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The Washington Farmer's Index

July 5th—December 27th, 1923

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JULY 5, 1923. Washington's Great Farm Magazine EVERY THURSDAY

THE WASHINGTON FARMER

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Please mention THE WASHINGTON FARMER when writing advertisers.

Glance over the bargains on the "Want Ad" page.

Tour Lewis County

West Washington's second annual live stock tour ended with a visit to several Lewis county farms.

Lewis county is one that can point to organization as a means of success with dairying and poultry raising. Both the United Dairymen's association and the Washington Cooperative Egg and Poultry association have branch houses in the county and they are among the strongest in the state. The live stock breeders have always worked well together and the Lewis County Pure Breeders' association, which includes all breeds of dairy cattle, takes an active part in the agricultural life of the county.

It is interesting to learn that the poultry breeders are giving the dairymen a close run for the value of the products. There are a large number of farmers who are keeping a small flock of hens in connection with their farm and are finding it a paying practice when properly handled. On the other hand, there are a surprisingly large number of commercial poultry flocks that have been established on small places and the number is constantly increasing.

Strawberries and bush fruits have increased in total acreage and are working in well with both egg and milk production. The last day of the tour was spent in Lewis county and was led by R. G. Fowler, the county agent. The day's trip included stops at dairy and live stock farms in the vicinity of Centralia and chehalis, where all of these types of farming are being practiced.

The Charles Ives farm near Centralia was the first place on the list and the 30 head of Holsteins were waiting in the barn lot. This herd includes a number of the Hamilton cows and the high cow is Ostego Highlands Butterfly, who has a record of 812 pounds of butter. The cows get pasture and green feed, but there are 10 acres of vetch and rye for summer silage, which will be all fed out in time for the 10 acres of corn to be ensiled for the winter. All milk produced at this farm is bottled and sold for city trade.

Builds Up Guernsey Herd.

On the opposite side of the town is the P. H. Thomsen farm, where the crowd saw one of the best examples of what can be done with the right herd sire that had been shown on the whole trip. Ten years ago Mr. Thomsen started in with Guernseys by buying 11 heifers and a registered bull with high production back of him. All of the heifer calves were raised and he now has a herd of which any breeder might be proud.

The herd made an average of 392 pounds in the testing association and the high cow made 485 pounds. Mr. Thomsen said that the association had been worth $500 to him for the improvement on the herd and the ability to get a better price for his cows. This point is emphasized by the fact that recent sales were $50 per cow higher than in former years when there were no testing association records.

The picnic lunch was at Riverside park at Centralia where George Barner, mayor of Centralia, welcomed the crowd, and W. H. A. Tram, president of the Lewis County Pure Breeders' association acted as toastmaster. He called on N. B. Coffman of Chehalis, O. M. Plummer, manager of the Pacific International Live Stock exposition, R. M. Turner and C. M. Hubbard of the state college for short talks.

At the J. T. Alexander farm near Chehalis were 60 head of Poland China sows and pigs, which were being run on pasture and fed a grain ration. A demonstration will be put on with two lots of these pigs. Both will get the same pasture and grain ration, but one pen will get a supply of tankage. Mr. Alexander expects to see a big difference in the growth in favor of the tankage fed pigs by early fall.

Len Goff of Adna showed his 26 head of registered Holstein cows, most of which are from Carnation blood lines. A senior calf out of Madam Hazelwood Pauline has exceptional type and quality. The herd is headed by a son of Matador Segis Walker, the well known Carnation bull. The bull's dam has a 27-pound record.

The last stop of the tour was at the home of Mrs. Jessie Greggs near Adna. Here was a splendid herd of Jerseys that indicated high production by their uniform udders. One of the best cows has an association record of 56 pounds of fat for 30 days and the herd average has been running between 35 and 37 pounds. The herd bull is Firwood Noble, a good individual out of Dahlia Forest Girl, sired by Luchiamute Sir Alpha. Both the sire and dam are in the N. C. Sorenson herd.

Since the Kittitas county day had been called off, the tour ended at Chehalis. With the exception of one or two days, the weather was good, and the attendance was all that could be expected, and in many cases the crowd was greater than all expectations.

SOUTHWEST WASHINGTON FAIR.

Premium lists for the 15th annual Southwest Washington fair, which is held on the fairgrounds between Centralia and Chehalis August 20 to 25, have been issued. The prize money is said to total more than at any previous Southwest Washington fair.

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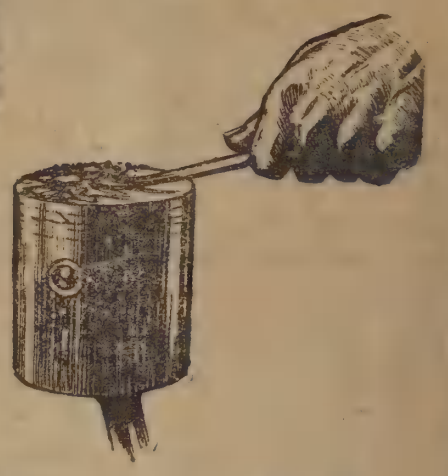

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Highest Grade in Proposed Schedule Would Be Considerably Below First Grade in Washington

The eggs produced in the state of Washington have attained a reputation for quality in the great marketing centers of the cast that has given them the top prices over the product of the eastern hen. The Washington Cooperative Egg and Poultry association is largely responsible for the development of this reputation and the corresponding profitable market in such cities as New York. The association has established and lived up to high standards in grading, the best egg sold being about as nearly perfect as an egg can be.

Comes now what some Washington poultrymen feel is a threatening menace in the form of proposed federal standards in which the highest grade is far below the highest grade upon which the Washington association has built up its reputation. The adoption of the proposed grades would, says Director E. L. French of the state department of agriculture, shut Washington eggs out of New York city, the destruction of this market meaning a loss of $5,000,000 anuually. "This market is the mainspring between success and failure of this great industry," says Director French.

The Washington Farmer took this matter up with the state department of agriculture, receiving the following statement on the problem by F. H. Gloyd, chief assistant director:

"The objection to the proposed federal grades for eggs is that the highest grade provided in those grades is just about equal to the third grade of eggs in the standards of the Washington Cooperative Egg and Poultry association. The only apparent requirements in the proposed federal standards are those of freshness. No eggs except strictly fresh are handled by the cooperative association. All that fail to come up to the highest quality in that respect, all soiled eggs, and all either far above standard in size or below the size of pullet eggs are broken and frozen and sold only to the bakers' trade.

"In addition to the requirements of the proposed federal standard, Washington extras are required to be chalk white, the slightest tinge of cream color relegating them into a lower class; they must be of exactly uniform size and weigh not loss than 24 ounces to the dozen and 46 pounds to the case. The slightest soil on the egg puts it in the next lower class. No tolerance of any kind is permitted in this grade, while the highest standard of federal grades permits a wide margin of tolerance. It is through rigidly adhering to these standards that Washington extras command a substantial premium on the New York city market over eggs grown in New York, Pennsylvania and New Jersey in the immediate vicinity of the New York city market.

"With the adoption of the proposed federal standard, while the trade would understand the very much higher standards of the Washington eggs, it would be different with the consumer. When assured that the eggs offered him were of the highest federal standard, and officially inspected and marked as such, he could not be expected to understand that there were eggs of much higher standard. He would believe he was getting the best, the more so as the federal standards propose the removing of any showing of the place of origin. As the trade could not sell the Washington extras for any more than the highest federal standard eggs would bring, it is easy to see that the premium would no longer be paid for Washington eggs and they would compete on exactly equal terms with the low standard eggs from adjoining states. If unable to get the higher price due to their superior quality, it would not pay to ship eggs to New York. The big reputation made by Washington eggs would be lost. The proposed standards would be hailed with solid satisfaction by the egg producers of the east, who are complaining bitterly of the manner in which Pacific coast eggs command the top price of the market and incidentally lower the price which their own product commands. That appears to be the most tangible argument for lowering the grades.

"It will also be observed that the proposed federal standard permits the sale in the market, for food consumption, of eggs which the association would never offer for sale in their shells, but handles only, while still fresh enough for food consumption, after breaking and freezing them, for the bakers' trade, selling directly to the public none except eggs which are strictly fresh, within the highest meaning of the term.

"The solid objection to the federal standards is that they lower the present standards of this state by a very wide margin; yet if they go into effect they will be recognized by the consuming public as indicating the highest possible quality of eggs offered for sale."

While realizing that the establishment of federal grades would tend to complicate the situation with reference to the popularity of Washington eggs in the east, S. D. Sanders, president of the Washington Egg and Poultry association, does not share the fear expressed by representatives of the state department of agriculture above. The fact that Washington grading regulations are higher than the proposed federal grades leads him to believe that Washington eggs would still be able to maintain their supremacy in the New York and other eastern markets.

A statement by the United States bureau of agricultural economics regarding the proposed federal standards says:

"It is proposed to establish the following United States grades for edible eggs. Five grades for eggs of sound, clean shells as follows:

"(1) U. S. specials; (2) U. S. extras; (3) U. S. No. 1; (4) U. S. No. 2, and (5) U. S. culls.

"Two grades for eggs of sound, dirty shells as follows:

(1) U. S. dirties No. 1 and (2) U. S. dirties No. 2, and one grade for eggs of cracked shells, viz., U. S. checks."

Herewith is a chart showing the proposed grades and the factors that determine each grade:

In the proposed federal standards there are eight grades, the requirements for which are as follows:

U. S. Specials (a tolerance of 3 per cent of U. S. Extras and 2 per cent of U. S. No. 1 permitted): Shell—Clean, sound and strong. Air cell—Localized, regular, 3-16 inch depth or less. Yolk—Dimly visible. White—Firm and clear. Germ—No development. Size—Uniform. Color and weight—As marked on the package.

U. S. Extras (a tolerance of 3 per cent of U. S. No. 1 and 2 per cent of U. S. No. 2 permitted): Shell—sound and stain-free. Air cell—Localized, well defined, regular, 5-16 inch depth or less. Yolk—Visible. White—Firm and clear. Germ—No development. Size—Reasonably uniform. Color and weight—As marked on the package.

U. S. No. 1 (a tolerance of 5 per cent of U. S. No. 2 and 3 per cent loss permitted): Shell—Sound and stain-free. Air cell—Localized, regular, 7-16 inch depth or less. Yolk—Visible but mobile. White—Reasonably firm. Germ—Development not over one-quarter inch diameter. Size—Variable. Color and weight—As marked on package.

U. S. No. 2 (a tolerance of 5 per cent culls and 5 per cent loss permitted): Shell—Sound, few stains. Air cell—May be bubbly, freely mobile and overmobile, 7-16 inch in depth. Yolk—may be fairly heavy to heavy, but must be mobile. White—May be weak and watery. Germ—May be well developed, but no blood showing. Size—Greatly variable. Color and weight—As marked on package.

U. S. Culls (a tolerance of 5 per cent loss permitted): Eggs which are heavily shrunken, salted or chilled or which weigh less than 20 ounces to the dozen.

U. S. Dirties No. 1: Eggs which are of the quality of U. S. Extras or better, but which are stained or dirty of shell.

U. S. Dirties No. 2: Eggs which are of the quality of U. S. No. 1 or lower, but which are stained or dirty of shell.

U. S. Checks: Eggs which are slightly cracked, with the shell membrane unbroken and not leaking their contents. (Eggs with slightly leaking contents shall be classed as leakers. Those with contents flowing freely from shell shall be classed as smashed.)

Loss: Loss is defined to mean eggs which are inedible.

The following are the grades established by the Washington Cooperative Egg and Poultry association. They are given here so that readers may compare them with the proposed federal grades and study the probable effect that the establishment of the latter grades would have on the market of Washington eggs in the east:

Washington Extras: Must consist of all white, fresh eggs, clean, sound, uniform in size and shape. Must average net to the case 46 pounds, that is 22 ounces and over. Cream or off-color not allowable in this grade and all soiled eggs of any kind must be eliminated.

Washington Firsts: Must consist of all fresh eggs weighing not less than 45 pounds, net average to the case containing no eggs less than 22 ounces. Must be reasonably clean and fairly uniform in size. Color white, but may contain cream or off colors. Slightly soiled, but no dirties. Washed eggs will be classed as firsts, but should be packed separate, and so marked.

Brown Eggs: Must be clean, fresh, weighing 22 ounces or average 45 pounds net to the case. May contain heavy cream eggs. This grade is always classified as a Washington first.

Washington Pullets: Must be all white, fresh eggs, weighing not less than 37 1-2 pounds net to the case, that is 19 to 22 ounces. Must be clean, free from soiled or stained eggs.

Undergrade Pullets: Must consist of all fresh eggs, weighing 37 1-2 pounds net to the case, average 19 to 22 ounces. Off colors and light dirties may be put in this grade.

Pee Wee Pullets: Must be fresh, reasonably clean, weigh 16 to 19 ounces. Real small under size, weighing less than 16 ounces, will be broken and sold by the pound to the best possible advantage.

Dirty Eggs or Seconds: Must be fresh and weigh not less than 43 pounds net to the case. May contain stained eggs and other soiled or dirty eggs, but it is not permissible to put in this grade smeared or extremely dirty eggs.

Bakers or Thirds: May contain real dirty, smeared, stained, shrunken eggs; also checks. Contents must be free from must or rot. Must be good salable stock.

Berry Festival

250 Attend Thurston Affair

The strawberry growers of Thurston county held a strawberry festival at Community hall, near South Bay, June 21. There were more than 250 guests present and as many who were directly interested in the production of berries. Each farmer and his wife asked some business man and his family to be his guest for the occasion and the novel affair ended with a strawberry feed late in the evening.

A committee of 10, representing the grange and farm bureau were responsible for the success of the affair. On the committee were the following: Fred Lewis, L. L. Snow, J. A. Donnelly, G. W. Parse, O. E. Ferguson, E. B. Stookey, Mrs. Agnes Taylor, Mrs. F. C. Baker, Mrs. Gus Nelson and Mrs. Ross Chilson.

The program of short talks was held before the feed and Fred Lewis of Tumwater acted as toastmaster. A. S. Caton of Olympia gave the address of welcome and the response was made by Charles Rose.

As representative of the grange, F. P. Walters gave a detailed account of the work of the grange and told of the many principles for which the organization stands. He named many beneficial laws that had been brought about largely by the efforts of the grange since its organization 50 years ago. "Cooperation with the business men is something that is needed more than anything else today," he said, "since that is the only way the important matters are going to be worked out."

Asked to speak on marketing, E. F. Dummeier of the state college outlined the present farm situation and demonstrated that the purchasing power of agricultural products was decidedly less than that of any other product that could be named. As a solution he suggested a balancing of production rather than a curtailment of production. Unless many of the farm products are better balanced, he said, the farmer will begin to desert his land and start manufacturing in other lines of industry.

Cooperative marketing was suggested as one of the best means for bringing about such a balance and he illustrated his point by citing what has been done in California and also in the state of Washington by the egg producers. The latter example was used to show how any industry here at home could be advanced to a high degree of efficiency and to such an extent that there is no overproduction of the products.

The program ended at a late hour, but not until all had had their fill of strawberries and cream and strawberry shortcake. The berries were donated by the North Pacific Cooperative Berry Growers of Thurston county and the Cloverfields dairy of Olympia furnished the cream. The cakes were brought by the farmers' wives.

REMEMBER THIS FUNDAMENTAL.
High yield means lower cost per unit.

College Graduates 50 in Agriculture

Degrees in agriculture were awarded to 50 students of the State College of Washington at Pullman in June, 49 men and one girl, Miss Adah Elizabeth Proctor of Seattle. Of these, 47 receive the B. S. degree, and five the master's degree, two men taking both degrees.

The representation from the different towns is as follows: From Ellensburg, 3, Fred Adams, Ellison Mundy and Harold Sorenson; Prescott, Martin Alexander; Wilson Creek, Hugh Armstrong; Centralia, Charles Arveson; Clarkston, G. Orien Baker; Bellingham, Harold Bliss; North Bend, Lorraine Boggs; Tacoma, L. W. Boyle (both degrees); Creston, Ernest Burke; Everett, Robert Christenson and Irwin Ingham; Mt. Vernon, John Clouston; Walla Walla, Cecil Compau and Louis Eiffert; Chewelah, Cornelius Cramer; Elberton, Willis Glenn Cronk; Pullman, Dan Crowley; Spokane (5), Don Foster, Leonard Le Grant, Leslie McIntosh, Lorin Markham and John Stone; Riverside, Robert French; Bothell, Harold Graham; Seattle (4), Mark Haller, Charles Parker (both degrees), Miss Proctor, and Alexander Sumbardo; Chelan Falls, Herbert Hamilton; Glaber, Otto Hill; Japan, Harry Ideno; Ilwaco, Wain Johnson; Ferndale, Louis King; Pe Ell, Robert Knox; La Center, Edwin Landerholm; Garfield, Warren Love; Donald, Dan McDonald; Stanwood, Chester Miller; Lynden, Donald Pace; Yakima, Guilbert Peck; Cushman, Mont., Paul Phillips; Port Townsend, George Ruehle; Sunnyside, Frank Ruppert; St. John, Aubrey White; Cloverland, Stephen White; Albion, Edward Farr (master's degree); Corvallis, Ore., Herbert Lunt (master's degree); Greenacres, Arthur Post (master's degree).

It Is on Page 10 of This Issue

Our new serial story, which we believe to be one of the best we have ever offered our readers, begins this week. Turn to Page 10 and read the opening paragraph. We leave it to you then whether you stop or continue, for we know that the curiosity that first paragraph arouses in you will carry you on chapter after chapter until this remarkable story of the adventures of a boy in the west ends. From the hour that Harry Hodson urges his fagged horse into the dark street of the frontier town of Bismarck with news that an Indian attack is coming until the hour that John Worth, the hero of the story, reaches college, "Cattle Ranch to College" relates one stirring adventure after another. There is not a man or woman or boy or girl in our big family of readers who will not enjoy every chapter. Begin this week. The opening chapter is on Page 10.

Building Up Soil

In St. Clair and Yelm Districts

A crop of vetch grown on any of the sandy loam prairie soils of Thurston county has a great influence on the succeeding crop. Many of the farmers in the St. Clair and Yelm districts have taken advantage of vetch in building up their soils. R. H. Ensign of St. Clair has an excellent stand of vetch on one 45-acre field, which he attributes largely to the application of a heavy coat of barnyard manure. It is sometimes hard to get a crop started on this type of soil, but this method seems to partly solve the difficulty.

In another field there is 60 acres of Rosen rye. This field was covered with a thin layer of straw last May by the use of a straw attachment on a manure spreader. It was immediately plowed under, cultivated during the summer, and seeded September 20. It made a splendid growth during the fall and was pastured until May 1. The 24 head of milch cows could not keep the patch down enough to injure this season's yield. The field is now in splendid shape and promises to give a maximum return of grain when harvested.

Mr. Ensign planted four acres of sunflowers for the silo last year, and it furnished two months' feed for the entire herd during the winter. The cows eat it readly, and he has planted 14 acres this year, which he expects will fill the two 80-ton concrete stave silos. The crop is planted closer this year, so that the stalks will not be so big, will be more palatable and easier to cut.

All of the stable manure from the cow barn is dumped into a large concrete manure pit by means of a litter carrier. No roof is built over the pit, since they feel that what little moisture accumulates during rainy weather does not injure the manure because it does not seep away. The liquid manure from the gutters is drained into the pit by means of tile. Any surplus that accumulates above what is absorbed by the manure in the pit is hauled onto the fields by means of a tank on a stone boat. The pit is emptied several times during the year, so that it does not accumulate and stand too long in the pit. The spreading is planned so that the wettest fields are covered before the rainy season sets in in the fall, and the drier fields are covered during the bad weather in the winter. In this way Mr. Ensign avoids hauling all the manure at one time, is able to utilize every bit of fertilizer that accumulates and gives his crops the advantage of this additional fertility.

One field has been seeded to a permanent pasture mixture, consisting of Italian rye grass, tall oat grass, hard fescue and other dry land grasses that are recommended for this district. After the land is well worked and the grass seeded broadcast, a brush drag was used to cover the seed. The result has been an excellent stand with the exception of some places where it was dragged too heavily, which covered the seed too deep. Mr. Ensign believes he should have used a lighter drag, which would have meant an even stand throughout the entire 30 acres.

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Anti-Liquor Forces Must Maintain the Advantages Won

A prominent anti-liquor worker recently made the declaration that the saloon was as dead as Caesar and would be dead just as long.

We trust that this is true, but it will not prove true if the people of this country who believe in prohibition take the position that the fight against intoxicating liquor is finished, as some are inclined to do.

The liquor issue is not a dead one. The fight is only partially won. Not only have we more or less illicit liquor, but there is a nation-wide campaign on foot to make intoxicants legal in spite of the amendment which 46 of the 48 states added but recently to the national constitution prohibiting their manufacture and sale.

The constitutional amendment prohibits the manfacture and sale of intoxicating liquor. The Volstead act defines intoxicating liquor as a beverage containing one-half of one per cent or more of alcohol. The constitution and laws passed by congress are the supreme law of the land, but the federal authorities find it exceedingly difficult to enforce prohibition when the states do not cooperate. Yet there are several states in which the so-called wets are attempting to prevent state cooperation in prohibition enforcement.

New York, for instance, repealed its law which had been passed to require state enforcement of the Volstead act. Then Wisconsin and Illinois began trying similar tricks. The leader for the liquor interests in the Wisconsin legislature indicated the nature of the campaign when he said that enough states were going to repeal their prohibition laws to compel congress to modify the Volstead act so as to permit the manufacture and sale of wine and beer. The legalization of these intoxicating beverages would, of course, be but the opening wedge which might be driven in so deeply as ultimately to bring about the return of the saloon with all its objectionable features.

Fortunately, the movements in Wisconsin and Illinois have met with temporary failure, but the liquor interests are not quitting the battle there. We must make no mistake about it—to yield ground to the liquor forces is to permit our land to go backward toward the evils of the saloon. If prohibition is to become in truth the law of the land, the forces that believe in it must be ever vigilant in their defense of it. They must give no ground. They must support loyally those officers who enforce the law and they must look into the future and elect legislators, congressmen and administrative officers that understand the menace of relaxation in liquor legislation and who will stand squarely behind the amendment and the Volstead act.

To Beat the Freight Rates

When we consider the advisability of marketing our products in more concentrated or more finished forms, we think primarily of avoiding the high freight rates on bulky products. There is, however, another phase of this matter that deserves thought. If the Pacific northwest develops its manufacturing as it well might it would mean not only a reduction in freight on bulky products, but it would mean a greatly increased population in this territory. This increased population, in turn, would mean increased consumption, meaning a home market with short hauls for an ever increasing amount of northwestern produce of various kinds. For example, suppose that there be established in the Pacific northwest woolen mills and clothing factories. We will then, to whatever extent we manufacture our raw wool into finished products, avoid the high transportation cost on that wool to eastern or foreign markets, gaining by the lesser amount that we will have to pay for the transportation of the finished goods. It will likewise require men and families to operate the mills and factories, and these people will have to be clothed. Therefore a considerable part of the product of the mills and factories will be used at home, thus avoiding the freight rate entirely. At the same time a market will be created for foodstuffs, other products of this territory, including those of the farms as well as those of the forests, streams and other sources.

Is it therefore good business for the wool growers of the west to ship their wool to the east in its crude state, paying high transportation costs eastward and paying the cost of shipping the clothing west again? The same principle can be applied to many other products of the farm and ranch.

Is it not time that serious thought be given to the development of factories in the Pacific northwest? Could we not thereby do much to build up our own markets and relieve ourselves of the present burdensome transportation charges?

Will Advertise Washington Well

It is a fine idea, that of the Holstein breeders of the state of Washington to send a selected state herd of the breed to a series of eastern dairy cattle shows this season.

Washington Holsteins are world famous. As a class they stand well at the top, both for show and production records. Washington numbers among its black-and-white breeders some of the most successful in America, and individual cattle of the breed stand pre-eminent among their fellows. There, for instance, is Segis Pietertje Prospect, with that wonderful milk production record of over 37,000 pounds in a year. Of the comparatively small number of cows that have produced 30,000 pounds or more milk in a year, Washington has more than her proportionate share.

In the past the limited number of cattle going from Washington to the eastern shows have brought honor to their state, convincing easterners that this state must be taken into consideration in figuring breeding possibilities. Easterners are beginning to come west to compete in our own shows because they realize that out here there is competition worthy their best efforts.

The entire northwest will follow Washington's state herd of Holsteins to the east with deep interest, and every breeder, of whatever kind of cattle, in this region will profit from the advertising this choice collection of black-and-whites will give this dairy cows' paradise.

LOOKING INTO OTHER FARM FIELDS

As an experiment three months ago a Viennese baker began putting out a loaf of wheat bread with a 20 per cent mixture of soy bean flour. The bread has become so popular that the output has now increased to 10,000 loaves daily. Soya flour is said to be rich in proteins and fats, and the carbohydrates in its content possess a sweetening quality which makes it agreeable as an ingredient of bread. The soya flour is produced under a secret process that eliminates the objectionable features of the flour prepared from straight milled soy beans, and the claim is made that it is not only palatable, but is easily digested and assimilated.

* * *

Declared exports to the United States from China for 1922, as reported to the department of commerce by the consul at Shanghai, were $163,891,630, an increase of 24 per cent over the previous year. The principal articles exported to this country during the year were raw silk, cow and calf hides, sheep's wool, wood oil, hair nets, squirrel skins and goat and kid skins.

Washington State Gleanings

The Grandview district June 15 shipped its first straight carload of cherries this season. They were Royal Anne and were consigned to the Yakima cannery.

OLD SETTLERS MEET.

At a meeting of the old settlers in Waterville recently the following officers were chosen for the ensuing year: Charles V. Ogle, president; John McKay, vice president; Art Will (Alstown), clerk; George A. Hensel, secretary-treasurer. In order to join this association it is necessary that one reside in the county for at least 20 years.

DAIRY PLANT PLANNED.

That the Yakima Dairymen's association may build at Sunnyside within a year is a possibility, according to G. V. Harris, manager. The matter was discussed at a recent meeting of the board of directors at Sunnyside. It was thought to be too late to build this year, but it is possible that construction of a plant may be undertaken early next spring. The next meeting of the board will be in Yakima on July 14.

CHEHALIS CANNERY BUSY.

Twenty-five tons of strawberries are being received daily at the Chehalis cannery, which is being operated to full capacity. Two hundred women and girls are employed, in addition to a large number of men and boys. Southwest Washington berries from Lewis county, southern and eastern Thurston, parts of Grays Harbor and other adjoining counties are going to the Chehalis plant. Fresh shipments are being made, the shipments thus far going to Montana, the Dakotas, Nebraska, one car to Texas and other states.

STRAWBERRY RETURNS LARGE.

A. McCleary, a strawberry grower within the limits of Ridgefield, has sold approximately $120 worth of strawberries from one-fourth of an acre since May 24, and expects to reach the $150 mark before the season is over. The fruit is of the Marshall variety and the first berries brought $3 a crate. The season is about two-thirds over and the best for years on account of an abundance of moisture, the lack of which cut down last year's crop about 50 per cent. Many plants have ripening berries and blossoms and it is believed the season will be extended for several weeks.

MARKETING CONTRACT APPROVED.

The membership contract drafted for the proposed Northwest Hay Growers' association has been approved by E. L. French, state director of agriculture, and it will be circulated throughout the hay districts of central Washington for signatures as soon as copies can be printed, according to Boyd Oliver of San Francisco, attorney for the organization. At least 75 per cent of the marketable alfalfa in the territory must be pledged in order to make the plan effective. Mr. Oliver has suggested $15 per ton f. o. b. cars at shipping point as a minimum price, and has urged growers not to sell for less than that figure.

EXPECT GOOD ONION CROP.

Indications are for a yield of between 600 and 700 carloads of onions in the Walla Walla valley this year and they should bring a sum in excess of $375,000 into the community, according to A. A. Prince, vice president of Gwin, White and Prince, Inc., sales managers of the Inland Empire Cooperative federation. The Walla Walla Gardeners' association and the Walla Walla Vegetable exchange are members of the federation. The onion crop is freer from disease than it has been for several years and the yield per acre bears every indication of being very good, said Mr. Prince.

SHIP 50,000 CRATES BERRIES.

The Kennewick strawberry growers, now ending their season, shipped 50,000 crates, at an average price of $2.50 a crate net to the grower, according to L. E. Johnson, president of the First National Bank of Kennewick. Premium crates, he reports, sold as high as $6 and many averaged $3 and $4. The district had a large acreage and production of strawberries this year, with ideal growing conditions. Prices, however, were only normal, because of the lateness of the California crop. Twenty-eight straight cars of strawberries were shipped. In addition to the bumper crop of strawberries, the Kennewick valley growers have shipped 25,000 boxes of asparagus, at running prices from $1.25 to $2.25, averaging about $1.50 to the grower. The district shipped six straight cars of asparagus this season, one going as far as New York and others as far as Minneapolis and Chicago.

HARVEST LETTUCE CROP.

Most of the lettuce crop of the Clarkston Heights has already been or is now being harvested, according to S. D. Steininger. Mr. Steininger stated that he had one-fourth of an acre in lettuce this season, from which he harvested over 200 crates, many of which packed 36 heads to the crate. The average pack is 48 heads. W. B. Smith, who had about three acres in lettuce, has harvested around 300 crates from his acreage and the returns from a few of the first crates shipped netted him a little better than $3 a crate. Mr. Steininger expressed the opinion that the lettuce industry will be greatly increased in the Clarkston Heights district from year to year, inasmuch as it has been proven that it can be grown successfully and profitably in that section. It is estimated that between 10 and 15 acres were planted to lettuce on the Heights this spring, which will net the growers around $200 an acre.

HOLDS POULTRY RECORD.

Known as "the home of the big white egg," Winlock, in Lewis county, has, within the first half of the year, shipped out 99 cars, or 16,929,000 eggs, according to railroad records. This is two-thirds of the total of the 1922 shipments, and with this record Winlock expects to head the national procession for poultry honors within a short time. Shipments for 1922 showed that 146 carloads had been shipped out, or 26,280,000 eggs. Poultry shipments included 150,000 broilers and 250,000 hens. The Winlock creamery shipped 409,149 pounds of butter and the Toledo Cheese association 202,192 pounds of cheese. Winlock is south of Chehalis, between Napavine and Vader, with a paved road leading into the city from the Pacific highway a little north of Toledo. In this district there are more than 1000 farms devoted largely to the poultry and dairy industry, according to the Winlock Commercial club.

FARM BUSINESS AND MARKETS OUTLOOK

LARGER receipts attracted by the recent advance in prices and congestion in beef trade channels as a result of hot weather caused a slump in prices of all grades of cattle last week. The yearling market was glutted again and some were about $1 lower at Chicago than the high point of the preceding week. Light grassy steers, heifers and cows showed greatest losses, with trade on low grade she stock in a semi-demoralized state. Veal calves lost about half of their gains of the preceding week.

The marked decline on low grade cattle is partly due to increased receipts of that kind, especially at southwestern points, and partly because of the less satisfactory carcasses produced by finishing on grass early in the season as compared with grain-fed cattle. The vacation season, combined with urban prosperity, is making a broad outlet for good beef, so that prices on better grades of steers did not yield quite so much as those farther down the scale.

Prime steers will probably reach $12 before the summer is over; common and medium grades have little chance of a sustained advance. Receipts usually increase sharply after the middle of July, when the southwestern grazing areas and western range begin to disgorge. These sections have about as many cattle as last year and grazing conditions so far have been favorable. The breadth of feeder demand will have much to do with prices on such cattle during the rest of the summer and fall.

Upturn in Hogs Checked.

Ten days of light receipts forced a recovery of 75 cents to $1 in hog prices, but the market turned downward again and ended last week about 35 to 50 cents lower at Chicago. Receipts have increased moderately once more, fresh pork trade was affected by extremely hot weather, export sales are gradually tapering off and a relatively low level of prices will be necessary to insure consumption of the present rate of production.

Receipts last week fell below the corresponding week a year previous for the first time since last December. The signs all point to a heavier summer run than a year ago, however. A 10-year average of receipts at 11 markets shows a gradual decline during July and August of about 40 per cent. Last year, when the summer run was the largest on record, the decline was only about 25 per cent. Some reduction occurs every year and there may be enough this year to keep prices around the present level or higher, depending on how well the demand is maintained. Besides the liklihood of larger receipts than last summer, total stocks of hog meats and lard on June 1 were 991,167,000 pounds, compared with 759,553,000 pounds last year. The increase in holdings is the equivalent of about 1,250,000 hogs which must be absorbed during the late summer and fall.

Lamb Market.

After a week of heavy receipts under which lamb prices crumbled rapidly, the supply let up again and values have strengthened, although the loss has not been regained. Louisville and Nashville are sending many southwestern lambs to northern markets and Virginia has kept Jersey City well supplied, although not flooded. Receipts during July and August are expected to be larger than a year ago, when they showed an increase of about 25 per cent over the June level. Practically no western lambs have arrived as yet, but the range crop is reported to be larger than last year. A broad demand for breeding ewes is springing up, although the season is exceptionally early for this trade.

Wool Market Dull.

The wool market was dull last week, with prices slightly lower, even on finer grades, which have held up fairly well heretofore. Manufacturers are buying slowly in the belief that prices are not yet at bottom. Bids in the west are 5 to 10 per cent lower, but growers are selling slowly and some western wools are being sent east on consignment. Some Missouri wools have been sold at 47 to 48 cents and Ohio wools at 50 cents. Foreign markets are fairly firm, but the London auction, at which about 220,000 bales are to be sold in the next four weeks, started at a decline of 5 to 7 1-2 per cent. Further sales for export from this country are being made. Woolen manufacturers predict higher prices for goods during the fall.

Undertone in Wheat Improves.

Wheat prices declined close to the dollar mark at Chicago last week. The market is beginning to show a firmer undertone, so that the break may soon be at an end.

Rains in the northwest where most needed have stilled complaints of drought for a time and clear skies in the southwest have stopped the damage to quality caused by previous rains as well as favored harvest, which is under way as far north as Nebraska. Canadian prospects at present are reported to be unusually favorable. Conditions in Europe have not changed as much as Broomhall's reports of a week ago indicated, as he now estimates that the European crop, including Russia, will be 160,000,000 to 175,000,000 bushels larger than last year, compared with his estimate of 200,000,000 larger made six weeks ago. Another factor against the market was the breaking of the drought in Australia, so that seeding of the new crop can proceed under favorable conditions.

Europe bought wheat in volume again last week when prices were around the low point. With the new crop abroad approaching harvest, foreign interests are disposed to carry as small stocks as possible.

While foreign countries have not been absorbing wheat as fast as expected months ago, supplies in commercial channels have been reduced and there is no great pressure from any country. Winnipeg prices are higher than in the United States, while they ruled below us most of winter. The July 1 carryover in this country promises to be about 100,000,000 bushels, Canada is reported to have had only about 30,000,000 bushels for export after June 1, and the world carryover will not be much greater than a year ago.

Domestic mills are grinding rather freely for this time of year, but their output of flour is less than the average disappearance, so that stocks in the principal markets are gradually being reduced.

Railroads have more empty box cars stored in the southwest than last year in readiness for handling the new crop of wheat at a rapid rate. There are indications that producers will sell reluctantly at prices now being offered, although offerings of new wheat have increased in the last two days and it is probable that the usual after harvest movement will be fairly heavy.

Rye prices have reached an unusually low level. The visible supply is 15,420,000 bushels, compared with 2,580,000 bushels a year ago, thus offsetting most of the decrease in the size of the crop. The financial condition of Germany, which is the chief foreign buyer, does not favor export sales. She has bought from all countries in the last year 70,000,000 bushels less than her calculated needs. Our exports in the first 11 months of the crop year were 44,147,147 bushels, compared with 24,950,134 bushels last year.

Corn Makes New High.

Corn prices have acted independently of other grains, owing to continuation of light receipts, a broad demand from industries and other buyers and gradual fading away of reserves at terminals. New crop prospects are spotted also, although hot weather last week forced rapid growth and helped to make up for lost time. Exports sales are small. Clearances from the United States last week were only 299,000 bushels, compared with 5,064,000 bushels from Argentina.

Too Hot for Oats.

Last week's hot spell arrived at a critical period in the growth of the oats crop when wet, cool weather is needed. No great damage has been reported thus far, however. Prices are at an unusual discount below corn.

Cash Grain Markets.

The range of cash grain prices for the week ended June 27 was as follows:

CHICAGO—Wheat—No. 2 red, $1.03 1-2@1.13; No. 2 hard, $1.03 1-2@1.09. Corn—No. 2 mixed, 84@85c; No. 2 yellow, 85@86c; No. 3, 85@86c; No. 2 white, 84 1-2@85 1-2c. Oats—No. 2 white, 43 3-4@45c; No. 3, 42@44 3-4c. Barley—62@66c.

Higher Prices on New Crop Clover Seed.

New crop clover seed for October delivery is quoted at Toledo about $1 higher than old crop seed. The market appears to be treading bottom unless the prospects for the new crop improve.

CHICAGO, per 100 pounds—Clover, $15@17.50; timothy, $5.50@6.50.

TOLEDO, per bushel—Prime red clover, $10.40; prime alsike, $10.25; prime timothy, $3.25.

Feed markets are dull and prices practically unchanged. Jobbers, contracted for large quantities of bran and absorbed offerings on the recent decline and prices are a shade higher. Cottonseed meal is quoted slightly lower. Production and stocks of most feeds are in excess of present demand. With new alfalfa starting to market, alfalfa meal prices have declined.

Prices per ton (100-pound bags) in carlots: Chicago—Bran, $22.50; standard middlings, $27.50; flour middlings, $32; cottonseed meal, 36 per cent, $41.25; 43 per cent, $46.50; hominy feed, $33; gluten feed, $37.15; old process oil meal, $40 tankage, $57.

Hay Receipts Still Light.

Hay receipts are light and prices are firm, but demand is limited to local needs at most markets and the undertone is unsettled. Quotations are unlikely to go higher. Hay harvest is starting, but alfalfa cutting is about two weeks late in Kansas and Nebraska. Receipts of new alfalfa are increasing, but wet weather during the cutting season lowered the quality and such hay is quoted at Kansas City at $10 to $16.50 per ton. Meadows and pastures have improved recently, but they are not so favorable as last year.

Prices per ton in carlots: Chicago—No. 1 timothy, $23@24; No. 2, $19@22; No. 1 light clover mixed, $20@22; No. 1 clover, $16@17; No. 1 and choice alfalfa, $16@25; midland prairie, $17@20; rye straw, $12@13; oat and wheat straw, $11@12.

Egg Holdings Approach Record Size.

Offerings of eggs at distributing markets were large last week, but as graded stock was not plentiful, prices were maintained. Storage holdings continue to increase over last year faster than the difference in receipts would indicate, showing that current consumption is not equal to that of last year. All signs point to record holdings in the United States on July 1 and they may be as large as on August 1 last year.

Butter Market Steady.

General hot weather caused smaller receipts of top scores of butter, which are generally desired for storage, so that prices were maintained throughout last week. Accumulation of lower grades, which must find consumptive outlets, was a weakening factor. That consumptive demand is very good probably accounted for the failure of the market to decline under the weight of these lower grades. Production and receipts continue to increase, but the increase is smaller than during the previous weeks, indicating that the flush season is being approached.

June is rapidly drawing to a close, with little headway made as yet in the storing line. The increase in storage stocks at the four leading markets last week was over 1,000,000 pounds lighter than during the corresponding week a year ago.

Imports of foreign butter continue unabated, with 3600 casks of Danish and 500 casks Holland arriving in New York last week. More Danish and a shipment of Argentine are expected soon.

Cheese Market Quiet.

Prices for cheese in distributing markets declined last week in line with reduction at country points. Receipts were liberal and stocks of many dealers showed accumulation. Much cheese is going into storage, although some buyers are still of the opinion that prices are too high for that purpose. Trading was slow, with only immediate needs being taken care of. Until speculative demand develops on a larger scale, increased sales are not expected.

Fruits and Vegetables.

The early and intermediate potato crops are not as good as last year and total shipments to June 16 were only 13,590 cars, compared with 20,249 cars to the same date a year ago. The difference has been partly made up by shipments of the old crop, which for several weeks have been larger than ever known at the corresponding season. Prices were generally lower last week, with Irish cobblers quoted at $4.50 to $5.50 per barrel in consuming markets. Southern Bliss Triumphs were $2.50 to $3.50 per 100 pounds in midwestern markets.

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Range of Live Stock Prices for Week Ending June 27, 1923

CATTLE.	Chicago.	Spokane.	Portland.	N. Salt Lake.
Ch., prime heavy steers (1100 lb. up)	10.50@11.60			
Good heavy steers	9.75@10.75			
Medium heavy steers	8.25@10.00			
Common heavy steers	7.25@ 8.60			
Ch., prime light steers (1100 lb. d'n)	10.30@11.50			
Good light steers	9.50@10.65			
Medium light steers	8.00@10.00	6.50@ 7.75	6.50@ 8.00	6.75@ 7.85
Common light steers	6.00@ 8.40	4.50@ 6.50	5.00@ 6.50	5.50@ 6.75
Common to choice butcher heifers	5.50@10.35	3.50@ 6.50	4.00@ 6.60	5.00@ 5.75
Common to choice butcher cows	3.75@ 8.50	3.00@ 6.00	3.00@ 5.50	3.00@ 5.00
Bologna and beef bulls	4.00@ 7.25	3.00@ 4.00	3.00@ 4.75	2.00@ 3.25
Canners, cutters, Cows, Heifers	2.00@ 4.10	2.00@ 2.75	1.50@ 3.00	1.50@ 3.00
Canner steers	3.75@ 5.50	3.00@ 4.00	3.00@ 4.00	
Medium to choice light veal	7.75@10.50	7.00@ 8.50	7.00@ 8.50	8.00@ 8.50
Common to choice heavy veals	4.00@ 9.00	6.00@ 7.00	4.00@ 7.00	
Com. to choice feeders (1000 lb. up)	7.00@ 8.85			
Com. to choice feeders (750-1000 lb.)	6.25@ 8.75	4.00@ 5.50		5.00@ 6.00
Common to choice stocker steers	4.75@ 8.65			
Com. to choice stocker cows, heifers	3.50@ 6.25			
HOGS.				
Top of market	7.75	8.10	8.25	7.00
Bulk of sales	6.50@ 7.60	7.00@ 8.00	7.25@ 8.10	6.25@ 6.75
Heavy (250 lb. up)	6.75@ 7.55	6.25@ 6.75	7.00@ 7.75	6.25@ 6.75
Medium (200-250 lb.)	6.90@ 7.75	7.25@ 7.75	7.25@ 8.00	6.25@ 7.00
Light (150-200 lb.)	6.85@ 7.70	7.75@ 8.10	7.75@ 8.25	6.25@ 7.00
Light lights (130-150 lb.)	6.65@ 7.50	7.50@ 8.10		
Smooth packing sows (250 lb. up)	5.75@ 6.75	5.75@ 6.25	4.50@ 5.00	5.50@ 5.75
Rough packing sows (200 lb. up)	5.50@ 6.50	4.75@ 5.75	3.50@ 4.50	5.25@ 5.50
Medium to choice pigs (130 lb. d'n)	5.75@ 7.25	7.50@ 7.75	7.50@ 7.75	
Stock pigs		7.00@ 7.50	7.25@ 7.50	5.25@ 5.75
SHEEP AND LAMBS.				
Medium to prime lambs (80 lb. d'n)	13.00@16.50	10.00@12.00	9.00@10.50	11.00@12.50
Culls and common lambs	8.00@14.25	8.00@10.00	6.00@10.00	8.00@11.00
Medium to prime yearling wethers	10.00@14.50	8.00@ 9.00	7.00@ 8.25	7.00@ 8.00
Medium to prime wethers	4.50@ 8.25	6.50@ 8.00	6.00@ 8.00	5.50@ 6.00
Medium to choice ewes	3.50@ 7.00	3.50@ 6.00	3.00@ 5.50	4.50@ 5.50
Culls and common ewes	1.25@ 4.00		2.00@ 3.00	

LATEST QUOTATIONS.

The Live Stock Market.

PORTLAND, Ore., June 30.—Cattle—Choice steers, $7.75@8.35; medium to good steers, $7.00@7.75; fair to medium steers, $6.00@7.00; common to fair steers, $5.00@6.00; choice heifers, $6.00@6.60; choice cows and heifers, $6.50@6.00; medium to good cows and heifers, $5.00@5.50; fair to medium cows and heifers, $4.00@5.00; common cows, $3.00@4.00; canners, $1.50@3.00; bulls, $3.00@4.50; choice dairy calves, $8.00@8.50; prime light calves, $8.00@8.50; medium light calves, $7.00@7.50; heavy calves, $4.00@7.00.

Hogs—Prime light, $8.25@8.50; smooth heavy, 230 to 300 lbs., $7.50@8.00; smooth heavy, 300 lbs. and up, $6.50@7.50; Rough heavy, $4.00@5.00; fat pigs, $7.50@8.00; feeder pigs, $7.75@8.00; stags, subject to dockage, $2.50@4.00.

Sheep—Choice valley lambs, $10.50@11.00; medium valley lambs. $9.50@10.50; common valley lambs, $7.50@9.00; cull lambs, $6.00@7.50; light yearlings, $7.50@8.00; heavy yearlings, $7.00@7.50; light wethers, $7.00@7.50; heavy wethers, $6.00@7.00; ewes, $2.00@6.00.

SPOKANE, June 30.—Cattle—Prime steers, $7.00@7.75; good to choice steers, $6.50@7.00; medium to good steers, $6.00@6.50; fair to medium steers, $5.25@6.00; common to fair steers, $4.50@5.25; choice cows and heifers, $6.00@6.50; good to choice cows and heifers, $5.50@6.00; medium to good cows and heifers, $4.50@5.25; fair to medium cows and heifers, $3.50@4.50; canners, 23.00@2.75; bulls, $3.00@4.00; light veal calves, $7.00@8.50.

Hogs—Prime mixed, $7.75@8.25; medium, $7.25@7.75; heavies, $4.75@6.75; fat pigs, $7.50@7.75; stockers and feeders, $7.00@7.50.

Sheep—Prime lambs, $11.00@12.00; fair to medium, $10.00@11.00; yearlings, $8.00@9.00; wethers, $6.50@8.00; mutton ewes, $3.50@6.00.

The Grain Market

PORTLAND, Ore., June 30.—Wheat—Hard white, Bluestem, Bart, $1.10; soft white, western white, $1.05; hard winter, northern spring,

SEATTLE, June 30.—Wheat—Hard, soft and western white, $1.10; hard and soft red winter, northern spring and winter red, $1.08.

WALLA WALLA, June 30.—Bart and Bluestem, 92c; club, 91c; Turkey red, 85c.

LEWISTON, June 30.—Red, 87c; white, No. 1, 93c.

(Continued on page twelve.)

LIVESTOCK AND DAIRY

Cottage Cheese

Good Skim Milk Is Essential

By E. V. ELLINGTON. Head Department of Dairy Husbandry, W. S. C.

We would like a recipe for cottage cheese from sweet milk. MRS. M. L. B. Beaver, Wash.

To make cottage cheese it is essential that good skim milk be used. Therefore, all milk utensils, including the cream separator, should be thoroughly cleaned before using, as dirty utensils may contaminate the milk and cause a poor quality of cheese. The skim milk should be used as soon after it comes from the separator as possible. It will then be fresh and sweet.

The milk should be placed in a vessel and brought to a temperature of 70 degrees Fahrenheit at once and held at that temperature until curdled. (It will be necessary to use a dairy thermometer so that the temperature can be regulated.) The curdled milk should have a clean, sour flavor. Ordinarily this will take from 24 to 30 hours, but when it is desired to hasten the process a small quantity of clean-flavored sour milk may be mixed with the sweet milk. As soon as the milk has thickened or firmly curdled it should be cut into pieces about two inches square, after which the curd should be stirred thoroughly with a spoon. Place the pan of broken curd into a vessel of hot water, so as to raise the temperature to 100 degrees Fahrenheit. Cook at that temperature for about 30 minutes, during which time stir gently with a spoon for one minute at five-minute intervals. This insures uniform heating. Vigorous stirring should be avoided, as the curd will be broken into fine particles and thus interferes with proper draining.

At the conclusion of the heating pour the whey into a small cheesecloth bag (sugar or salt sacking will answer the purpose nicely) and hang the bag on a rack to drain, or the curd may be poured into a milk strainer or colander, over which a piece of cheesecloth has been laid. Part of the whey will pass through immediately and it is important that the whey be removed as soon as possible. This may be accomplished by rolling the curd back and forth on the cloth. To complete the draining tie the ends of the bag together and hang it up. Draining, however, should not be hastened by twisting or squeezing the drain sack as this will produce hard, dry lumps of cheese. Draining should stop when the whey ceases to flow in a steady stream.

The curd is now emptied from the bag and worked with a spoon until it becomes fine in grain, smooth and of the consistency of mashed potatoes. Add about 2½ ounces of salt to 10 pounds of curd, or a teaspoonful to each pound. Sour or sweet cream is added, if desired, as it increases the smoothness, palatability and flavor of the cheese. This should be added at the rate of one-half pint for each 10 pounds of curd. One gallon of milk will make about 1½ pounds of cheese.

LIFE PRESERVERS FOR LIVESTOCK

By DR. E. E. WEGNER, W. S. C.

Pigs That Are Down.

I have numerous inquiries relative to the condition in pigs that is manifest by inability to raise the hind quarters from the ground. Just now a man came in to tell me that such a condition existed on his farm and he wished to know what this trouble was and how it could be corrected. This condition is particularly common in brood sows and is most likely to occur during the period when the pigs are nursing. In many cases the cause is one of improper feeding. Particularly if the ration is too heavy in grain and not heavy enough in the roughage which contains the minerals and the nitrogen.

Pigs are commonly found to be eating grains as a great part of their diet and trouble is likely to result when this is continued over a great period of time. The man who just left told me that their hogs had been fed on wheat and barley almost exclusively. I asked if they had access to clover or alfalfa pasture and he said their was no clover or alfalfa on the place and that all the roughage they had received was from the wheat and barley plants.

The condition that he described was that the animals were unable to raise themselves on their hind legs. They could sit like a dog with the fore feet raising the fore quarters, but they had to drag the hind parts if they moved at all. They prefer to lie most of the time and make little effort to move about. Many of these cases seem to suffer very little, if any, pain, at least for a time. Swellings and soreness may develop later, however, when the cases become chronic.

Other diseases of a similar nature are sometimes met in hogs. Rheumatism and a disease described as a degeneration of the nerve and resulting paralysis have been mentioned. Probably a great many of the conditions of this nature are due to faulty feeding, through, of course, the above mentioned diseases do exist—rheumatism particularly when the animals are required to inhabit quarters that are damp and poorly drained.

The nursing mother that must provide milk for her young has to secure the materials for its manufacture from the foods that are provided her. Likewise she must provide the same nourishing materials before the young are born. If the essential elements are not in the ration afforded, she will take them from her own body to a considerable degree and that is what has occurred in many of the cases of the broken-down brood sow. This condition may also be seen in young pigs that are litters that were poorly nourished in certain essential elements, especially the bone-forming substances.

What is to be done when this condition is found? The greatest good should be done in preventing it by giving the brood sow a ration that contains the elements necessary to build sound and strong pigs and not rob her own body. Good pasture of clover or alfalfa will help or other pasture grasses along with the grain ration that is quite necessary to supply the energy materials. Ground bone meal is helpful in supply this deficiency, but if the elements can be given in organic combination, as they are in the plants and as nature intended them to be supplied the results are better, since these materials are more readily used by the body when supplied in this form.

When the animals is already down the condition has reached an advanced stage that may not respond to treatment. The pigs should be taken away from her, unless they are more valuable than the sow, and the sow given plenty of green feed with the addition of bone meal. Even then they may not recover, as the softened bone may not restore itself.

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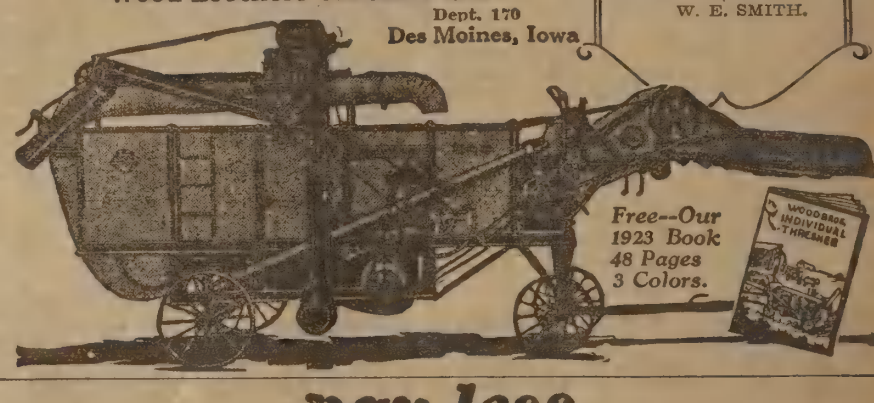
W. E. SMITH.



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SEEDS AND NURSERY STOCK—Yes, they are offered on this week's "Want Ad" page.

POULTRY AND RABBITS

New Poultryman at State College

John S. Carver, now of the U. S. Veterans' Bureau Vocational school at East Norfolk, Mass., has been appointed head of the department of poultry husbandry at the State College of Washington. He was graduated from the Massachusetts Agricultural college at Amherst, in 1913, and has had experience in commercial poultry plants in New Jersey and Connecticut, besides his teaching and experimental work in colleges. In 1915-17 he was head of the poultry department of the Essex County Agricultural school at Hathorne, Mass., and later was poultry extension specialist for the University of Maine, Orono, Me.

Mr. Carver has been much interested in experimental work, and has been engaged in some form of it practically all the time since 1915. First he worked on the elimination of blackhead disease in turkeys, through breeding, at Stanford, Conn., breeding some 275 turkeys with 25 different matings in a year's experiment. For five years he worked with nine different types of trap nests, attempting to eliminate the out-egg factor in trapnesting. In 1919 he perfected a trap nest that practically rids the poultryman of that difficulty.

Tests Similar Feeds.

For three years he experimented with the relative value of fish scraps and beef scraps as protein feed for chickens. After trying them on some 8000 chickens he established the fact that fish scrap as the only source of protein gave better growth at less cost per pound for the protein than did the beef scrap. At the market price it was cheaper and more efficient.

From 1915 to 1921 Mr. Carver ran experimental work in pedigree breeding for egg production with Rhode Island Reds and White Leghorns. The final average at the end of the period with the Leghorn flock was 178 eggs for a flock of 450 birds. With the Rhode Island Reds the average secured was 167 eggs. This pedigree breeding work, which was not completed, aimed to establish two strains of cockerels bred for high egg production, which could be recommended to breeders as a means of improving and grading up egg production in their home flocks.

Through six egg-laying contests he weighed all feed, both scratch grain and mash, and also weighed all hens at two-month intervals. Many changes were made in the feeding of the birds as a result of this experiment in feeding contest hens.

House Construction.

The ventilation of poultry houses has been a subject of special interest to Mr. Carver. He has done more experimental work along this line and poultry house construction than in any other. After a considerable amount of work covering some four years he perfected a poultry house front with a sliding curtain that gave most satisfactory results as to uniform temperatures and regulation of dryness in the house. He has built nine different types of brooder houses for coal stove heaters and last summer, after seven years of keeping careful records, he arrived at a type of brooder house which he considers most efficient from all viewpoints—ventilation, light, room and initial cost.

John S. Carver.

Through his contact with egg-laying contests (for some years he was superintendent of the Essex county egg laying contest), he has had opportunity of doing a large amount of special disease experimentation. Careful post mortem records were kept of every bird that died, and disease records of all that were sick. Of the principal diseases encountered—chickenpox, canker, roup and intestinal worms—he had a wide range of experimental treatment. He also studied all kinds of poultry diseases and performed hundreds of post mortems under varying conditions.

Projects for Washington.

Two special interests he has in experiment projects for Washington are: (1) Breeding for egg production with the idea of distribution of well-bred cockerels to Washington farmers; and (2) a five or 10 year experiment in breeding for egg production on the basis of external selection versus pedigree selection.

The state college was anxious to get the strongest man possible for the poultry work, in view of the large poultry interests in the state; the excellent opportunities for development of both farm flocks as a side line to other products, and commercial poultry plants; and the amount of cutover and irrigable land as yet undeveloped which in time will be open to settlers to whom a good, producing poultry flock will mean ready money in time of need. The college feels it has found the right man in Mr. Carver.

BUTLER

Galvanized Steel Grain Bins

Starve Rats

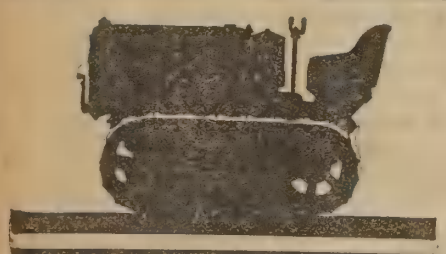
Pay For Themselves In GRAIN SAVED.

RAT, FIRE, WEATHER PROOF

Thresh Directly Into BUTLER BINS: Save Time and Grain. Best Material and Workmanship. Full capacity level full. LAST FOR YEARS.

Reduced Prices! Buy of your dealer or write us. Get our Special Club Proposition. Circular Free.

BUTLER MANUFACTURING CO.
908 6th Ave., S. E., Minneapolis, Minn.



Whenever power and endurance are at a premium the "Caterpillar" has no real competitor.

Our catalog proves why. Send for your copy.

CATERPILLAR
Reg. U.S. Pat. Off.

HOLT

The Holt Mfg. Co.,
Spokane, Wash.

The 1923 De Laval Separator which has now been on the market for over nine months, and of which there are already more than 75,000 in use, is acclaimed on all sides as being the best De Laval ever made, and that is saying a lot.

This new De Laval has all the efficiency, quality, durability and the advantages of former De Lavals, plus:

—A self-centering bowl which eliminates vibration, causing it to run smoother and adding to its efficiency and life;

—More uniform separation and less variation in the cream test;

—Still easier running, and

—Greater convenience, through the use of a bowl holder which is now attached to the supply can support. In addition, this new De Laval has other improvements and refinements, all of which give its owner the greatest value obtainable in a cream separator.

The Sweetest Running De Laval Ever Made

Saves the Most in Summer Months

A De Laval will soon pay for itself any time, but more quickly during the summer months. Then the greater capacity, easier cleaning and handling of the De Laval are most appreciated. Quick, easy and thorough handling of milk and cream in hot weather maintains the highest quality of both and often means the difference between profit and loss.

Why not see your De Laval Agent or write us about securing one of these new De Laval Separators? Sold on easy terms, from $55 and up.

De Laval Pacific Company
61 Beale Street San Francisco

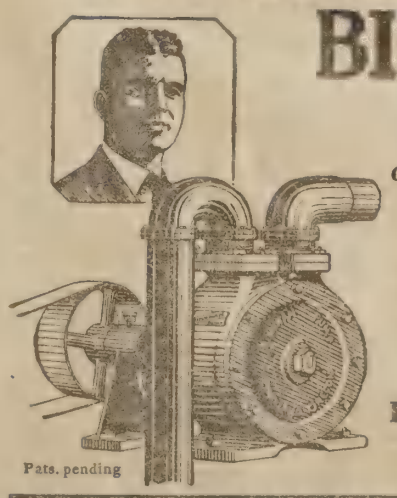
Sooner or later you will use a De Laval Cream Separator and Milker

By tomorrow!

Is lack of water all that stands between you and real profit?

—A Bingham Pump will give you all the water needed for bumper crops. One pump will irrigate large ranch. Low first cost and extremely low operating cost.

Go to your dealer or write, wire, or telephone our Portland office for a



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BINGHAM PUMP or Pumping Plant

Rotary, self-priming, nothing to get out of order, efficient and durable. Stop at our new display room and investigate for yourself.

Local or Long Distance Telephone East 9683.

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Portland, Oregon.

214

POST CARDS BRING BIG RETURN

Many of our advertisers offer free booklets and information which is very much worth your while to send for. A postal will bring them. Why not place a dime or so in your rural mail box with a note requesting the carrier to leave you some cards? Then use the cards in writing advertisers. When you do so be sure to mention THE WASHINGTON FARMER.

ORCHARD AND GARDEN

Fruit Shipments

Total Movement of 15,039 Cars Out of Wenatchee

By E. H. PHERSON.

Complete reports of all fruit shipments out of the north central Washington district through Wenatchee station have just now been compiled and checked over. There were 13,871 cars of apples forwarded from the district, and 1178 cars of soft fruits, making a total movement during the season of 1922-23 of 15,039 cars, which was 1351 less than for the previous season when 14,850 cars of apples and about 1450 cars of soft fruit were shipped.

The apple shipments were divided as follows among the principal varieties: Winesaps, 4241; Jonathan, 2341; Delicious, 2371; Spitdenburg, 1301; Rome Beauty, 1030; Stayman, 1094; Black Ben, 236; Yellow Newtowns, 178; Winter Bananas, 167; Winter Pearmain, 204; Black Twig, 126; Arkansas Black, 119; Ben Davis, 121; King David, 99; Grimes Golden, 76, and miscellaneous varieties, 231 cars.

Notable features of the distribution of shipments by varieties are the fact that Delicious have displaced Jonathans as the second leading variety, and it is doubtful if the Jonathan will ever gain its place as hundreds of trees of this variety are being cut out or grafted over, while Deilcious are increasing in number and bearing capacity annually.

It is also worthy of remark that the Stayman has gone ahead of the Rome Beauty and threatens to usurp the place of the Spitzenburg. The Stayman is now taking its rightful place as one of the leading varieties of winter apples. Experiment with oil wraps prove the Stayman to be one of the best keeping apples, excelling the Spitzenburg in this respect by a considerable margin.

Classification of soft fruits as to kinds is a much more difficult task than that of apples. A great proportion of summer fruit shipments go out in mixed express cars. Thus out of 1120 cars of soft fruit shipped 361 were mixed, containing cherries, apricots, plums, prunes, peaches and pears. Most of the pears, however, went out by refrigerator freight, there being 436 cars thus listed with about 60 cars by express or mixed.

Shipments of fruit by months reveal the time and manner of the transportation breakdown that cost the growers of the district $5,000,000 for which claims are now being presented to the railroads. During June 7 cars went out, all by express; in July 135 by express; in August 450 cars of soft fruit by express and 51 cars of summer apples; in September 462 cars of soft fruit and 1478 of apples; in October, when over 7000 cars of apples should have been shipped, according to schedule, only 3032 cars of apples and pears were forwarded; in November shipments dropped to 2114 cars so that by December 1, when 11,000 cars of apples should have been moved, only about 6600 had been forwarded, or 4400 less than schedule.

During December apple shipments were 1845, and in January when the Pacific Fruit Express and Milwaukee refrigerator cars arrived, 2967 cars went out, the heaviest apple movement of any single month during the season, though usually apple shipments are at a minimum during that month. February showed 1552 cars, March 776, April 241, and May the 20 last cars of the season were shipped.

Already refrigerator cars are arriving in the district from eastern points and being stored on sidings everywhere. The first solid carload of cherries will go out within a few days, followed by others daily, probably to Seattle. The cherry crop is unusually fine this year, though rains at this date (June 12) threaten to split the fruit if they continue.

Insects Infest Raspberries

There has been an increase in the number of insect pests that infest the raspberries in western Washington, and some of them have been found to be abundant, according to Arthur Frank, plant pathologist of the western Washington experiment station at Puyallup. Among them may be mentioned the small green worms known as the raspberry sawfly worms, the leaf roller, and the American raspberry beetle.

On the leaves of the new shoots are seen many ragged holes. On looking on the underneath side of these leaves a number of whitish green worms are seen working. They are quite hairy. These eat rapidly and increase in size. The adult form of the insect is a small fly, which appears when the new shoots are quite small.

Spraying the new shoots up from underneath with lead arsenate powder, 1 pound to 35 gallons of water, is recommended as soon as the worms appear. The pest has obtained a bad start and is present in raspberry and loganberry fields quite generally through western Washington.

The leaf roller twists and gnarls and webs together the terminal leaves of new shoots or the ends of leaves on the new shoots. While this pest is quite common everywhere in the valley, still it is not very abundant.

Within the webbed-together leaves will be found a small, dark green worm with a black head. Growers are advised to inspect their fields for this pest and to pinch together the webbed part, thus crushing the worm whenever they find indications of this pest.

If pests such as these are let go from year to year without paying any attention to them, the time comes when they are a problem to deal with and one that may cause a great deal of damage.

Several years ago much complaint was common on account of a small white maggot being found in raspberry and loganberry and blackberry fruit. The true cause for this could not be found for some time. Finally it was found that the insect which caused this condition was the American raspberry beetle.

This is a small, brown hairy beetle about one-eleventh of an inch in length. The beetle is common on the new shoots, eating holes in the terminal leaves. Later this same beetle works on the fruit buds and also on the blossom.

It is then that the egg is laid on the newly formed fruit, for that is where the worms are found. The only remedy known is to spray the new shoots with lead arsenate and to keep them covered, starting when they are small and keeping it up until they are two feet or more high.

Drooping and dying shoots are indications that the cane maggot is working on the shoots of the raspberry. The same also on the dewberry. The adult is a small fly which lays the eggs on the tips of the new shoots when small.

The egg hatches into a small grub which works its way down inside the new shoot and then turns toward the outside and then girdles the shoot just beneath the bark. There is no remedy for it except to cut off and burn the shoot. Careful inspection of the fields is advised to be done frequently and faithfully so that all infested shoots are taken. No spray is effective.

PUT ON THIN COATS OF PAINT.

Do not make the mistake of putting on thick coats of paint. Three thin coats are much more valuable than two thick ones.

Cuts Tops Off Thistles

"I have found one way to get rid of the Canadian thistle and have demonstrated that it will work, even in extreme cases," said James Carstairs of Shelton, who has a farm close to the Grays Harbor county line, just north of Elma. "It is not a difficult remedy, and is not as costly as some of the other methods advocated.

"The secret is nothing more than to take a hoe and keep after the thistles, cutting off all the tops as fast as they come through. The first three times they come up they should be cut as soon as they show through the ground, but the most important time is when they come up the fourth time late in the fall. There may be a few plants come through in the following spring, but they will be very delicate plants, and one cutting will usually kill them off.

"It is a good plan to plant some kind of a hoe crop, such as potatoes, corn, or any other row crop which can be cultivated with a horse and hoed by hand. The cultivation which is necessary will be very effective in keeping the thistles down and it will not take long to entirely rid the field of the pest."

Glance over the bargains on the "Want Ad" page.

Farmers' Want Ads

MONUMENTS F

COMPLETE STOCK. WRITE FOR DESIGNS and prices. Inland Monument Co., N1001 Monroe, Spokane.

PERSONALS R

HEALTH-GIVING CORSETING IN ALL ITS branches. Only exclusive specialist in the west. Write us. National Garment & Corset Co., W925 Riverside, next Review bldg., Spokane.

HELP WANTED—Male 1

WANTED—STEADY, BUSINESS-LIKE MAN of good habits, hustle and integrity; experience unnecessary; opportunity make good money; permanent, year around. Cash weekly. Middle-aged and elderly men find this attractive. Washington Nursery company, Toppenish, Wash. Box N.

WANTED — SALESMAN WHO CAN SELL high-grade, dependable nursery stock; several counties in Oregon, Wash., Idaho now open for assignment. Our selling contract will interest you. Address Albany Nurseries, Inc., Albany, Ore.

HELP WANTED—GENERAL. 5

MEN AND WOMEN, AGE 17 TO 30, AT ONCE to train for positions with the Western Union Telegraph Co. and various railroads. Pacific Telegraph Institute, Spokane, Wash.

SCHOOLS AND COLLEGES 26

EARN $110 TO $250 MONTHLY, EXPENSES paid, as railway traffic inspector; position guaranteed after 3 months' spare time study or money refunded; excellent opportunities. Write for free booklet G-157. Stand. Business Training Inst., Buffalo, N. Y.

FRESH FOOD PRODUCTS 51-3

LARGE SIZE OREGON PRUNES, 60-65 TO pound; guaranteed specially fine quality; direct from "Red Hill Orchard." 28-pound box (25 lbs. net), $2.12 per box; in 100-pound sacks, double sacked, $7 per 100 pounds. Order your dried loganberries now and get the best. Orders should be in by July 10th for Aug. 1st delivery. 15½-pound boxes (12½ pounds net), $4.90 per box. These prices are f. o. b. Salem. Red Hill Orchard, R. 3, Box 158, Salem, Ore.

(Continued on the following page.)

When answering advertisements don't fail to mention this paper.

The "40" Fits the Fordson

The only plow for the Fordson with the great draft-reducing, work-improving combination of rolling landside and self-adjusting hitch is the

John Deere "40"

All-wheel-carried — rear weight rolls on the rolling landside — no dragging friction — that means very light draft.

Hitch adjusts itself to proper line of draft whenever depth is changed — it's always automatically correct — bottoms always run true and level at all depths.

Genuine John Deere bottoms, famous for scouring, good work and long wear. There's a type for every soil.

Quick detachable shares, strong and close-fitting. Loosen one nut to remove share; tighten the same nut and share is on tight.

Beams guaranteed not to bend or break. Simple, strong and positive power lift. Lever control of depth and leveling, from the tractor; you don't have to go behind the "40" to adjust it. See the "40" on display in your town.

FREE FOLDER. Write for your copy today. Address John Deere, Moline, Illinois. Ask for Folder FC-647

JOHN DEERE

THE TRADE MARK OF QUALITY MADE FAMOUS BY GOOD IMPLEMENTS

"Like the old gray mule — they never die"

Mr. Wesley Overton, Bridgeport, Oklahoma, owns four OILPULLS. In a recent letter he says, "I have put these OILPULLS in places where a good horse could not go and they pulled out easily. They are a good investment. I have never found an OILPULL in the scrap pile. They seem to be 'like the old gray mule — they never die'."

Long life is only one result that comes from the careful building of the OILPULL. Letters received from every section of the country mention this. But there are, also, thousands of other letters which point out the unusual dependability—the great saving in fuel—the remarkably low upkeep cost—farmers are experiencing. All are largely the result of Triple Heat Control, dual lubrication and other OILPULL features.

Write for letters from your district

No matter where you are located we can send you letters from your district — maybe from neighbors —who have used and proved out the OILPULL. Read these letters. They are interesting. They are convincing. They tell the story of the OILPULL from YOUR side. Just ask us to send along the letter. We will include our new booklet on Triple Heat Control and other interesting literature.

FREE BOOKS

OILPULL

"The Cheapest Farm Power"

ADVANCE-RUMELY THRESHER CO., INC. LA PORTE, IND.

Dept. Y.

Spokane, Wash. Portland, Ore. Pocatello, Idaho.

The Advance-Rumely Line includes kerosene tractors, steam engines, grain and rice threshers, husker shredders, alfalfa and clover hullers and motor trucks.

Serviced through 33 Branch Offices and Warehouses

FRESH FOOD PRODUCTS (Continued) 51-3

FISH—4 LBS. SMOKED SALMON, $1; 4 LBS. Alaska salmon bellies, $1; 4 lbs. black cod, $1; 3 lbs. best codfish, $1; delivered by mail. Coffin Fish Co., Seattle, Wash.

BEES AND HONEY 53

NEW CROP ALFALFA HONEY, POSTPAID. 2d and 3d zones, 5-lb. pail, 95c; 3 5s, $2.70; 10-lb. pail, $1.85; 3 10s, $5; 60-lb., $8. You send the money, we send the honey. Kittitas Valley Apiaries, Ellensburg, Wash. Rt. 2.

EXTRACTED HONEY — ONE 60-LB. CAN, $6.50; two 60-lb. cans, $12.75, collect; three No. 10 pails, prepaid, third zone, $5. Wells D. Rose, Sunnyside, Wash.

QUEEN BEES—BUY THE BEST. UNSURpassed Italian queens, 1, $1; 6, $5.75; 12, $11; 50, $45; 100, $85. Circular free. J. D. Harrah, Freewater, Ore.

HAPPY HOME HONEY—ALFALFA AND clover; 60-lb. can, $6.50; two cans, $12.75; case six 10-lb. pails, $7.75. H. N. Paul, Mabton, Wash.

EXTRACTED HONEY—TWO CANS, SIXTY pounds each, $11; one, $6. J. M. Ruyts, Buhl, Idaho.

VALLEY BLOSSOM HONEY; QUALITY GUARanteed; 1 60-lb. can, $7.50; 2, $14.40. Ernest Sires, Route 7, Yakima, Wash.

MISCELLANEOUS—FOR SALE

SASH AND DOORS—O. B. WILLIAMS CO., 1943 First ave. So., Seattle. Chicken house sash, 20" wide by 25" high, 80c; a dozen different sizes in stock for immediate shipment. Skylights for chicken houses, 36"x40"; price, glazed, $2. This is the size recommended by the Western Washington experiment station. We carry them in stock for immediate shipment. Sash and doors for all purposes at lowest prices. All orders receive prompt attention. Our large illustrated catalog No. 35, showing full line of building material and built-in fixtures for the home, free on request. O. B. Williams Co. Established 1899.

PIPE—GET PARTICULARS ON OUR SPEcial flue pipe, 1¼, 1½ and 2 inch. Big saving on it. We also have all sizes second-hand and new standard pipe at low prices. We also save you on roofing, belting, pumps, engines, cables, etc. Alaska Junk Co., S120 Adams, Spokane, Wash.

LEAF TOBACCO—FIVE POUNDS CHEWING, $1.75; ten, $3; twenty, $5.25; five pounds smoking, $1.25; ten, $2; twenty, $3.50. Pipe and recipe free. Send no money, pay when received. United Tobacco Growers, Mayfield, Ky.

WALL BOARD—WRITE FOR SAMPLE OF Washington plaster wall board; won't warp, won't burn. Manufactured by Washington Building Products company, 6851 E. Marginal Way, Seattle, Wash.

NATURAL LEAF TOBACCO—CHEWING, 5 lbs., $1.75; 10 lbs., $3; smoking, 5 lbs., $1.25; 10 lbs., $2. Pay when received. Pipe and recipe free. Farmers' Cooperative Tobacco Union, Paducah, Ky.

SMOKING TOBACCO—10 LBS. BEST KENtucky Burley, $5; 10 lbs. best Tenn. Red, $3.50; 10 lbs. smoking, $2.75, prepaid. Farmers' Ass'n, Dukedom, Tenn.

HOMESPUN TOBACCO—CHEWING, 5 LBS., $1.25; 10 lbs., $2.50; smoking, 5 lbs., $1.25; 10 lbs., $2. Farmers' Union, Mayfield, Ky.

TOBACCO—FINE, YELLOW MAMMOTH chewing; 10 lbs., $3; smoking, 10 lbs., $2; 20 lbs., $3.50. Farmers' Club, Mayfield, Ky.

FILMS DEVELOPED FREE BY KODO, THE Picture King, S15 Stevens, Spokane, Wash.

SEND FOR OUR FREE CAMERA OFFER. Spokane Film Co., Spokane.

MISCELLANEOUS 61

CHILD'S DRESS, STAMPED, PRETTY DEsigns, unbleached muslin; sizes 2, 4 and 6; seventy-nine cents, postpaid. Home Stamping, 51 Montana st., San Francisco, Calif.

A. & K. MARKET, SPOKANE, WANTS YOUR hogs, veal and poultry. Prompt remittance.

GRAIN BINS AND TANKS 90

METAL GRAIN BINS SAVE YOU MONEY. Write for circular T and prices. Spokane Culvert & Tank Co., Spokane, Wash.

MACHINERY—For Sale 93

WE HAVE LARGE STOCK 32-VOLT MOTORS from ⅛ to ½ h. p., vacuum cleaners, etc., for farm lighting plants. Also a few Lally light plants. All above less than wholesale prices. Write Farm Equipment company, 310 1st ave. South, Seattle.

TWO LATE TYPE, SNAPPY RUSSELL STEAM engines; two Rumley oil pulls, several separators, several small used gas engines. Fallquist Bros., W20 Riverside ave., Spokane, Wash.

THRESHERS, STEAM ENGINES, TRACTORS, trucks; all kinds of machinery. Exchange Machinery Co., W20 Riverside, Spokane.

EMERSON STANDARD MOWER REPAIRS. Spokane Farm Machinery Co., Spokane, Wash.

TWELVE HORSEPOWER STOVER GASOLINE engine, $150. Albion L. Gile, Chinook, Wash.

MACHINERY—Wanted 96

WANT A SMALL THRESHER AND TRACTOR. Write James R. Brown, general delivery, Spokane.

AUTOMOBILES—FOR SALE. 112

WE HAVE A FEW EXCELLENT USED CARS at prices that will surprise you; stop in or write. Inland Empire Chevrolet Sales Corp., 916 2d ave., Spokane. Open evenings. Open Sunday.

AUTOMOBILES AND TRUCKS BOUGHT AND sold. Barton & Fleming, 1020 1st., Spokane.

AUTO ACCESSORIES AND PARTS 119

FRONT AXLE BOLTS AND BUSHINGS, spring bolts and bushings. Wire and disc wheels. Sales and service. Pacific Gear & Auto Parts Co., 1022 First ave., Spokane.

STOVE REPAIRING

WRITE MYER RUBENS, SPOKANE, ABOUT stove repairs, welding broken parts, nickel plating.

PATENTS 150

PATENTS, TRADEMARKS, COPYRIGHTS. Write to B. P. Fishburne, registered patent lawyer, 398 McGill bldg., Washington, D. C.

FUR-BEARING ANIMALS 170

SILVER AND CROSS FOXES FOR SALE. William Rambo, 407 Sprague, Spokane.

PETS—Dogs, Birds, Etc. 171

COLLIE PUPPIES, REAL WORKING STRAIN. Males, $10; females, $5. A. J. Dennis, Fish Trap, Wash.

KENTUCKY FOX HOUND PUPS AND YOUNG dogs. J. E. Bateman, Gales Creek, Ore.

POULTRY 174

DANIEL'S WHITE ROCKS AND S. C. WHITE Leghorns; trapnested continuously; 8 week pullets and matured breeding stock at reduced prices. Free list. Ideal Poultry Yards, Hoquiam, Wash.

FARMERS' WANT ADS

This is the farmers' "want," "sale" and "exchange" department for small advertisements of farmers, including live stock and poultry.

Advertising rates for ads running 1 to 3 times, 10c per word per insertion, with a special rate to Farmer subscribers, as follows: Ads running 4 to 12 times, 9c per word per insertion; ads running 13 times or more, 8c per word per insertion.

All commercial and land advertising, 10 cents per word per insertion. Open also to nonsubscribers.

In using these columns advertisers must observe (1) No advertisements will be inserted for less than $1.00 (2) Every word, number and initial, including name and address, must be paid for. (3) New advertisements, changes of copy or cancellations must reach general office, Spokane, Wash., 10 days in advance of publication date. (4) Cash must accompany order.

Above rates include insertion in The Washington Farmer, The Idaho Farmer and The Orgeon Farmer, which constitute the Pacific Northwest Farm Trio, 46 Review building, Spokane, Wash.

POULTRY (Continued) 174

WHITE LEGHORN PULLETS — MARCH, April and May hatches. From thoroughbred, mature hens, mated with cockerels of 225 to 265 egg record, Hollywood, Tancred or Gilbert strains; 8 weeks old, $1.20 each; 12 weeks old, $1.40 each; shipped with a guarantee of being satisfactory or any undesirable ones may be returned within three days and refund will be promptly made. Send 25 per cent with order; balance C. O. D. Mention this special offer when ordering. Queen Hatchery, 1430 First ave., Seattle, Wash.

250,000 ACCREDITED BABY CHICKS FOR sale during May and June. Send in your order early. "A" grade, $6 for fifty; $11.50 per hundred; $110 per thousand. "AA" grade, $8.50 per fifty; $16 per hundred; $155 per thousand, f. o. b. Petaluma. Member of the Sonoma county farm bureau accredited hatchery list. White Hatchery, Petaluma, Calif.

CERTIFIED WHITE LEGHORN QUALITY chicks for summer and fall months, from selected free range, high egg producing breeding flocks, inspected and accredited by the Sonoma county farm bureau. Send for catalog and attractive prices. Safe delivery and full count guaranteed. Must Hatch Incubator Co., Inc., 445 Seventh st., Petaluma, Calif.

SUMMER SALE OF "HENACRES" LEGhorns—2000 hens, 5000 pullets, 200 cocks, offered at special low prices. Direct from either our own breeding plant or commercial egg farm. "Henacres" quality at bargain prices. Write for sale price list. "Henacres," Box A, Prosser, Wash.

WHITE LEGHORN BABY CHIX FROM flocks mated to males having sire's dam record of 240 to 297 eggs per year. Full particulars and interesting literature on request. We are accredited by Sonoma county farm bureau. The Pioneer Hatchery, 422 Sixth street, Petaluma, Cal.

DOLLARS FOR YOUR EGGS—WE PAY THE top market prices for your eggs and poultry. Daily cash remittances. McClintock-Trunkey Co., produce department, Spokane.

FOR SALE—REDUCED PRICES FOR JULY hatched Ancona baby chicks, 333-egg strain from pedigreed stock. Smith's Ancona Farm, Route 4, Caldwell, Idaho.

JERSEY BLACK GIANTS, PEDIGREED MATings; 15 eggs, $3.50; 8-week-old chicks, $3 each. E. M. Chambers, Bovill, Idaho.

WHITE LEGHORNS—OLD HENS, 50C; splendid layers and breeders. Chic-U-Want Poultry Yards, Roseburg, Ore.

PUREBRED LIGHT BRAHMAS; EGGS, $1 per 15. Mrs. C. W. Laabs, Irby, Wash.

LIVE STOCK. 177

RARE OPPORTUNITY FOR HORSEMEN wishing to purchase and better their herd. Purebred Percheron stallions and mares, best blood of Percheron stock; these horses have taken prizes every place they were entered; stallions range in weight from 1500 lbs. to 2300 lbs.; all outstanding with good bone; mares of the blocky type. Wish to dispose of this stock as I am going out of business. Call at farm or write Thos. F. Wren, Fenn, Idaho.

16 WORK HORSES AND MARES FOR SALE—Weights 1200 to 1700; mostly 4 to 8 years old; 10 well broken, 8 Shire colts; just a carload. Also one Shire stallion (sired by Rothwell Forester), weighs about a ton. One good 3-year-old Mammoth jack. These with or without work stock. Reasonable down payment with 1 and 2 years time on secured notes at 7 per cent. Address G. C. Finley, agent, Yakima, Wash.

WE GUARANTEE TO PAY THE HIGHEST market prices for your poultry and live stock. Veal market growing stronger. Owing to the constant changes in the market we are unable to quote prices in this paper from week to week. We will furnish tags and prices when you are ready to ship. Write us what you have to sell. Prompt returns. John Lewis & Co., Spokane, Wn.

REGISTERED SHORTHORN BULLS OF quality and breeding; red, white or roan; polled or horned; of serviceable age or younger; priced to sell. Wm. Mulhall, Buena, Yakima county, Wash.

TOP PRICES PAID FOR CREAM, EGGS, poultry, pork, veal, also fruits, berries and vegetables in season. Inland Products company, Second at Cedar, Department E, Spokane, Wash.

WE PAY TOP RICES FOR YOUR LIVE OR dressed veal, hogs and poultry. Your check by return mail. Shipping tags on request. M. & J. Packing Co., Spokane.

WE PAY THE HIGHEST CASH PRICE AND remit every day for strictly fat dressed veal and pork and live poultry. Address Dept. T, Welch's, Spokane, Wash.

THOROUGHBRED CHESTER WHITE PIGS, 8 to 12 weeks; gilts 2 for $25; boars, $10 each; also bred sows. R. J. Borne, Farmington, Wash.

TWENTY REGISTERED HOLSTEIN HEIFers, one to fifteen months old; some from tested dams. Terms. Percy Hillis, Snohomish, Wash.

REGISTERED HOLSTEINS—BULLS, HEIFers and cows for sale; accredited herd. Oscar Dunlap, Junction City, Oregon.

AYRSHIRES FOR SALE—FIFTEEN REGistered Ayrshire cows and heifers. Carold J. Parker, Grants Pass, Ore.

REGISTERED GUERNSEY BULL FROM IMported stock; very reasonable. R. F. Tubb, 9 E 11th st., Portland, Ore.

ONE HUNDRED DOLLARS BUYS REGistered yearling Hereford bulls. Platt Bros., Genesee, Idaho.

FOR SALE—FULL BLOOD HOLSTEIN BULL; 3 years; gentle. D. Bridgeman, Harrison, Idaho.

REGISTERED HAMPSHIRE HOGS, WITH PApers. Write me. K. Kingston, Boring, Ore. R4.

REGISTERED SHROPSHIRE RAMS AND ewes. Write McK. Edwards, Valley, Wash.

FOR SALE—REG. HOLSTEIN BULLS; HERD fed accredited. Whitla Ranch, Mica, Idaho.

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Cattle Ranch To College

By Russell Doubleday - Copyright by Doubleday & McClure Co.

Says the author:
This is a true tale of a boy's life in the west many years ago. It is an account of his amusements, his trials, his work, his play. The incidents described actually happened and are described substantially as "the boy" related them to the writer.

An Indian Attack.

CHAPTER I.

A solitary horseman rode into the little frontier town of Bismarck, shortly after dark one evening, a good many years ago. Horse and rider passed up the single unpaved street; in the darkness no one noticed the fagged condition of the animal, nor the excitement of the rider, betokened by the continued urging of his weary pony.

The town was unusually full of the nomadic people who made up its population, cow-punchers, saloonkeepers, gamblers, freighters, and outlaws. The evening quiet was constantly broken by the sounds of revelry, and the report of a pistol occasionally punctuated the general noise as some hilarious cowboy playfully shot at the lights.

In the dim ray cast across the street through the small windows of the saloons and dance halls, no one saw the horseman ride up the street to "Black Jack's," one of the most conspicuous saloons; here he stiffly dismounted and tied his pony to the pole where stood a row of other horses. After glancing around to see that all was secure, he entered. He was hailed with a chorus of shouted greetings and questions.

"Hello, Harry! what's the matter?"

"Why, there's Harry Hodson! What drove you down the trail tonight?"

"Are you dry, old man? Come and drive a nail with me."

As the crowd drew around the newcomer, who was a sober, steady cattleman from 25 miles up the river, they noticed that there was something out of the ordinary in his manner. Even the fact of his appearance at that place and hour was unusual.

"No, boys," he said, in answer to the many invitations to drink. "I think we'll all need clear heads before daylight."

"Why, what's the trouble?" chorused the crowd.

"The fact is," continued Hodson, hurriedly, "I cached my cattle and then came down to tell you that a big bunch of Indians crossed the river above my place this afternoon, and they looked as if they were on the war path."

All were attentive now, and even the most reckless of these wild men, living continually in the midst of dangers, wore grave faces.

"I didn't stop to investigate. I wasn't taking any chances, you see," he went on. "So I ran my cattle over onto Woody island and then started down the trail, giving the word to the fellows along the road. Hostiles have been pretty thick across the river lately, and I've had to watch out."

By this time all hands were thoroughly interested. As Hodson went on with his tale, the men drew nearer to him, their faces showing how keenly they realized what his news might mean to all.

Questions followed thick and fast.

"How many were there? Where did they cross?" asked one.

"How many horses? Did they have any squaws with them?"

Without giving Hodson a chance to answer, they all began to talk in an excited babel of voices, advancing opinions and theories as to what had taken place. One big fellow, in a red flannel shirt, asserted that they must have crossed the river at Elbow island; another contradicted this statement and said that the stream was too wide at this point and that they crossed in "bull boats," as the rude craft made of buffalo or cowhides stretched over strong light frames of willow were called.

Hodson stood apart while this discussion was going on, with the bored air of one who was fully acquainted with the facts and could end the unnecessary talk in a moment if he was allowed an opportunity.

"Big Bill" Smith, one of the older men, took in the situation. "Dry up," said he; "let Harry talk, will you? He's the only one who knows anything."

"Well," said Harry, as the crowd once more turned to him, "there isn't much talking to do, but there's plenty of hustling ahead for us. About 200 Indians crossed the river up at Sioux ford. They were traveling pretty light, and I guess they are looking for beef or anything else they can lay their hands on; probably they think they can scare us off with a few shots and then run the stock off. They had a lot of horses—not enough to go around—but a lot. We've got to get ready for them on the jump, for if they're coming they'll be here before daylight, and the stock and wagons will have to be got in right away."

"Somebody go for Jim Mackenzie," said Big Bill.

As one of the men started for the door to carry out this order, a tall, commanding figure, grizzled and somewhat bent, but more from hardship than from age, entered the room. He was recognized at once as the sheriff; the central figure when trouble was brewing, but a retiring, inconspicuous citizen when all was peaceful.

When action was required he was in his element. A man to depend on in time of trouble, one to command in an emergency. It was very noticeable that these rough cattlemen, accustomed to depend upon themselves, who when off duty acknowledged no law except their own wishes, instinctively looked for a leader when confronted with this common danger. No one thought for an instant of questioning his orders, but obeyed with military precision. For the time, his word was law.

"Harry," said the sheriff, turning to the bringer of these bad tidings, after the facts had been told him, "you put your saddle on my bay and take a couple of men with you back on the trail. Bring back Jim White and his outfit of wagons and stock; he's camped down on Hay creek. There are some smaller outfits on the Black Hills road; better help them get in. You'll want to hustle," he added, as Hodson and his two helpers went out.

"Smith," continued the sheriff, issuing orders as fast as a pony could trot, "take a couple of men and get in the circle bar stock, there's only a night-herder with them. The rest of you who have wagons and stock out, bring them in yourselves. All you loose men," he added, as he noticed that several men still lingered in the hot, close smoke-filled room, "get your guns, saddle up, and come to my shack."

The sheriff had been in the place but five minutes, but now fat Sam Whitney, a frequenter of the place, Black Jack, the saloon keeper, and a couple of soldiers from the fort across the river, were all that remained with him.

The men outside could be heard saddling up, struggling with their refractory horses, and calling out to each other; from time to time the rapidly diminishing sound of galloping hoofs came to the ears of the silent men who for the moment remained motionless.

The sheriff was planning his defense against the expected Indian attack, and the men who were with him, without a word, waited for the announcement of his next move. It was Jim Mackenzie, and they put themselves in his hands with blind confidence.

Bismarck was a frontier town in the full sense of the word. A collection of rude houses, more or less strongly built of logs and dried mud, straggled along the single street. Placed at the intersection of the expected railroad and the Missouri river, a town of considerable size was mapped and many streets with high-sounding names were projected. But only Main street was actually laid out. The houses, which their inhabitants called shacks, were built on the north side of the street facing the south, in obedience to the natural law of cold climates, so Bismarck boasted really of but half a street, and that a short one.

Fort Abraham Lincoln, situated directly across the river, was supposed to afford protection to the settlers from the Indian marauders, but the hardy, self-reliant frontiermen were generally able to take care of themselves. Not many of the inhabitants stayed the year round. The few who did remain through all seasons—the saloon keepers, horseshoers, stable keepers, and the three families—dwelt in the more pretentious houses. The other residences were mere temporary shelters, which the owners would not have considered worth fitting up had they been able to do so.

Around the outskirts of the town were always a number of freight outfits, and this night was no exception to the general rule. The cumbrous wagons were drawn in a circle, harnesses lying in a seemingly hopeless tangle on the wagon tongues, and the tents were pitched against their sides or canvas lean-to's were rigged up. A number of greasy men lounged around the campfires some sleeping, some rebraiding whips, some mending harness or chopping out new brake blocks. The work stock were grazing at a little distance where the grass was good, guarded by an armed herder.

To these freighters' camps came the sheriff himself to warn them of the impending danger. Immediately all was activity. The work stock were brought in and in a thrice were harnessed to the heavy wagons. The mules were urged forward with shouts and cracking of whips, and soon the whole outfit was on its way to form a cordon around the town, or, at least, on the side that was most likely to be attacked.

Mackenzie rode with the wagon-train for a short distance, then branched off after giving some final orders, or rather suggestions, for any emergency that might arise.

"So long," he said.

"So long," said the driver of the leading team. (Whether a man was leaving for a trip across the street or across the continent, the parting words were, invariably, "So long.")

Mackenzie went on his way, skirting the town, keeping his eyes and ears wide open. There was nothing within hearing to indicate that the settlement was in danger of attack from the dreaded Indian. The teamsters could still be heard shouting to their mules, and an occasional creaking squeak from the wagons broke the stillness. The sheriff listened in vain for more ominous sounds. "The reds are still pretty far off or they are keeping mighty dark," he said to himself, as he put spurs to his horse and galloped toward one of

the better-looking houses that stood on a little rise some distance from the main street settlement.

Messengers had been sent in every direction, to warn sleeping citizens, and all had been arranged for except this household, one of the three families of the town.

Mackenzie rode up to the door and, without dismounting, knocked.

In an instant there was a sound of bustling, for the westerner sleeps with one eye open, and is ready at a moment's notice for anything that may occur.

"Who's there?" shouted a voice.

"Mackenzie," answered the sheriff.

Almost at the same moment the door opened, and a man stepped out.

"Hello, Worth!" said the sheriff. "You'd better bring the wife and children further down. Harry Hodson just came down the trail and reports a big bunch of Indians a few miles up, and——"

But Worth did not wait to hear any more.

"John," Worth shouted back into his shack; "you and Ben help your mother pack up the bedding and take care of the baby. We've got to be lively. You know what to do. You see, Mac," he said, turning to the horseman, "I thought I might as well get things started while you were telling me about these hostiles."

"All right," said the sheriff. "Good scheme. You might as well saddle up and come along with me so you can find a place beforehand for the wife and kids."

In a few minutes both men were on their way to the center of the town: Mackenzie, to send out his pickets and guards, and to arrange the placing of stock and wagons; Worth, to find a temporary shelter for his family. The boys, John and Ben, were left behind to look after the home, pack up the goods, catch and saddle

(Continued on the following page.)

A solitary horseman rode into the little frontier town of Bismark shortly after dark one evening.

FAMILY CIRCLE

ALICE W. BARLAND
EDITORIAL CONTRIBUTOR

Cheer up! for the sun is shining
Somewhere, in the heart of the sky;
Cheer up! for the folly of whining
Is close to the sin of a lie.

Cheer up! for the burden of sorrow
Has ever a coming relief;
Cheer up! there's a brighter tomorrow;
Cheer up! there's an ending of grief.

Cheer up! or the present is wasted.
The beautiful, only today;
Cheer up! till a beaker is tasted,
Why turn in abhorrence away?

Cheer up! for good sense is a leaven
To lighten the load of a fear:
Cheer up! for all God and all heaven
Are offered, and eager, and here.

—AMOS R. WELLS.

Dear Mrs. Barland and Members of the Family Circle: I take it for granted that each member is anxious to do his bit to bring the price of sugar back to normal again. I suggest that everything be canned without sugar that well can be, and that you use honey for the rest. I have used honey successfully and as there is a knack to the process I will give my method.

Use more honey than you would of sugar and cook the fruit from one-third to one-half longer than with sugar to neutralize the acid, or fermentation will take place. I made jellies, jams, preserves, etc., one season and had splendid success. I was warned about the longer time to cook the fruit, but a friend of mine living in Colorado lost all she put up not knowing about this.

We are going to send east of the mountains for a 60-pound can of honey and we hope the bees will not go on strike nor the beekeepers raise the price. We must let the sugar barons see what a mistake they have made to antagonize the housewives of these United States.

MRS. LOURA PRATT.

Dear Mrs. Barland: I have been a subscriber to THE FARMER for many years and we look forward to the day for it to come. It is surely a grand little paper.

We live on a small rented place and our family consists of my husband and two dear little children, a boy of nearly 5 and a girl of 2.

My husband is a landscape gardener and has been in business in Everett for about 14 years. He is growing nursery stock. I am raising fancy sweet peas of 1923 novelty for cut flowers, as I have made good before in cut bloom for receptions, parties and hospitals.

I am like many of the others, I make over old clothes and make new ones from flour sacks. I pull a stocking top over my broom and tie it to the handle and it holds it in shape, and I put a screw eye in the end of the handle to hang it up by. It saves the broom and keeps it in good shape.

I think children should be trained to help, boys as well as girls. My boy of 5 gets in the wood every morning and evening and is also beginning to dry the dishes. He knows how to use a broom and I have taught him to clean the walks and porch if he gets them dirty.

Both my parents were born across the ocean. My father was born in London and was a Civil war veteran, and my mother was born in Paris and was on the stage there for 31 years. MRS. R. J.

Family Circle Girls

Dear Mrs. Barland: I always look at the Family Circle first and think these discussions that we are having very interesting and helpful.

I live on a dairy ranch about five miles from Klamath Falls, Oregon, and I like ranch life and often help my father with the work. I can milk and do any chores that my brother can do. I like to read better than anything else and I don't like housework at all. I would rather help my father with the outside work. I am very fond of school and it is the height of my ambition to get a good education.

I think smoking is a vile habit and that no girl with self-respect would do it. If a girl starts smoking and drinking and such like when she is young she is apt to do worse as she grows older till she becomes a disgrace to herself and family. I don't think boys should smoke, either.

I try to do as my mother advises, as she is experienced and knows what is best for me and always knows where I am.

My brother broke open an egg the other day that didn't hatch with the other eggs under the hen and found a chicken in the egg with four legs. We have put it in alcohol to preserve it to show to our friends. FLORENCE.

Dear Mrs. Barland: I have been reading the letters in the Family Circle and find them interesting, but the discussion on kissing was more interesting than the smoking, because it was not so one-sided. Many letters were written in favor of kissing. For my part, I can't see why girls want to lower themselves and thus show the world how weak their character is. I admire R. V.'s ability to refrain from smoking, when she chums with so many girls who do smoke.

I would like to ask the Circle what they think about girls going with boys younger than themselves.

I was an Idaho girl till last April, when I came to Utah. I like it pretty well here, but it doesn't seem quite like home.

A. P. H.

Cattle Ranch to College

(Continued from the preceding page.)

the horses. It was a seemingly big task for boys of 10 and 12, but from the time these boys were able to walk they—in common with other boys of the frontier—had to look out largely for themselves. They were strong, sturdy little chaps. John, the elder, was his father's right-hand man, and when Mr. Worth was away on one of his frequent freighting trips. John was often called upon to take care of the family in emergencies much like the present one.

In this frontier town, the reports of bands of hostile Indians coming to raid and kill were not uncommon. The single man, active, mounted, armed with weapons as familiar to him as his right hand, had no fear of not being able to outwit or escape the enemy, wily as the redskins were. In fact, the Indians themselves were well aware of the ability of the plainsmen to cope with them when unhampered by women and children, so they practically never began hostilities until they could get their white enemies at a disadvantage. The few families were, therefore, their special point of attack. It was their helplessness that tempted the onslaught and aroused the savage instincts of these marauders. When the head of the family, the bread winner, was away, the dread of these fearful, relentless attacks on his helpless ones abode with him always. The mother and children, left at home, lived always under the shadow of the same fear.

John and his brother, therefore, fully understood the danger and the need for speedy and careful preparation. They had often, at the warning of the hostiles' approach, helped their mother make a fort of the solid log house by piling up the scanty furniture and bedding against the doors and windows, leaving only loopholes for their rifles; and though the present situation was one that would make ordinary boys useless through fear, John and Ben, on the contrary, were too busy to worry; they knew exactly what was to be done, and in their sturdy, independent way went to work to do it.

"Say, Ben," said John, as they went toward the corral (the circular inclosure in which the saddle horses were kept), "I'll bet it's just those Indians we saw across the river, day before yesterday, while we were hunting Gannons' horses. There was a lot of squaws in that bunch, do you remember?"

"That's right," assented Ben; "and I'll bet that some of Gannons' horses were in that lot of Indian ponies. If it was $10 reward instead of five, it might have been worth while to run the risk of trying to find out; but five dollars is too little to go fooling around a strange Indian's camp for."

The talk was ended by their arrival at the corral and the subsequent busy time catching and bridling of the horses. The ponies were then led to the door, where they were saddled. As they were cinching them up—as the tightening of the girths is called—Mr. Worth returned. In a few minutes the whole family were on their way to the Sebells', one of the other Bismarck families who lived on Main street.

In town they found all activity. Horsemen were galloping to and fro, cattle horses, and mules dashed in and out, wagons driven at full speed crossed and recrossed the dusty street. As soon as they were installed at their new-found shelter and their household goods disposed of, John went with his father to get in the extra stock of horses and mules, for, next to his family, these are the freighter's chief care.

They found their stock together, as was expected, for animals, particularly horses, that come from the same place, always stay together. This instinct made it much easier for the herder to gather his own, when there were many animals belonging to different outfits on a common grazing ground. The Worth stock was promptly driven inside the now almost complete circle of wagons, and there tied.

A group of men were busy piling up boxes, barrels and bales, taken from the freighters' wagons, into the semblance of breastworks. As John and his father approached, the sheriff came forward and joined them.

"Family all right, Worth?" he asked, kindly. "I sent up a couple of men to help you and they reported that your shack was deserted and the place locked up for keeps. You didn't waste any time."

"That was good of you, Mac," said Mr. Worth, holding out his hand. "How you're able to think of so many things at once, beats me. Yes, we got out in pretty quick shape; you see my boys, Johnny here and Ben, are first-rate hands to depend on in an emergency. They did pretty near the whole thing tonight. By the way, the boys were hunting horses up the river day before yesterday, and saw quite a bunch of Indians in the brush below Harry Hodson's."

"Why didn't you say something about this before?" interrupted the sheriff, turning to John.

"Ben and I have seen plenty of Indians," said John, eagerly. "There were a lot of squaws in this bunch, so I didn't believe they were a war party. We didn't think anything more about them until this scare came up tonight."

"Well, you have a good head on you, young man. I don't know but you are right, and this may be a false alarm. Still Hodson generally knows what he's talking about." The sheriff was speaking more to himself than to his hearers. "I'm glad we've got a lot of first-rate scrappers with us; I guess the reds would think twice if they knew what they were running up against."

All was comparatively quiet. The work and strain of preparation was succeeded by a time of waiting, a period of suspense that was, perhaps, harder than the first shock of the unpleasant news.

John and his father returned to their temporary home to calm the fears of John's mother. Mrs. Worth had the family rifle ready and Ben had polished and oiled every cartridge in the belt so that they would slip in without jamming. Mr. Worth shouldered the gun and went out, leaving the boys with their mother. Though all was now quiet and his mother and brother were asleep, John could not close his eyes. He understood, as his younger brother could not, the danger that menaced the household and the town. Death, swift, by knife or bullet, or slow through torture, was sure to come if that band of Indians got inside the inclosure. He had heard gruesome tales describing the treatment that the savages meted out to their prisoners and the horror of it would not leave him. At last he could stand it no longer. Quickly he rose from the heap of bedding and stole to the door. He was fully dressed, and his little six-shooter still slung on his hip, where he had buckled it when the sheriff first knocked at the home shack.

All was still outside, except for the occasional stamping of a pony or the distant wail of a coyote. Pickets were posted just over the rise to the north of the town, from which direction the attack was expected. They were to give warning of the approach of the Indians by a rifle shot.

Suddenly there was borne on the breeze to the waiting men the sound of galloping horses. Louder it grew, then fainter; then again still louder. So the sound wavered, but ever came nearer.

The watchers sprang to their feet, rifles ready, eyes gleaming.

"Steady, boys," said the calm voice of Mackenzie. "Wait a bit."

Still the thumping of many hoofs approached nearer.

What had become of the pickets? Had they been all killed with the enemy's noiseless arrows? Or had they been lured away beyond hearing and shot?

Daylight was breaking; the enemy could now be seen, that was one comfort. And as they stood, cars alert, eyes strained, their nerves keyed up to the tensest pitch, awaiting the onslaught, that ominous noise of hoof-beats came ever nearer, nearer, nearer.

Suddenly a horse's head appeared above the brow of the hill, then another and another until quite a score or more were in plain view. They dashed down the incline toward the corral of wagons. But they were all riderless! Presently two riders appeared. They shouted a greeting as they came down the hill and explained that they were of the N bar N outfit.

A space was hastily cleared between the wagons to allow these newcomers' horses to enter the inclosure; but it was too late; the bunch parted, turning to right and left. The two herders also separated in pursuit, each following a bunch.

Immediate danger over, the waiting men relaxed their extra vigilance, and all hands watched the efforts of the two herders in their vain attempts to head off their charges. The sheriff was just saying, "I wish some of you fellows would help round up that bunch; we want to get them all in before the hostiles show up," when a third horseman appeared, riding like the wind.

"Say, that chap has got a fresh horse, said "Casino," one of the freighters.

The new arrival, after a headlong dash, regardless of ditches, brush and badger holes, succeeded in rounding up the frightened horses, and with the help of the herder, drove them into camp. A similar performance soon brought in the other bunch.

As the new rider trotted in through the gap, some one shouted: "What'll you take for that horse? He's a regular whirlwind."

"Yes," said one of the herders, "he's a dandy, isn't he? My stock would have got away if Johnny Worth hadn't come out on Baldy."

"So it's Johnny Worth, eh!" said Bill Smith. "Good work, kid."

"Oh!" said Johnny, "they're only worn-out, winded plugs; they were easy for Baldy. He was saddled and all ready," the boy added in explanation.

"Well done, Johnny," said the sheriff, who had once before that night praised the boy's pluck. Then, turning to the group about him, "Some of you boys had better get breakfast," said he; "there's no telling when that war party may turn up, and you must eat now when you have the chance."

While the men were eating (a sufficient number being left to keep watch and guard) in one of the dance halls, which was hastily impressed for the purpose, the herders of the N bar N outfit were questioned as to their knowledge of the Indians.

They reported that the redskins were in force and were coming rapidly in the direction of the town. That while they were guarding their stock, they were startled by the sudden appearance of an Indian near them, who yelled and waved his blanket, and finally succeeded in stampeding the animals. They started off at a gallop after the horses, and this solitary brave forthwith disappeared.

The stock stampeded, but the herders stayed with them, riding full speed over all sorts of rough country. The Indians appeared at intervals in pursuit of them, and added to the confusion and danger by keeping up a running fire.

The herders said they were about to give up the attempt to keep their charges out of the savages' hands when they came in sight of the town. "Even then," said one of the men, called Singing Jim, "we couldn't have corralled the beasts if that youngster hadn't chased out to help us a fresh horse, and a fast one at that."

"We'll have troubles yet," said the other herder, Calamity Jake he was called, because of his ability to see small black clouds of evil a great distance off. "Plenty of trouble, too, in the shape of Indians on the warpath. They were not far behind us when we reached these diggins."

"What became of your wagons?" said Harry Hodson, a mouthful of beans interfering somewhat with his speech.

"Oh! I guess they're done for. Probably makin' light for the Indians to do a war dance by," remarked Singing Jim, cheerfully.

"I reckon not," said Mackenzie, who had appeared in time to hear the last; "they'll not show their location by making a big blaze like——"

"I heard a shot fired from over the hill," shouted Johnny, who stuck his head in at the door that moment. "Maybe it's one of the pickets."

The men jumped up and made a rush for the door. The herder, Singing Jim, who was the last man out, exclaimed as he disappeared, "Well, if that kid ain't ubikkertous, as the States papers say!"

Several shots were now heard and then the pickets topped the rise and made a break down the slope to the town.

The enemy was close, but still invisible behind the ridge.

(To be continued.)

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High Points in News of the Week

President Harding and his party reached the northwest last Thursday, the first stop and the first address in the three Pacific northwestern states being at Pocatello, Idaho. On the same day, June 28, he delivered an address at Idaho Falls before leaving for Montana points and the Yellowstone National park. He arrived at Spokane, Wash., Monday afternoon, July 2, and left that night for Meacham, Ore., where, on July 3, he participated in the Old Oregon Trail celebration. His other two stops this week are at Portland, Ore., July 4, and Tacoma, Wash., July 5, from which latter point he sails for Alaska. He returns after three weeks in Alaska, reaching Seattle July 26.

In his addresses last week the following were important points stressed:

That reduction in the cost of government and consequent reduction in taxes is essential to the wellbeing of the people; that the new federal budget law offers much of hopefulness in this direction; that not only in governmental affairs but in personal affairs the habit of lavish spending must be corrected; that the cost of living must be reduced by the shortening of the bridge between the producer and the consumer; that the cost of distribution of essential commodities between producer and consumer is unwarrantedly high; that the old-fashioned features of the American home must be restored if the American people are to endure; that the United States should become a member of the world court of justice but should not become a member of the league of nations; that if the United States ever becomes involved in another war, all the people and all the industry of the country must be drafted for various forms of service and not merely the young men for military service; that labor has the same right as capital to organize for its own betterment and protection, but that evils on both sides of the labor-capital question must be removed.

The special train carrying President and Mrs. Harding carries also Secretary Wallace of the department of agriculture, and Secretary Work of the department of the interior, and a considerable number of other persons more or less directly connected with the government.

* * *

That the French people are not weakening in their determination to compel Germany to live up to the terms of the treaty which ended the World war is indicated by the fact that the senate of that country by a unanimous vote last week indorsed the present program of occupation in the Ruhr and appropriated 307,000,000 francs with which to continue this occupation. Premier Poincare declared in an address to the senate that France would not relax until Germany paid. He declared that France had no desire to annex the Ruhr district or any other German territory, but that her army would not recross the Rhine until Germany had lived up to her obligations.

* * *

Secretary Work of the department of the interior last week indicated why he had reorganized the reclamation service by discontinuing the office of director and accepting the resignation of Secretary A. P. Davis. He indicated that under the old system the director of reclamation had really been an engineer rather than a general supervisor of reclamation policies and the actual development of projects after water was placed upon them. "We do not need two engineers in charge of the reclamation service," said Secretary Work. "In the future the service head will be known as the chief of the bureau of reclamation and will be qualified to aid the farmer rather than to supervise engineering work on the project." Former Governor D. W. Davis of Idaho was appointed by Mr. Work to be the chief of this newly created bureau. F. E. Weymouth, former assistant chief of the service, has been appointed chief engineer of the bureau.

* * *

The American Medical association convention representing 90,000 doctors, last week defeated four resolutions that were aimed against the Volstead prohibition enforcement act. The resolutions were intended as denunciations of the prohibition laws and were so framed as to urge removal of restrictions on the use of liquor for medicinal purposes.

* * *

The department of the interior has announced the beginning of a nation-wide survey of undeveloped water power resources in public land states, with a view to determining the possibility of developing additional power. Public lands that are now reserved for use in connection with water power sites, but which are shown by the survey to be without power value, will be recommended for restoration to public entry.

* * *

Figures show that 39 per cent of the total imports of the United States during May were in the form of raw materials intended to be manufactured in this country. Exports for the month of May to Europe exceeded imports from Europe, but total imports from all parts of the world exceeded total exports.

Farm Business and Markets Outlook

(Continued from page five.)

DAYTON, June 30.—Club, 90c; red, 85c.

ODESSA, June 30.—New wheat. Bluestem and Bart, 83c; Turkey red and Marquis, 83c; Fortyfold, 81c; Jones Fife, 78c.

RITZVILLE, June 30.—Bart, 90c; red, 85c.

DAVENPORT, June 30.—Bluestem, 89c; Gold Coin, 86c; club, 86c; dark northern spring, 86c; northern spring, 83c.

Hay and Feed Grain.

SPOKANE, June 30.—Wheat—Feed wheat, $44 ton.

Oats—$42 per ton; rolled, $44.

Corn—$44 per ton; cracked corn, $46 per ton.

Barley—$40 per ton; rolled, $42.

Bran—$31 ton.

Bran and Shorts—$32 ton.

Shorts—$34 ton.

Alfalfa, $24 ton; timothy, $28 ton; mixed hay, $24 ton.

PORTLAND, June 30.—Millfeed—City delivery prices, millrun, $34 per ton; middlings, $46; scratch feed, $50; rolled barley, $37; cracked corn, $48; rolled oats, $46.

HAY—Buying prices f. o. b. Portland. Alfalfa, $16 ton; cheat, $22; valley timothy, $26; eastern Oregon timothy, $27; clover, $16; oats and vetch, $24.

General Produce.

PORTLAND, Ore., June 30.—Butter, cubes, extras, 39@40c lb.; prints, parchment wrapped, box lots, 42c; cartons, 43c. Butterfat, 41c delivered Portland, 38@39c station buying price.

Eggs—Buying price, white hennery standards, 26c; mixed color standards, 24½@25c. Selling price, Front street, selects, 29c; candled ranch, 27@28c. Association selling prices, cash at store, selects, 28c; firsts, 26c; pullets, 26c.

SPOKANE, June 30.—Poultry, Light Weight—Hens, 4 lbs. and over, 18c; light hens, under 4 lbs., 15c; springs, 15c; old roosters, 8c; ducks, 15c; geese, fancy, 15c.

Fresh Range Eggs, $5@6 case, according to quality.

Butterfat—43c lb.

SEATTLE, June 30.—Eggs—Select local ranch, white shells, cases included, 24@25c per doz; mixed colors, 22@23c per doz; pullets, 20c per doz; cases returned to shippers, 1c less; do to country store f. o. b., 21@22c per doz.

Butter Fat—F. o. b. Seattle: A grade, 45c per lb; row milk, $2.20 per cwt.

Poultry—Hens, 4 1-2 lbs and up, 21c per lb; do 3 1-2 lbs and heavier, 23c per lb; broilers, 1 1-2 lbs and heavier, 23c per lb; do leghorns, 1 lb and heavier, 20c per lb, hens, 3 to 4½ lbs, 14c per lb; do dry picked, 2c above live; capons, live, fat, 6 to 10 lbs, 33c per lb; do dry picken, fancy, dressed, 35c per lb; old roosters, 9c per lb; Belgian hares, 3½ lbs and heavier, 12c per lb; geese, fat, live, 16c per lb; ducklings, live, 3½ lbs and up, 20c per lb; turkeys, fat, dry picked, 8 to 10 lbs. 30c per lb; do live, 25c lb; squabs, large, dressed, $4.50 per doz; pigeons, $2; guineas, $8 per doz.

Beef—Steers, fancy, 7@8c per lb; cows, fat, 6c per lb.

Veal—Fancy light, 13c@14c per lb; do medium, 10@12c per lb; heavy, 7@9c per lb.

Mutton—Fat, 9c per lb; spring lambs, fat, 16@17c per lb.

Hogs—Good block, 60 to 159 lbs, 10@11c per lb; do heavy, 7@9c per lb.

The Slogan Contest

Voting on the slogans submitted in THE FARMER'S contest for a slogan to take the place of "Diversified Farming," will close with the ballots received from readers Saturday, July 7. If any slogan receives a clear majority of the votes cast, it will be declared winner of the $10 prize. If no slogan receives a majority, then the board of judges will decide which shall be the winner. Announcement will be made as early as possible.

Make your shingle roofs last twice as long

It's less costly to weatherproof shingle roofs and sidewalls than to let them "run down." Careful farm owners use Oronite Shingle Oil—inexpensive and easily applied.

It retards the evaporation of natural oils in the wood and prevents the absorption of water. It checks warping, splitting and leaks and prevents the growth of moss. It keeps down repair bills.

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There is something goes into the Silvertown Tire from which the farmer reaps service. It is as real as the seed that goes into the ground from which grow his crops.

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Bits of Fun for Everyone

The Nervous Patient.

A dentist had to crawl under his auto in order to make some adjustment in the machinery. Applying the monkey wrench to it he said soothingly, "Now this is going to hurt just a little."—Outlook.

Score One for Adam.

Whatever trouble Adam had,
No man could make him sore
By saying, when he told a joke,
"I've heard that thing before."
—London Opinion.

Natural History.

Teacher—"A quadruped travels on four legs and a biped goes on two legs. Give an example of a biped."

Johnnie—A pair of stockings.—Boys' Life.

Organized Arithmetic.

A Chicago teacher gave a pupil a sum for home study, which was in substance: How long would it take a certain number of men working 10 hours a day to complete a stated job?

The next morning one pupil handed the teacher a note written by the boy's father, saying: "Dear sir: I refoosed to let my son James do his sum you gave him last night, as it looks to me like a slur on the eight-hour system. Any sum not more than eight hours he is welcum to do, but not more."—Boston Transcript.

Wonders of Nature.

Miss Angelina (to Captain Brown, who has been cruising in Alaskan waters)—I suppose, captain, that during part of the year the sun doesn't set till quite a while after dark in those northern latitudes.

A Claim to Distinction.

Teacher—If Shakespeare were alive today, wouldn't he be looked upon as a remarkable man?

Student—I'll say so. He would be more than 300 years old.

Latest High Class Patterns for the Home

Please order the patterns you desire at least two or three weeks before you wish to use them. Desiring to obtain the latest high-class patterns for its readers, THE FARMER has made arrangements to have them sent direct from the east, and under present mailing conditions it takes about that time for them to reach you.

4123. Ladies' dress. Cut in seven sizes: 36, 38, 40, 42, 44, 46 and 48 inches bust measure. A 38-inch size requires 7 1-2 yards of one material 44 inches wide. The width of the skirt at the foot is 2 1-8 yards. Price 10 cents.

4414. Girls' dress. Cut in four sizes: 6, 8, 10 and 12 years. A 10-year size requires 3 1-8 yards of 32-inch material. Price 10 cents.

4409. Sleeveless dress with guimpe. Cut in six sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. A 38-inch size requires four yards of 40-inch material. The guimpe requires 1 3-4 yard of 36-inch material. Price 10 cents.

4393-4418. A smart suit style. Jacket 4393, cut in four sizes: 14, 16, 18 and 20 years. Skirt, 4418, cut in seven sizes: 16, 18 and 20 years for misses, and 31, 33, 35 and 37 inches waist measure for ladies. To make the suit for an 18-year size will require 4 1-8 yards of 40-inch material. The width of the skirt at the foot is about two yards. Two separate patterns, 10 cents for each pattern.

4264. Misses' dress. Cut in three sizes: 16, 18 and 20 years. An 18-year size requires seven yards of one material 40 inches wide. Price 10 cents.

3681. Girl's under garment. Cut in six sizes: 4, 6, 8, 10, 12 and 14 years. A 10-year size will require 2 1-8 yards of 36-inch material. Price 10 cents.

3613. Girls' dress. Cut in four sizes: 4, 6, 8 and 10 years. A 6-year size requires 1 3-4 yards of 36-inch material. Price 10 cents.

4415. A comfortable "smock." Cut in four sizes: 6, 8, 10 and 12 years. A 10-year size requires 2 7-8 yards of 32-inch material. Price 10 cents.

4408. Ladies' apron. Cut in four sizes: Small, medium, large and extra large. A medium size requires 3 1-2 yards of 27-inch material. Price 10 cents.

4066. Ladies' house dress. Cut in seven sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. A 38-inch size requires 5 3-8 yards of 32-inch material. The width of the skirt at the foot is 2 1-8 yards. Price 10 cents.

4400. Group of bathing accessories. Cut in one size for the bags and in four sizes for the shoes: 3 1-2, 4 1-2, 5 1-2 and 6 1-2. The shoes will require one-half yard 36 inches wide for one pair size 4 1-2. Bag No. 1 will require three-fourths yard and bag No. 2 one-half yard of 36-inch material. Price 10 cents.

4397. Dressing sack and cap. Cut in four sizes: Small, 34-36; medium, 38-40; large, 42-44; extra large, 46-48 inches bust measure. A medium size requires 2 1-8 yards of 32-inch material for the sack and five-eighths yard for cap. Price 10 cents.

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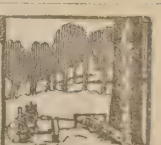
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Read the "Want Ad" page this week for good offers of all kinds.

A letter of thanks for the good things in The Junior Farmer comes to us from Pauline Robinson, who lives in Whitman county, Wash. Pauline expects to have a good time during her vacation.

We have the following letter from a boy in Whitman county, Wash.: "My name is Delbert L. Rucker. I shall be 7 years old July 25, 1923. I have a little puppy named Bobby. I go two miles to school. I ride a Shetland pony named Don."

"Here I am at school," says Martin Crowe. "I am in the fourth grade. Two more children are in my grade. They are Chester Porter and Hattie Pierce. When school is out, May 16, we are going to have a picnic. (Martin's letter was written April 27.) There are big hills all around us and they have bunchgrass on them." Martin lives in east Washington.

Sophia Pflugrath of central Washington writes: "In school we have a great deal of fun and we play such games as keep-away, hop scotch and ball. There are four stories in recent issues of The Junior Farmer that I like best. They are "The Treasure Box." "The Deserted Cabin," "The Three Brothers" and "Petit's Demise." Sophia was 10 January 11, 1923.

Birthday Greetings

THURSDAY, July 5—Bernice Almlee, 10 years old; Harold Milton Dunnagan, 11; Virgil Sills, 6.

FRIDAY, July 6—Olive Peterson, 8 years old; Helen Schmauder, 11.

SATURDAY, July 7—Marjorie Cannon, 11 years old; Mildred Gerber, 11; Roy Kister, 11; Violet Sherwood, 11.

MONDAY, July 9—Thelma Bulard, 11 years old; Elva Morehouse, 10; Harriet Perkins, 11; Daniel Trupp, 10.

TUESDAY, July 10—Alma Abrahamson, 11 years old; Murray Dean Snell ,7; Daniel Trupp, 10.

WEDNESDAY, July 11—Clara Breitmeir, 10 years old; Harold Michael, 11.

BEDTIME STORIES

By THORNTON W. BURGESS.

MAKES THEMSELVES AT HOME.

Bully, the English sparrow, and Mrs. Bully soon had their home completed in the house they had stolen from Skimmer, the swallow. It was made of straw and dead grass and feathers and was big and dirty, not at all like the neat little nest that Skimmer had had in the same hollow of the old apple tree. But it seemed to suit them perfectly. Mrs. Bully fussed over it a great deal, as if it were really something very fine. If they noticed that not one of their neighbors in the old orchard ever spoke to them or even seemed to see them when they met they made no sign. It didn't seem to bother them the least little bit.

Every day they flew over to Farmer Brown's henyard to help themselves to the grain meant for the chickens, and were so bold about it that their neighbors of the old orchard didn't know what to make of it. It soon became very clear that Bully considered that he had a perfect right to go where he pleased and do what he pleased in the old orchard. For a few days after the nest was finished, he fussed around, never going very far from the house and spending most of his time quarreling with Mrs. Bully and then making up again. All of this was very unpleasant for their neighbors. They didn't seem to care the least bit in the world what their neighbors thought.

"I declare," said Goldie the oriole, "if I hadn't a young family I would move right out of the old orchard at once, much as I love it."

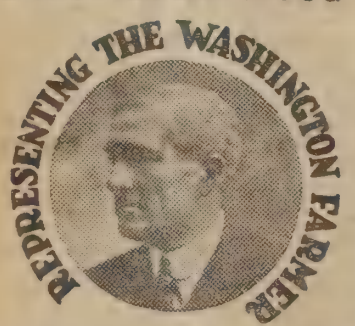
"I feel exactly the same way," said Pewee, darting into the air to catch a fly. "I never in all my life saw such disagreeable people. There isn't a moment of peace and quiet. They seem to think they own the whole orchard."

It did begin to seem so after a time. Bully began to go about all through the old orchard trying to pick a quarrel with some one. It didn't matter how much bigger than he they were. He wasn't afraid of anybody. One morning, while Welcome Robin was busily hunting for his breakfast, Bully stole up behind him and without any warning attacked him. It was all so sudden that Welcome Robin was so wholly taken by surprise that he couldn't half defend himself, and Bully actually drove him away. He did the same thing to others. He even went so far as to visit their homes and threaten to drive them out as he had driven Skimmer the swallow out of his home. He invited them to come on and fight. In fact, he seemed to be always looking for a fight just for the love of fighting.

His very boldness made the others hesitate. Most of them are peace-loving people, anyhow, and all they asked was to be let alone. But Bully wouldn't do this. It began to look very much as if he had made up his mind to have the whole of the old orchard for himself and Mrs. Bully. Everybody said so. But nobody knew what to do, and so there was great unhappiness in the old orchard.

(Copyright by J. G. Lloyd.)

Don't Be Buncoed



During recent weeks we have been warning our readers against the solicitor who shows up in every community once in a while with a bunco game of some kind. We refer especially to the unscrupulous solicitor for farm magazines. As stated in previous issues, we have on hand evidence that some of our own readers have been bilked by fellows who claim to represent The Washington Farmer when they do not. These solicitors usually offer a premium of some kind like a pencil, a map or a wallet and collect anywhere from a few cents to a few dollars for a subscription to some farm paper. What makes us especially indignant is to have some one whom we have never employed claim to represent us and get money from our readers under this misrepresentation.

In order to help our readers guard against the trickster when he appears, we have furnished our field men large round buttons bearing their pictures, real photographs of the men themselves. Around the picture are the words in gold, "Representing The Washington Farmer."

The next time any solicitor approaches you for your subscription to this magazine, if there is the slightest doubt about his honesty, demand that he show you his button. If he can not do it, he is not our representative.

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depend upon the care used in printing and developing. Have your films developed by experts, who make this work their only occupation.

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ENTERTAINING STORIES, POPULAR FEATURE OF YOUR STATE FARM PAPER

A GOOD story is welcome in the home circle any time of the year; and it gets an extra welcome these weeks when the evenings are long and dark.

One of the reasons for the popularity of The Washington Farmer is the fact that you will find a chapter of a rattling good yarn in every issue. How our friends would miss it if it didn't appear!

READ NEW SERIAL WHICH STARTS THIS WEEK

In order to provide a fresh treat for our thousands of story lovers throughout Washington, we are starting publication of a new serial story, "Cattle Ranch to College," which we believe will prove exceptionally popular. Start reading it tonight. We would suggest that you attend to renewing your subscription promptly in order not to miss any part of this and scores of other worth-while things which are being prepared for forthcoming issues of your state farm magazine.

Our cooperative subscription plan has established a rock bottom subscription price. Our readers are requested to send in their own renewals and the orders of friends and neighbors as well. You get the benefit of every penny which would ordinarily go to the subscription agent.

$1 For Five Years 260 Issues

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Review Bldg.,
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I enclose herewith $..... for a..... year subscription to THE WASHINGTON FARMER.

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If your subscription is already paid in advance, it will be extended from the date to which it is paid. July 5, 1923.

One feature that makes the 2-Ton "Caterpillar" (T35) Tractor so remarkably versatile is the use of a three-speed transmission. The speed of the motor is controlled by an accurate governor.

Write for complete 2-Ton catalog

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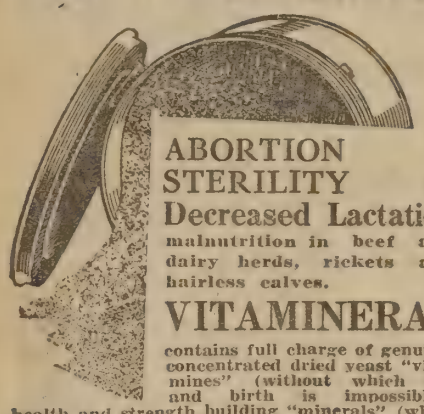

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malnutrition in beef and dairy herds, rickets and hairless calves.

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contains full charge of genuine, concentrated dried yeast "vitamines" (without which life and birth is impossible); health and strength building "minerals" (which cattle do not get from ordinary natural or prepared feeds).

Vitamineral is indorsed and used by leading veterinarians, farm advisers, county agents and big breeders everywhere. Secretary Axby (Indiana State Vet. Ass'n.) has had miraculous results with VITAMINERAL in entire herds afflicted with abortion; he advises every veterinarian and breeder to use it.

Avoid dangerous, fatal contagion; make more beef; increase milk flow and butter fat; get healthy, sturdy calves.

Ask your veterinarian or write for free illustrated book "Vigorize Your Herd."

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We Buy and Sell

Grade and Pure Bred Dairy Cattle.
We can save you money whether you wish to buy or sell. One or a carload.

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NEAR CARSTENS' PACKING PLANT.

Raise Silver Foxes

Easy to raise. Larger profits than any other live stock raising. Stands strictest investigation. Recommended by Government. 4 different plans. One will suit you. Complete description free. Send today.

C. T. Dryz, Box 1017, Eagle River, Wis.

Please mention THE WASHINGTON FARMER when writing advertisers.

News for Breeders

FROM OLD DUTCH TYPE.

The herd of registered Holsteins on the Dr. H. K. Stockwell farm at Monroe, Snohomish county, is from the old Dutch dual purpose type cow, one of which is still in the herd. She is the foundation cow, and has 13 calves, some of which are now milking in the herd. The main characteristic of this type is that the cows are more beefy than the true dairy type, and yet the udders are well placed and they have the frames to carry them.

The herd bull, Prince Aralia De Kol Burke 4th has many heifers in the herd and none have given less than 58 pounds of milk. In fact, he has increased the production of all the heifers over their dams and he has maintained the true Holstein type.

During the last few months Dr. Stockwell has added some new blood to the herd. Tyee Patricia Fayne was recently purchased at the Dr. Heg sale. She stands fourth in the United States for milk production and eighth in butter.

Dr. Stockwell devotes most of his time to his practice at Monroe, but takes a great pleasure in looking after his herd during his spare time. In addition to milch cows he has some registered Hampshire hogs, which are being fed on pasture and soilage crops.

BOAR FOR PIG CLUB MEMBERS.

William Hawes of Withrow, Douglas county, has a registered Berkshire herd boar which is indeed a credit to any one who intends to build up a herd of this breed. His name is Matchess Laurel 3d and he comes from the F. M. Curtis farm at Fruitland, Wash. He was sired by Ames Laurel the 2d, one of the Curtis animals, and is a strictly smooth individual with a quiet disposition.

He is to be used in the neighborhood by members of the pig club who have seven Berkshire sows. All the boys expect to get some good, typy Berkshire pigs from this boar.

In addition to the herd boar Mr. Hawes has two registered sows from the Warren Gray herd of Jefferson, Ore. They are Graymere Mistress 4th and 5th and are litter mates. Both are typical Berkshire sows and promise to make the best kind of brood sows. Mr. Hawes plans on keeping a few head of sows on the place each year to handle such waste as is unavoidable around a wheat farm.

BROADMEAD HERD ON TOUR.

Seventeen head of Aberdeen Angus cattle from the Broadmead farm herd of J. A. Scollard of Chehalis have been shipped to Brandon, Manitoba, Canada, where the animals will start on the Canadian western fair show circuit. They are in charge of Thor Hedon. Following the Brandon exhibition July 2 the fairs at Calgary, Edmonton, Saskatoon and Regina, in Alberta, wil be visited; later Vancouver, B. C., which will close August 18. Thence the herd will return direct to Chehalis for the Southwest Washington fair, which will be held August 20 to 25. The later show circuit will also be made.

BUY YEARLING HOLSTEIN.

A yearling Holstein heifer of excellent breeding was added to the Holstein herd of Sommers Brothers, young but budding breeders of Little Rock, Thurston county, at the Frame sale near Chehalis, in May. Frame farm Jeannie Ormsby is a daughter of the Frame senior herd sire, he by a son of King Segis with 93 A. R. O. daughters and out of a 22-pound daughter of King Segis 10th. She is out of a 17-pound granddaughter of King of the Pontiacs, and a 20-pound daughter of Sir Johanna Ruth Rayne is her maternal granddam.

YOUNG LADY IS GUERNSEY BREEDER.

Miss Bee Morris, a young lady living near Buckley, Wash., recently purchased a 2-month-old Guernsey bull calf from W. A. Goodin of Cornelius, Ore. The calf is out of one of the good cows of the herd and by Langwater Khedive, a herd sire that is both richly bred and is siring high-class offspring. Miss Morris' father is president of the Pierce County Guernsey Cattle club and Miss Morris, who is much interested in the breed and in dairying, has a few choice cows and is building up a fine little herd.

DOUBLE LETTER RECORDS.

Recent A. R. records approved by the American Guernsey Cattle club include two double letter records made by H. B. Douglas of Ferndale, Wash.; three single and one double letter by Valley Gem farms of Arlington, Wash., and two single and one double by A. B. Flint of Beaverton, Ore.

EXCELLENT RESULTS SELLING TURKEYS

Boise, Idaho,
June 9, 1923.

Pacific Farm Trio,
Spokane, Wash.

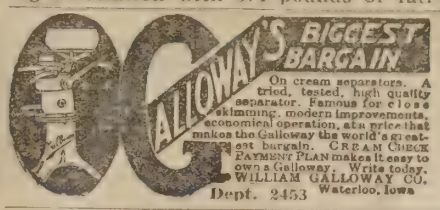
Dear Sirs:

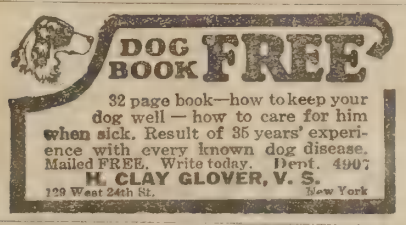
I have had most excellent results in selling my turkeys the past season and your paper is a fine advertiser.

Yours truly,
—Adv. MRS. C. R. LOWERY.

ROCHESTER MAN BUYS JERSEYS.

A. E. Lundeen of Rochester recently bought 16 head of Jerseys at the Ed. Cary sale in Oregon and brought them to Thurston county. He does not intend to keep the carload, but is reselling to neighbors and will dispose of about half of the lot. He has sold five head to E. E. McPherson of Rochester for $2000. Lundeen's Jersey cow, St. Mawes of Glenn Thelma, held the record for butterfat production the last year in Thurston County Cow Testing association with 571 pounds of fat.





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Hotel and Restaurant

(C. C. DEMPSEY & SONS)
UP TO DATE.
Opposite Union Station, Spokane.

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United States Silver Fox Farms Corporation
BREEDERS OF
THE ROOSEVELT STRAIN
MORMON FOXES

Also ranch bred blue foxes
Write for particulars of THE MOST PROFITABLE LIVE STOCK FREE

Beware of Cheap Inferior Stock.

PURE BRED REGISTERED STOCK. GUARANTEED.
200 HUTTON BLDG., SPOKANE, WASH.

Richards Champion Durocs

We have 25 last fall gilts, bred to farrow during July, August and September; also boars ready for service and the best lot of spring pigs we ever raised. All sired by our champion boars and out of big sows. They are priced way down to sell quick. Write for prices. Satisfaction guaranteed.

RICHARDS LIVE STOCK COMPANY.
Virginia, Idaho.

Bargains Weaned Duroc boar pigs from heaviest prize winning herd, Wash. and Ore. state fairs. Champion stock, $25; 1st prize stock, $20; all others, $15.
S. D. CORNELL, Grandview, Wash.

Poland Chinas Entermille bred Polands made clean sweep at the Union Live Stock show in strongest local show in state. Won sweepstakes on sow and boar, get of sire, and every first but two. Order choice weaned pigs of same breeding. Bred sow sale Aug. 17, 1923.
FRED D. ENTERMILLE, Baker, Ore.

Poland Chinas Choice young boars, sired by By Gosh, Giant Liberator and Giant Pathfinder; out of show sows. Write for descriptions and prices.
FIRKINS & SON, AMBROSE JOHNSON.
NAMPA, IDAHO.

DUROCS Wash. and Ore. state fairs, 1922; 5 entries, winning 18 ribbons, including 1 champion, 7 firsts and 6 seconds. Stock for sale.
H. W. TURNER, Sunnyside, Wash.

Quarjo Hampshires

for sale now. Bred sows and gilts; spring pigs.
W. B. LINDSAY, Quarjo Ranch, Merlin, Ore.

Jerseys at Auction

TURNER, ORE., JULY 10, 1923.

Twenty-five head females, two selected bulls, complete dispersal of the mature herd of registered Jerseys owned by Hansen & Anderson. Several with show type and creditable R of M. records. Among them the world's record twin cows, Oxford's Dairy Queen Pet, 508.57 lbs. and Oxford's Dairy Queen Beauty, 526 as jr. 2-yr.-olds. The herd carries the blood of Oxford's Majesty, Golden Glow's Chief and other noted sires. If your name is not already on my 1923 catalog list, send for catalog.

E. A. RHOTEN, Sale Manager.
Salem, Oregon.
HANSEN & ANDERSON, Owners.
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Maple Ridge Jersey Farm

offers strongly bred St. Mawes bull calf; bred for production and type. Reasonable.
J. C. BROWN & SONS, Shedd, Ore.

Jersey Type and Production

Two medal sires in service. Young bulls out of dams of heavy producing families.
J. M. DICKSON & SON, Shedd, Ore.

Jersey Bulls at Bargain Prices

Send today for our special sale list of registered Jersey bulls from R. of M. dams. Easy terms, liberal credit.
WARREN GRAY, Box T, Jefferson, Ore.

Daniels Jersey Farm Home of St. Mawes Pretty Lady, world record senior 2-year-old. Herd sire Belle's St. Mawes, silver medal bull. Young stock for sale.
L. C. DANIELS, Tillamook, Ore.

Milking Shorthorns

FARMERS! Why not diversify, work from both ends? Produce beef as well as milk at a minimum cost. We are offering bull calves from profitable milking cows of approved Shorthorn type. Herd headed by Gretna Challenger, grand champion Washington state fair and Western Royal, 1922. Visit the herd or write
NORTHWOOD FARMS, Redmond, Wash.

Milking Shorthorns

Bull calves by Foothills Corporal, record of merit bull and grand champion at Pacific International, 1919, and Jackson county fair, 1922, the only times ever shown. Sire of champion and grand champion calves. Correspondence solicited.
KIRTLAND FARM, Central Point, Ore.

2 Shorthorn Bulls--2

Coming 2 and 3 years; blue ribbon winners; one grand champion at the county fair; their dams and granddams are good milkers. They are priced to sell. Write for information.
J. T. STANTON, Nez Perce, Idaho.

Hollywood Holsteins A fine individual son of our junior herd sire out of 796-lb. 4-year-old dam.
HOLLYWOOD FARMS, Hollywood, Wash.

Linn County Holsteins Cows, heifers, bulls and calves. Send for list. LINN CO. HOLSTEIN ASS'N.
GEO. A. McCART, Sec., Harrisburg, Ore.

Pure Bred Guernseys

for sale, both sexes; plenty of A. R. backing. Write the Ruby Dell Guernsey Farm.
H. E. ANGEL, Mabton, Wash.

Brown Swiss Stock Farm

Breeders of Brown Swiss cattle, the farmers' dairy cow. Young stock for sale.
THEO BRUGGER, Route 3, Gresham, Ore.

Red Poll Bulls

For sale, at farmers' prices.
J. S. GOULD, North Cove, Wash.
BREEDER OF RED POLLS.

Send for Free Booklet

"Some Suggestions to Live Stock Advertisers," outlining the practices of successful men of long experience. Helps in determining how much to spend, the mediums to select, preparing advertisements, handling inquiries, the use of photographs, etc.
Write today.
THE PACIFIC NORTHWEST FARM TRIO
Dept. L. Spokane, Wash.

Read the "Want Ad" page this week for good offers of all kinds.

Thousand Springs Farm

HERD SIRE.

MASTERPIECE'S ULTRA KING OF EDGEMOOR 69741.

1st prize Pacific International, 1922. His six nearest dams average 13,411.31 lbs. milk, 657.5 lbs. butter fat. Traces 19 times to May Rose 2d and is 15.22 per cent her blood.

For Sale.

BERNARD OF THOUSAND SPRINGS—Born January 21, 1923. Sire, Masterpiece's Ultra King of Edgemoor 69741. Dam, Imp. Buttercup 2d of the Queen's 104112. 1st prize, junior and grand champion at Utah state fair, 1921. 2d prize at Western Royal (Spokane), 1921. In 135 days has made 5018.9 lbs. milk, 249.44 lbs butterfat in class D.

NORMAN OF THOUSAND SPRINGS—Born January 26, 1923. Sire Masterpiece's Ultra King of Edgemoor 69741. Dam, Imp. Norma of Brechou 107365. Dam of Rosanne of Thousand Springs 121434. 2d prize Pacific International, 1922. An unusually large, vigorous calf. A real show bull.

THOUSAND SPRINGS FARM, Wendell, Idaho.
MINNIE W. MILLER, Owner. Accredited Herd No. 15054.

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EXPERIMENT STATION
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Canopy Express
$1375
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For *Every* Kind of Rural Transport

FRUIT GROWER, dairy farmer, market gardener, truck farmer, stockman, poultry farmer,—food producers of every description and in every section have found the Speed Wagon the most definitely practical vehicle for economical haulage.

Designed and manufactured as a unit (not assembled) in the big Reo shops, the Speed Wagon has *balanced goodness*. Stamina for a quarter-million miles (or more) is inbuilt, and a policy of 50% oversize applied to all vital parts guarantees certainty of performance under the severest conditions of operation.

Ruggedness—fleetness—safety—roadability—ease of driving and riding—remarkable economy. All are *provable* Speed Wagon factors, and reasons why there are nearly 100,000 Speed Wagons in service.

Capacity 500 to 2500 pounds. Equipped with pneumatic cord tires and complete electrical system. Chassis, $1185 at Lansing; add tax.

Send for Booklet "REASONS for REO"

REO MOTOR CAR COMPANY

Lansing, Michigan

THE WASHINGTON FARMER
ESTABLISHED 1894
SPOKANE. SEATTLE.

STATE COLLEGE LIBRARY

DAISY of Chicona, junior three-year-old Guernsey owned by A. L. Gile of Chinook, Wash., is a world record cow. As recently reported, she produced in a year 12,915.2 pounds of milk with a butterfat content of 747.84 pounds. The record is made in Class EE. The head of this Washington world beater is shown here.

The Fruit Crop Prospects Are Bright; What of the Market?—Page 6

President Visits Northwest

Makes Six Formal Stops in Washington, Oregon and Idaho

For the first time in the more than half a century that the territory of Alaska has been under the American flag, it is being visited by a president of the United States. After several days spent in the four Pacific northwestewn states, President Harding on Thursday, July 5, sailed from Tacoma for Alaska, where he will spend about two weeks prior to his return for the last lap of his nationwide trip.

The president first entered the Pacific northwest when he crossed the line from Utah into southern Idaho week before last and, after delivering two addresses in Idaho went to Spokane, Wash., by way of western Montana.

At Spokane, the president's message dealt primarily with reclamation, due to the intense interest in this form of development in Washington, Idaho and Oregon. He emphasized the necessity for continuous development of natural resources.

"Contemplating the certainty that another century will give us a population of approximately 300,000,000, one is forced to concede that a wise development of resources is the only policy to which we dare commit ourserves," said President Harding. "There was a time when the public domain was thought of as the treasure house of potential wealth, to be looked up against the day when we should need it. It was assumed that by looking it up we should make it surely available whenever it was required. As a matter of fact, that would prevent it from being ready when needed. Developments must be gradual; a business of the decades and the centuries. It should, indeed, be given wise direction and supervision. The opportunities of the newer country should be so administered as to insure their equitable distribution in future. We have done with the era of thoughtless and reckless exploitation of our domain."

The president urged the development of water power projects in connection with the development of irrigation projects, predicting that before many years the railroads would be operating by electricity rather than by steam power.

"Our whole view of the relation of water to western development has changed much in the last generation," he said. "Only a few years since, these waters were looked upon as potentially useful merely for irrigation and agriculture. We entered upon a great program of irrigation enterprise in that era when we had as yet but a vague notion about the dual purpose that your water resources ought to serve. But now we know that the same water can, in most cases, be utilized in both power and irrigation. Thus the great power development will mark the sites of industrial centers, adjacent to which will grow up areas of intensive agricultural production. The industrial populations will provide markets, without impossible transportation expenditures, for the products of the soil, and in time the people on the soil will afford markets for the products of industry."

Speaking directly with reference to the proposed Columbia basin irrigation project, President Harding said:

"The Columbia river basin alone, under the program of development on which your Inland Empire is bent, will be made the seat of a greater, incomparably more rich and varied empire of industry and agriculture than was the Egypt which served as granary for imperial Rome. Not once, but a hundred times over, will we reproduce here, in the plains and mountains and valleys of our west, the wealth and productivity which enabled the pharoahs to build monuments for the wonder of all times. But the monuments of our achievement will bear inscriptions telling not of the slavery and suffering of gencreations which gave their lives to perpetuate the glory of a tyrant. Our inscriptions will tell of great, free states made up of contented, cultured and Christian homes.

"I am sure you are interested in what the federal government can do to help solve the problems on which your future so largely depends. As we have gone onward in reclamation there has been impatience that we could not proceed faster; there have been disappointments in the progress of work involving intricate and diversified engineering, and hesitant

(Continued on page sixteen.)

Judges Will Have to Decide

The judges will have to decide who won the prize for submitting the best slogan to take the place of "Diversified Farming." In the voting which closed Saturday, July 7, no slogan received the necessary majority to make it the winner. In fact, no slogan received 10 per cent of the total vote cast. This means that the board of judges will have to decide who wins the prize. It is hoped that the judges will make their report in time for publication in the next issue of THE FARMER.

When the announcement is made it will cover all the prizes offered and the names of the winners. First, there will be the $10 prize offered for the best slogan. Then there will be the three prizes, one of $5 and two of $1 each, to the three persons whose ballots for the slogan that received the highest number of votes were received first in the office of THE FARMER. Watch for these announcements in an early issue.

AMERICANUS

Gigantic Spectacle

Pageant · Drama

"AMERICANUS" -- the world's greatest spectacle of patriotism -- a thrilling drama of life and progress since the birth of the Nation.

10,000 Actors and Singers -- 200 Spanish Dancing Girls -- a 1000 piece Band -- $250,000 in scenery and lighting effects -- the sight of a lifetime.

SOPHIE BRESLAU

Nationally famous operatic star in the role of Sacajawea, direct from Metropolitan Opera Company. She alone commands Grand Opera prices in the world's largest cities

PRESIDENT HARDING

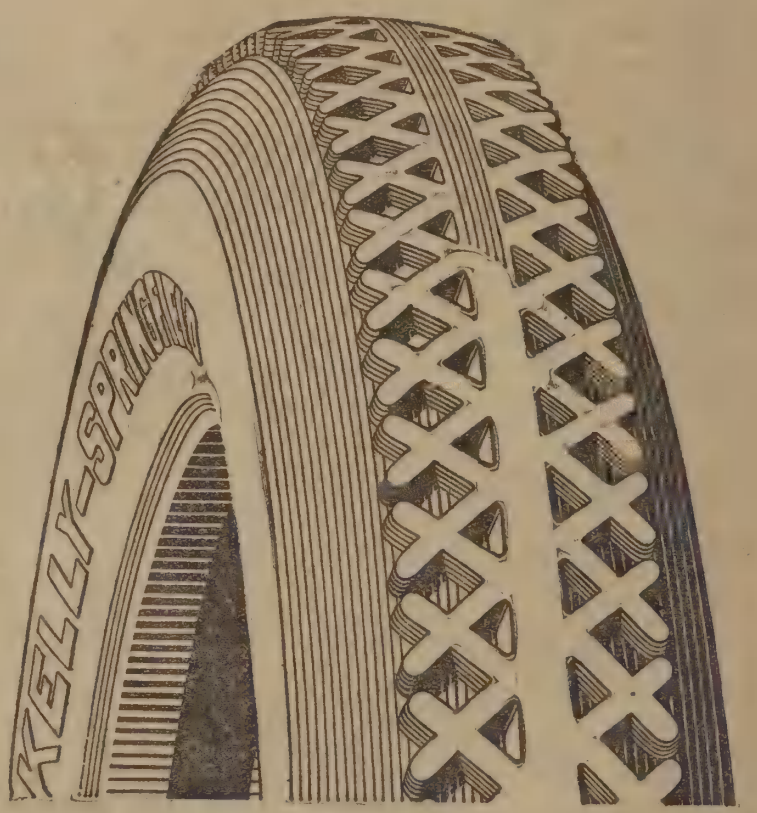
And the U. S. Battleship fleet -- the largest display of naval strength ever seen on the Pacific -- will be in Seattle in

"AMERICANUS" WEEK

Seattle, July 23 to 28

University of Washington Stadium. 8 o'clock each evening. Reserved seat tickets on sale after July 1. $2.00, $1.50, $1.00, and 75c. Mail your order early to "Americanus", 407 Union St., Seattle Reduced rates on all Railroads.

KELLY SPRINGFIELD TIRES



A pedigreed tire for farmers

There is no place on the farm for "culls." Pedigreed stock pays best.

The same is true of tools, machinery, automobiles and tires. The best is most profitable in the end.

For more than twenty-five years, Kelly-Springfield Tires have held the blue ribbon for high quality and long mileage. Their pedigree is unquestionable.

To buy inferior quality because of its lower price is sometimes a temptation, but when it comes to buying tires, there is no need to be satisfied with any but the best.

It costs no more to buy a Kelly

Wheat Is the Big Thing in the Big Bend

Experiment Station at Waterville Holds Annual Field Day to Show Farmers What It Has Learned

By RALPH ERSKINE

SUMMER FALLOW RECOMMENDATIONS FOR THE WATERVILLE DISTRICT.

Early plowing of summer fallow land gives better results than any method where the ground is worked later.

Clean summer fallow prevents excessive loss of moisture and gives a better yield of wheat.

By growing a larger percentage of winter wheat the cost of production is lowered because of a better distribution of labor.

Straw can be scattered on early plowed summer fallow without injury to the succeeding crop.

Wheat growing gets the farmer into a rut, but be sure it is the right rut. Find out the best methods and stay with them.

The new smut proof wheat is proving to that description, even though the seed be rolled in smut spores before planting.

Harrowing of winter wheat does not pay in the Big Bend section.

Best results have been obtained by not harrowing fall wheat after seeding. Better stands have been secured with a hoe drill which leaves the seed covered in a clean furrow.

The smut proof oats has proven to be the best for the Waterville section.

The Big Bend farmer is always happiest when he is talking wheat. It is natural that he should be, since wheat is the main crop in almost every part of this district that is under cultivation. There were between 800 and 1000 wheat growers who attended the fourth annual field day at the branch experiment station at Waterville June 30, and they talked wheat all day.

It has been the custom at this and other branch stations to hold a field day each year when every one may have an opportunity to see the results of the experiments that are being carried out and to hear the explanation of the methods that are in use. To say that the experiments carried on each year are getting results is putting it mildly because one can see these results in every part of the county. Practically all of the farmers in the Waterville district have adopted the growing of winter wheat, one of the methods advocated at the station, and many other practices have been taken up by wheat growers in other counties as well as in Douglas county.

The event was an all-day affair. The main part of the program was held at the county fairgrounds at 10:30. Edward C. Johnson, dean and director of the experiment station of the state college, was the first speaker and he outlined the work at the station and told of its connection with the home station at Pullman.

"While there is much talk about better marketing for our products, we must not forget that production is basic and that it is our duty to produce the best yields we can," said Dean Johnson. "In times when prices are not the best we are properly anxious to produce our crops at the lowest possible cost. Therefore, cost of production is one of the problems on which the experiment stations are working so that growers may adopt the most economical methods and not have to experiment on their own individual farms."

There are few growers who have seen the work at the Waterville station but realize that the expense of maintaining it is more than repaid in better production and more economy to the farms where the facts which it discovers are applied.

Many questions have arisen among farmers relating to the various practices recommended and F. J. Sievers, head of the department of soils at the college, was one of the speakers at the Waterville station to answer many of them.

"Wheat is the one crop upon which the farmer of the Big Bend district must depend and always will depend," said Mr. Sievers. "There are some that believe the growing of wheat is getting the farmer into a rut, but there are cases when ruts are the right thing. It is all right to get into a rut, provided you are in the right rut. The wheat farmers must learn which are the best methods to use and then follow them out.

"There should be no argument between the experiment station and the farmer. The station is here to learn the facts and on the basis of them show the farmer why he should do certain things and not simply how to do them. That part of the game must be worked out by the man himself according to his local conditions. The average farmer is not equipped to find out the reason why certain practices are better than others. The experiment station can better do this work.

"There are many problems that are yet to be worked out by the wheat farmer and many of them can only be done in a general way at the experimental stations. For instance, how is the wheat grower going to maintain the fertility of the soils that are fast being depleted by our one-crop method? It is certain that alfalfa and clover can not be profitably grown on a very extensive scale in the Big Bend.

"It is very essential, however, that more straw be put back into the soil than has been done in the past, provided it can be turned under early enough in the spring to allow it to decay during the summer fallow year. Where straw is applied on late plowed land it is liable to remain all summer in the dry state and then cause a decreased yield of the succeeding crop."

After the noon lunch, which was served by the Waterville Commercial club, the crowd listened to addresses by State Senator C. E. Meyers of Davenport and Judge Sam B. Hill of Waterville. Judge Hill has never missed a field day since the first one put on at the station four years ago. Mr. Meyers has always been directly interested in farming and operates farms in Lincoln and Douglas counties.

The second part of the day's program came in the afternoon, when C. E. Hill, superintendent of the station, took the people from outside the county and went the rounds of the experimental plots at the station farm. H. F. Zentner of Waterville, the county agent, took those from Douglas county, thus giving each group a better opportunity to see the results and to hear the explanations.

The trip was through the varietal test plots, on to the tillage trials, then to the time-of-seeding rows and back to more of the varietal plots. There were a number of farmers' wives present, all of whom braved the hot sun and dust to see the results that were vitally interesting to them. What they saw and heard can best be left to Superintendent Hill for explanation.

Gamble in Farm Methods.

"Dry farming under a clean summer fallow system on the deep soils in the Big Bend area is no more of a gamble than farming in any other section, but it is probably true that farmers gamble more in their farming methods in this section than in other sections," said Mr. Hill. "Experimental results indicate that no method of tillage will give the best results every year because of varying climatic conditions. In 1917 the best yields were obtained from the dryest plowing, but the farmer can not foretell conditions when he starts field work in the spring and should play safe by following a system of farming that will give the most profitable yields over a period of years.

These groups of farmers are learning what the experiments in wheat growing at Waterville station have revealed.

"Growing two or more crops of wheat in succession without summer fallowing is generally poor economy, although large yields are sometimes obtained under the most favorable conditions. This practice has brought grief to many farmers in the Big Bend during the last five years and should be discouraged. A large yield was obtained from a "stubble in" crop in 1921, but what was gained was more than lost the next year when it was again necessary to "stubble in" to balance the farming operations.

Grow More Winter Wheat.

"In order to be assured of a maximum yield each year, the farmers in this section have come to the growing of winter wheat on clean summer fallow. This has given higher average yields than spring wheat and because of better distribution of labor it is grown at a lower cost per bushel. The proof that it is a more profitable practice is evident from the large percentage of winter wheat that is now grown in Douglas county, where 10 years ago there was mostly spring grain. The most important factor in the growing of winter wheat is to maintain a bare surface of the summer fallow. The ground must be kept free from all growth of volunteer wheat and weeds during the active growing season. The cultural methods by which this is accomplished are of minor importance from the standpoint of resultant yields and will vary in different sections. There will often be a wide variance on the same farm in different years, according to the conditions, but the aim should be to keep the ground clean at the lowest possible cost and to prepare a firm and level seed bed for winter wheat.

"Early plowing has given the best results at all the experiment stations under soil condttions varying from light blow land to soils of the heavier type. Land that can not be plowed in the spring before volunteer wheat and weeds have made an appreciable amount of growth, should be disked early in the spring to kill all growth and conserve the moisture and available plant food until the time of plowing. When the ground is disked the plowing should be finished before the second crop of weeds or volunteer wheat has become large enough to draw seriously on the soil moisture and plant food or a second disking will be necessary."

Comparing early spring plowing with disking and delayed plowing, Mr. Hill pointed out that both methods give maximum yields, but that the first method was the cheaper, as it costs more to disk the ground than it does to plow early and give the land the extra cultivation that may be necessary after plowing, since much more land can be tilled in a day with a harrow or weeder than with a disc. This tillage after plowing prepares the ideal eed bed for winter wheat, while the late plowed ground is often too loose for seeding.

The plats on the station farm that were plowed in the fall and followed by clean summer fallow the next year showed good yields and the practice is recommended for the section with farmers who have more land to be summer fallowed than can be plowed early in the spring. By a combination of these methods, fall plowing and disking the land that must be plowed as late as May 1, it is possible for the farmer to do more work himself and obtain the maximum yields at the lowest cost of production.

Early Disking Pays.

The advantages of early disking at Waterville to hold the moisture for delayed plowing are told by the following figures, taken from the station records:

Land that was disked April 15 and plowed May 10 yielded grain at the rate of 35.9 bushels to the acre and hay at the rate of 5510 pounds. A similar plot that was not disked, but which was plowed May 10, yielded at the rate of 30.1 bushels and 4280 pounds of hay. Another plot disked April 15 and plowed June 20 yielded at the rate of 33.4 bushels and 5150 pounds of hay, while a similar plot not disked, but plowed June 20, yielded at the rate of only 20.8 bushels of grain and 2790 pounds of hay.

All plats were given clean tillage after plowing until the time of seeding and were sown on the same day. It will be seen that the 15 bushel variance is due entirely to early disking before early plowing.

Deep plowing, over eight inches, has not been found necessary to get the best yields, according to experimental results, and in dry years slightly higher yields have been obtained from shallow plowing, as the ground dries out almost as deep as it is plowed. The time of plowing on ground that has not been disked is more important than the depth of plowing and shallow plowing can be done faster with the same horsepower, while additional horsepower increases the cost of plowing.

Packing after plowing has shown a slight increase in yield some seasons, but not sufficient to pay for the extra cost when the work is done with horse, but if the farmer delayed plowing to pack his ground the yield from the entire field would be reduced much more by the later plowing than it would be increased by the packing. Some tractor farmers figure that the extra cost of pulling a packer behind a plow is more than saved in the next cultivation because of lighter draught of the tractor in running over the firm ground and less wear on the machinery.

Must Control Weeds.

Cultivation after plowing should be efficient to control weed growth and to prepared a firm and level seed bed for winter wheat and will vary in different years, according to the time of plowing and the rainfall after plowing. The spike-tooth harrow was recommended for the first cultivation on soils that do not blow, as the largest area can be tilled per day with this implement. The spring-tooth harrow was recommended for blow lands. After the weeds get a hold on firm ground so that they can not be controlled with a harrow a rod weeder has been found best. This tool, it was stated, firms the ground below the surface and leaves a cloddy mulch.

Plans for making a double-rod weeder in general use can be had by application to the Waterville station, so that a weeder of this type can be made at home. It has been estimated that more than 100 of these weeders have been made in Douglas county following the first demonstration of the weeder on the Waterville station three years ago. The acme or knife harrow was not recommended, as it often makes the mulch too fine and dusty and is not as effective as a rod weeder in controlling weed growth.

Regarding the burning of the stubble, Mr. Hill said that his experiments were not far enough along to make a definite recommendation, but that this practice was often necessary when fields were harvested with "combines," leaving straw rows and a very heavy stubble which caused trouble in plowing and subsequent tillage operations. He knew of no experimental results to show that this practice reduces yields, but that the stubble should not be burned in sections where it is needed to keep the soil from drifting.

The best yields are usually obtained from wheat that shows above ground in September, according to experiments at the station and from general practice around Waterville. When it is not possible to obtain a stand until late in October the rate of seeding should be increased and every precaution should be taken to prevent the seed from being sown too deeply. A hoe type of drill which drops the seed in clean furrows was considered preferable to a single-disk drill, which throws the soil too much, especially on hillsides. In using a hoe drill, the ground should be clean, so that it will not be necessary to zigzag the hoes, as the rear hoes often cover the seed from the front hoes too deeply.

An eight-inch drill is preferred to one with the hoes or disks spaced closer, as it is possible to plant the seed in deeper furrows, which give the plants better protection through the winter and with more plants per drill furrow in sowing at the same rate per acre they are better able to push through a crusted ground. With clean furrows the ground will crack in the furrows and if the rain comes too late for the plants to get up in the fall they will emerge in the spring through the cracks, providing the seed is not sown too deeply or injured by wet treatments. One of the plants sown November 7 on a north slope was shown, and excellent stands were obtained from the grain that emerged through the cracks this spring.

Dry Treatment of Seed.

The new dry method of treating wheat with two ounces of copper carbonate per bushel of seed was compared with the old treatment and other new methods and as yet no treatment has surpassed it. This method has shown satisfactory control of smut without causing any injury to the germination of the seed. The importance of using a good grade of powder and thoroughly coating the seed was emphasized.

"I do not know of any place where harrowing winter wheat has paid except on

(Continued on page sixteen.)

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Wool Growers and the Forest Service

"Washington wool growers have always maintained a strong, well officered association and have done good work," testifies Will C. Barnes, assistant forester, of Washington, D. C. "They have cooperated with the forest service to the fullest extent, and looking back over the many years' relations we have had I do not recall anything which has arisen between the service and the association in which they have not given us credit for trying to handle matters on the forest, in which they were interested, in a fair and just manner. Even in the early days when few of the associations were our friends, the Washington wool growers maintained a friendly attitude. The service which they are rendering their members through carrying out such plans and policies as are mentioned in their circular indicates that members of the association are getting value received from their fees. Under such circumstances any stockmen's association is bound to grow in usefulness and prosper."

Every sheepman in the state should feel proud of his association's standing with the forest department, as indicated by this extremely complimentary letter, thinks Secretary J. F. Sears, and he is right. Every sheepman, too, should be taking advantage of the "plans and policies" referred to. If you are not, you are missing something which Secretary Sears, whose address is Yakima, will be delighted to tell you about.

A Great Team

It is not uncommon for two lawyers of different qualifications to form a partnership. The one is a first-class office man; the other is a good speaker. The one knows how to keep things straight and in order, how to find the provisions of the law in the law books, decisions of the courts on particular issues and so on; the other knows how to present the case in open court with logic and convincing argument. The man in the office often does the hardest work; the orator or trial lawyer gets the plaudits of the public. Each is vitally essential to the success of the firm.

This case is not entirely different from that of the experiment stations and the extension services of the agricultural colleges. The scientists in the laboratories and in the fields of the college farm work diligently and long over problems that confront them. They try this and they try that, hoping that they may prove some specific thing that will be of value to mankind. They spend hours and days and months—even years—seeking the discovery of new facts, and they find them. They find out how to produce a smut resistant variety of wheat, for instance; how to combat a pest that threatens the orchard; how to win over an animal disease that threatens an important industry, and many other things of equal importance.

Then comes the extension service, carrying the message to the people at large. This service is organized thoroughly with a view to the maximum efficiency of operation. Its men are trained in both knowledge and the skill of transmitting it to others. They go on schedule throughout the state preaching the gospel—the gospel of facts that the experiment station workers have discovered through long labors. Sometimes we sort of forget the fellows there at the home station that are silently working out these problems and give all the glory to the fellows who come out into the field and tell us about the discoveries.

Well, just as the office lawyer and the trial lawyer is each vital to the success of the law firm, so is the experiment station and the extension service each vital to the success of the college of agriculture. They are a great team when properly operating. They do a valuable work. We seldom realize how important it is to us, even though we be practicing the gospel they teach in our orchards and our fields and our pastures.

Ayrshire Records in Washington

A pointed illustration of the value to the breeders of a particular state or district of a great breeding establishment like that formerly conducted by J. W. Clise at Redmond, Wash., may be drawn from a recent compilation by the Ayrshire Digest of advanced registry facts regarding the breed of which it is the mouthpiece.

Out of a total of 212 leading records of the breed, based on production equivalent to 15,000 pounds of milk and 600 pounds of butterfat in one year, 23, or approximately 10 per cent, were made in the Pacific northwest, or, to be exact, in Washington and Oregon. But of the 23, 21 were made in Washington, and of the 21, 18 were made by J. W. Clise of Redmond. Looking still further, it will be seen that 14 of the 18 were made on animals obviously of Clise breeding. Thirteen others made all over the United States fall into the same category, so that all told nearly 15 per cent of all the leading animals of the breed bear the made-in-Washington sign of "Willowmoor." What this is worth to other men who are striving to advance the prestige of the Ayrshire in this section can not be computed in dollars and cents, but it certainly is true, in the words of W. A. Kyle, advanced registry superintendent, that "the progress of the breed is measured by the increase in production of advanced registry records each year," and that "the forward movement and increased interest in the Ayrshire breed can in great measure be attributed to the progressiveness of the owners mentiond in the list."

The loss of such a plant as Willowmoor is keenly felt, but that there are others coming along to take its place is indicated by the remarkable production records being made by the younger animals, particularly in several northwest herds. For example, E. W. Van Tassell of Wenatchee, Wash., who has a 4-year-old in the list of 212 leaders, bred and developed the animal which holds the world record among junior 3-year-olds in the roll of honor, and he owns another which is sixth in that class and sixth also among junior 4-year-olds of the advanced registry. He had eight animals, three of them class leaders, all of them of his own breeding, and none of them over four and one-half years old, in the latest monthly 50-pound list, and his Wenatchee farm herd is constantly in the limelight, both for its production records and its show ring winnings. It is by way of becoming as potent a factor in advancing the interests of the Ayrshire as Willowmoor ever was.

The state colleges, too, are doing excellent work with this breed. At Pullman, two records just completed put Willowmoor Ila and Chinook Peter Pan Bessie in the honor list of 212, and the latter animal, a senior 4-year-old, is of the college's own breeding. Seldom a month goes by without a Washington State college Ayrshire in the 50-pound list, and this is true also of Oregon Agricultural college, which too has one of its own youngsters, Oregon Robinetta M, in the list of 212. Lathrop Brothers of Grants Pass, Ore., is the fourth northwest name to be so honored, and there will be others when the list is compiled another year.

Washington State Gleanings

Farmers in Pend Oreille county are putting out poison mash to kill grasshoppers, which are found in large numbers in parts of the county. County Agent E. E. Hupp is directing the work.

INVESTIGATE PINE BEETLE.

E. J. Jaenicke, forest examiner in charge of insect work for the federal forest service, will spend two months surveying the pine beetle situation in the Chelan national forest in Washington.

POTATO BUGS REPORTED.

Potato bugs are reported to be doing damage in the Burbank district and growers are being given advice on eradication by A. W. Kasten, Walla Walla county agent. Not only are potato vines infested, but weeds near potatoes are covered with the bugs.

HARRAH HAY GROWERS MEET.

Hay growers of the Harrah district, meeting June 18, expressed themselves as being for the proposed hay growers' association. They favored the idea of having a 75 per cent minimum, that is, that the organization should not function until 75 per cent of the product is signed up.

ORGANIZE NEW FARM BUREAU.

Five community farm bureaus have been organized in Stevens county and 50 new members signed three-year contracts for membership. The work is progressing in an excellent manner, according to W. H. Tally, secretary of the state organization, and D. H. Ulrich of Colville, manager of the county bureau.

PUPILS DRING MUCH MILK.

Annual report of the milk distribution in the Yakima schools was made at a recent meeting of Secretary B. F. Kunder, showing a total consumption of 114,417 half pints. Of this number 88,834 were sold and 25,643 were given away. The milk was purchased at a cost of $3387.71 and that sold brought in $2576.24.

APPOINT NEW HORTICULTURIST.

R. P. Bean, superintendent of the Washington irrigation experimental station at Prosser, has announced the appointment of Thorland R. Hall as horticulturist for the station. Mr. Hall graduated at Oregon Agricultural college and has just completed post-graduate work at Ames, Iowa.

INDIANS CATCH SALMON.

The 1923 salmon fishing season closed June 14 for the Quinault Indians with a total catch of 150,000 fish, says an Aberdeen repoft. This is slightly better than half of last year's catch, when 266,000 fish were caught. This season's catch will pack 20,000 cases. The catch will net the 65 Indians, who had fishing rights on the river, a total of $70,000.

STRAWBERRY PACK LARGE.

Thirty thousand cases of strawberries have been packed so far this season by the cannery of the Oregon Packing company at Vancouver, which expects to pack more fruit this year than ever before in its history. The strawberry season has been unexpectedly long and the cherry and raspberry crops will keep the cannery working to capacity for the next several weeks.

DEMAND FOR FEEDER LAMBS.

Applications for more than 20,000 head of feeder lambs have been made to the Woolgrowers' Service corporation, which is just launching its campaign to develop in the Yakima valley one of the great winter feeding grounds for lambs. J. F. Sears, general manager, hopes to double this number by July 15, after which time he will not agree to consider further orders for the coming season.

PIONEER PICNIC HELD.

At the annual meeting of the Stevens County Pioneer association at Chewelah recently the following officers were elected for the coming year: President, John Rickey, Colville; vice president, Frank W. Dickey, Chewelah; secretary, Mrs. Clara Shaver, Colville.

There were about 400 people in attendance and an enjoyable time was spent by all. The next meeting will be held at Colville.

HORTICULTURISTS TO MEET.

At a conference at Walla Walla between C. L. Robinson, state supervisor of horticulture, who is secretary, Colonel Paul H. Weyrauch, who is president, and J. L. Dumas of Dayton, who is chairman of the committee on arrangements, the dates of the summer session of the state horticultural association were set for August 17 and 18 in Walla Walla, according to announcement of Mr. Robinson. A large attendance of fruit men from all over the state is expected.

PIONEERS FORM ASSOCIATION.

The Grandview Pioneer association has been organized, with the following officers: President, H. Murray; vice president, John V. Hartman; secretary-treasurer, J. M. Fleming; executive committee, Mrs. A. B. Marshall, Mrs. W. W. Wentch, J. H. Stuckrath, Mrs. J. M. Fleming, C. V. Tharp.

Citizens who have lived at Grandview 12 or more years are eligible to membership. The association will hold a picnic July 10.

CHERRIES BRING PROFIT.

Some excellent yields of cherries have been harvested in the Ziliah district, according to C. H. Furman. A tree in the Rudolph Smith orchard produced 400 pounds of Bing cherries which sold at 10 cents a pound. The fruit on the tree thus brought $40.

The fruit on 14 cherry trees in the same orchard brought $309 three years ago. The fruit on a Royal Ann tree in another orchard in the Zillah district brought $36 this year, the cherries selling at 9 cents a pound.

CODLING MOTHS LOSING.

The codling moths are on the losing side of the fight being waged against them by the horticultural office and the county agents of the Yakima valley, according to reports from the orchards. The horticulture office, cooperating with the county agents, waged an intensive fight against the moth this season, and, armed with additional data on the habits of the moth from their own observations and the investigation of E. J. Newcomer at Yakima, have been making great headway in the fight.

FARM BUSINESS AND MARKETS OUTLOOK

THE specialists who forecast business trends are still divided in their opinions as to the outlook.

The Harvard committee on economic research is optimistic. It declares that "the business situation remains sound; and we forecast firm or rising money rates for the remainder of 1923. Nowhere is there evidence of a reversal in the trend of the business cycle. After all, the important consideration during the prosperity phase of the cycle is not the short time movement of commodity prices; it is the movement of interest rates. The relatively easy condition of the money market sustains our forecast of good business in 1923."

The Brookmire agency says that a high rate of business activity can be expected, at least, up until the end of the present year. It points out that basic conditions indicate a depression early next year, but that some of them are already improving again, so that there is now a strong probability that a favorable forecast will be justified a little later on and that the business reaction will not occur.

Moody suggestions that plans for the future "should be formulated on the basis of a trade reaction beginning before the end of the present year and running far into next year," but declares that nothing very serious is indicated.

Babson states that "events of the last two weeks have shaken our faith" and he now forecasts" a sagging tendency in the average of raw material prices in the next few months" and a gradual decline in business activity which will be reflected in a period of low prices for industrial stocks, which have already dropped about 15 points from the high point reached in March.

Upon certain points opinions are fairly well agreed:

1. That the business reaction, if it comes in the next six or eight months, will be much less severe than in 1920 and 1921.

2. That retail buying of goods will be maintained at a high rate through the rest of 1923, which implies an excellent consumptive demand for such farm products as live stock and dairy and poultry products. While the demand for cotton and wool usually declines sharply during business depressions, these commodities have the advantage of present scarcity.

3. That one reason for the termination of the prosperity phase of the present cycle is the fact that agriculture has not prospered proportionately and that prices of farm products being already low, may not suffer quite so much as prices of finished products in which present high labor costs are so important a factor.

Cattle Breaks and Recovers.

Cattle prices received a severe jolt last week when arrivals at the leading markets increased about 8 per cent and accumulation of dressed beef as a result of the recent hot spell made slaughterers indifferent. All kinds of steers, cows and heifers declined in value, with losses of 75 cents to $1 on half-finished yearlings at Chicago. Producers promptly applied the rest cure, however, and with cooler weather to aid dressed beef trade, about half of the loss was recovered. Long-fed, mature steers rose to the high point of the season once more.

During the first half of July market arrivals are unlikely to increase much and prices, even on grassy kinds, may work up again. But, before the month is over, Kansas and Oklahoma grassers will be filling southern markets, and the vanguard of western rangers will appear at northern points. These additions to present sources of supply will tax beef trade channels.

Stocker and feeder demand subsided last week, as farmers are extremely busy, old corn is high priced, the new crop is not yet assured and the probable supply of late summer and fall forage is uncertain. July always is a dull month in this division, but if the corn outlook is favorable, a broad demand can be expected a month hence.

Lighter Hog Receipts Are Due.

The bulge in hog prices a week ago started another run, forcibly demonstrating that the crop is not all in yet. Prices dropped back almost to the low point of the season before reaching solid footing again.

If receipts of hogs are going to show the usual summer decline they should begin to do so in the next 30 days, according to past records. Such a letup in the run would permit another bulge and a return to $8 for choice light hogs at Chicago might easily take place. A big summer run of half-fat sows and light hogs lacking finish is probable and it is difficult to see a better future for them.

The halt in the decline of lamb prices last week was due to a lighter supply, as the dressed lamb and mutton market was sharply lower. The run from Tennessee is subsiding and shipments from Kentucky are moderate, but Virginia is still sending a large quota to Jersey City and rangers are becoming more numerous at Omaha with reports of increased loadings in Idaho and Washington. Prices are apt to work lower as the range movement rises to flood tide.

Opening sales of wool at London auction, which began last week, were at a decline of only 5 to 7 1-2 per cent, which was better than generally expected, and part of this decline has been recovered since. As a result our seaboard markets have shown a tendency to rise more nearly to the world level. The woolen goods market is in a fairly healthy state and consumption of wool by mills continues at a high rate. In the west a deadlock exists, as most growers refuse to sell at prices which show a decline of 5 to 10 per cent from the peak. In the bright wool state around 46 to 50 cents is the ruling price.

Wheat Market Marking Time.

Wheat prices have declined to the lowest level of the season and almost to the lowest point since prewar days.

Crop prospects have improved recently and unofficial estimates now place the yield about 20,000,000 bushels higher than a month ago. Rains in the northwest have removed fear of drought for a while, although irreparable damage was done in parts of North Dakota early in June.

Canada continues to report prospects of a crop nearly as large as last year, the Australian drought has been broken and European weather has become favorable again.

Broomhall estimates that exporting countries will have an exportable surplus of 768,000,000 bushels, while importers' needs will not exceed 656,000,000 bushels, suggesting a fair factor of safety in favor of the buyer if these conditions are maintained. Since the importing countries of Europe are still in financial straits, they will buy as sparingly as possible and are expected to do less buying ahead than usual during our heavy marketing season.

Cash Grain Markets.

Cash grain prices on July 3 were:

CHICAGO—Wheat—No. 2 hard, $1.05 1-4; No. 1 northern, $1.04 1-2; No. 2 northern, $1.04 1-4; dark northern $1.04 1-2@1.11.

Corn—No. 2 mixed, 80@80 1-2c; No. 1 yellow, 82@82 1-2c; No. 2 yellow, 82@82 3-4c; No. 1 white, 81@81 1-4c; No. 2 white, 81 1-4@81 1-2c; No. 3 white, 80 3-4c.

Oats—No. 2 white, 42 1-4@43 1-4c; No. 3 white, 40 1-2@44c; No. 4 white, 38c.

Rye—No. 2, 64 1-2c.

Barley—61@66c.

Flax—$2.70.

Clover Seed Prospects Improve.

Prospects for the new clover seed crop have improved recently as a result of favorable weather and prices declined again last week. Crops news is the chief market influence at present. Timothy seed prices show little change. Blue grass and red top seed crops are smaller than last year.

CHICAGO, per 100 pounds—Clover, $15@17.50; timothy, $5@6.50.

TOLEDO, per bushel—Prime red clover, $10.05; prime alsike, $10.25; prime timothy, $3.25.

Country demand for byproduct feeds is slow and prices on most kinds remain easy. The arrival of new wheat is a weakening factor in the bran and middlings market in the southwest.

Prices per ton (100-pound bags) in carlots: Chicago—Bran, $22 50; standard middlings, $27.50; flour middlings, $32; cottonseed meal, 36 per cent, $40.25; 43 per cent, $45.50; hominy feed, $32; gluten feed, $37.15; old process oil meal, $39; tankage, $57.

With new crop alfalfa and prairie hay coming on the markets, prices are adjusting to a lower level. Some new clover is arriving also. Total receipts are not large. Demand for timothy has declined and prices are weaker on some markets.

Prices per ton in carlots: Chicago—Choice timothy, $24@25; No. 1, $23@24; No. 2, $19@22; No. 1 light clover mixed, $20@22; No. 1 clover, $16@17; No. 1 clover mixed, $16@17; No. 1 and choice alfalfa, $16@25; upland prairie, $17@20; midland prairie, $15@16; rye straw, $12@13; oat and wheat straw, $11@12.

Egg Pack to Make New Record.

Storage stocks of eggs at the four leading markets continued to increase last week in excess over the same period a year ago, so that it is believed a surplus of holdings in the United States of 200,000 cases will appear July 1, as compared with the same date last year. Receipts during June were heavier than in 1922, but lack of broad consumptive demand sent relatively larger numbers into storage than the increase in receipts would suggest.

Peak of Butter Production.

Storing demand for butter bearing the Junt mark maintained prices on high scores last week. The movement into storage was heavier compared with both the preceding week and the corresponding week a year ago. Receipts of butter at the four leading markets during the month were larger than during the same period last year, but consumptive demand was so broad that the net addition to storage stocks at those markets was about 8 per cent less than in June, 1922.

That the peak of production arrived during the week was the opinion of the trade. The report of the American Creamery Butter Manufacturers' association showed a small increase in production compared with the week previous, but this increase is expected to be eliminated in the next report. Last year the peak was reached earlier in June, after which the market dropped rapidly. The decrease this year is expected to be more gradual by those who look for a cool summer, with a resultant effect on quality and receipts.

Cheese Prices Lower.

The break in country cheese markets early last week was reflected in lowered asking prices at distributing points. Many still believe cheese too high and buying is chiefly for immediate requirements only. Speculative operators have been slow to start storage operations this year because of the high prices of cheese in relation to butter and appear to be waiting for prices to work down to a lower level before taking hold in any large way. A little storing is going on, chiefly on dealers account.

Fruits and Vegetables.

The shortage in shipments of new potatoes is still largely offset by a heavy movement from the old crop, so that the total market supply is large. Prices have declined further, with Carolina Cobblers quoted at $4.50 to $5.50 per barrel in leading cities. Southern Bliss Triumphs are quoted at $2 and $3 per 100 pounds in midwestern cities

Total shipments of peaches from producing sections to June 25 were 1417 cars, compared with 2788 cars to the same date last year.

LATEST QUOTATIONS.

The Live Stock Market.

PORTLAND, Ore., July 7.—Cattle—Choice steers, $7.75@8.35; medium to good steers, $7@7.75; fair to medium steers, $6@7; common to fair steers, $5@6; choice heifers, $5.00@5.50; medium to good cows, heifers, $4.50@5; fair to medium cows, heifers, $3.50@4.50; common cows, $2.50@3.50; canners, $1.50@2.50; bulls, $3@4.50; choice dairy calves, $7.50@8; prime light calves, $7.50@8; medium light calves, $7@7.50; heavy calves, $4@7.

Hogs—Prime light, $8.25@8.50; smooth heavy, 230 to 300 lbs., $7.50@8; do 300 lbs. and up, $7@7.50; rough heavy, $4.50@6; fat pigs, $8@8.50; feeder pigs, $8@8.50; stags, subject to dockage, $2.50@4.

Sheep—Choice valley lambs, $10@10.50; medium valley lambs, $9.50@10; common valley lambs, $7.50@9; cull lamps, $6@7.50; light yearlings, $7.50@8; heavy yearlings, $6@6.50; light wethers, $6@6.50; heavy wethers, $5.50@6; ewes, $1.50@5.50.

SPOKANE, July 7.—Cattle—Prime steers, $7@7.75; good to choice steers, $6.50@7; medium to good steers, $6@6.50; fair to medium steers, $5.25@6; common to fair steers, $4.50@5.25; choice cows and heifers, $6@6.50; good to choice cows, heifers, $5.50@6; medium to good cows, heifers, $4.50@5.25; fair to medium cows, heifers, $3.50@4.50; canners, $2@2.75; bulls, $3@4; light veal calves, $7@8.50; heavy veal calves, $6@7; stockers and feeders, $4@5.50.

Hogs—Prime mixed, $7.75@8.25; medium, $7.25@7.75; heavies, $4.75@6.75 fat pigs, $7.50@7.75; stockers and feeders, $7@7.50.

Sheep—Prime lambs, $11@12; fair to medium, $10@11; yearlings, $8@9; wethers, $6.50@8; mutton ewes, $3.50@6.

The Grain Market.

PORTLAND, Ore., July 7.—Wheat, soft white, $1.09; western white, $1.08; northern spring, $1.04; hard winter, $1.03; western red, $1.

SEATTLE, July 7.—Kheat, hard white and Big Bend Bluestem $1.10; soft and western white, $1.08; hard and soft red winter, northern spring and western red, $1.05

LEWISTON, July 7.—Red, 87c; white No. 1, 93c.

WALLA WALLA, July 7.—Bluestem, Bart, 92c; Club, 89c; Turkey red, 82c.

ODESSA, July 7.—New wheat. Bluestem and Bart, 88c; Turkey red and Marquis, 83c; Forty-Fold, 81c; Jones Fife, 78c.

DAVENPORT, July 7.—Bluestem, 89c; Gold Coin, 86c; club, 86c; dark northern spring, 86c; northern spring, 83c.

Hay and Feed Grain.

PORTLAND, Ore., July 7.—MILLFEED—City delivery prices: Millrun, $34 per ton; middlings, $46; scratch feed, $50; rolled barley, $37; cracked corn, $49; rolled oats, $46.

HAY—Buying prices, f. o. b. Portland: Alfalfa, $16 ton; cheat, $22; valley timothy, $26; eastern Oregon timothy, $27; clover, $16; oats and vetch, $24.

SPOKANE, July 7.—WHEAT—Feed wheat, $44 ton; OATS, $42 per ton; rolled, $44; CORN, $44 per ton; cracked corn, $46 per ton. BARLEY, $40 per ton; rolled $42; BRAN, $31 ton; BRAN AND SHORTS, $32 ton; SHORTS, $34 ton.

ALFALFA, $24 ton; timothy, $28 ton; mixed hay, $24 ton.

General Produce.

PORTLAND, Ore., July 7.—BUTTER—Cubes, extras, 39@40c lb.; prints, parchment wrapped, box lots, 42c; cartons, 43c. Butterfat, 41c delivered Portland, 38@39c station buying price.

EGGS—Buying price: White hennery stand-

(Continued on page sixteen.)

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Range of Live Stock Prices for Week Ending July 3, 1923

CATTLE.	Chicago.	Spokane.	Portland.	N. Salt Lake.
Ch., prime heavy steers (1100 lb. up)	10.50@11.50			
Good heavy steers	9.65@10.50			
Medium heavy steers	8.10@ 9.75			
Common heavy steers	7.00@ 8.35			
Ch., prime light steers (1100 lb. d'n)	10.25@11.25			
Good light steers	9.25@10.25			
Medium light steers	7.75@ 9.35	6.50@ 7.75	6.50@ 8.00	6.40@ 7.85
Common light steers	6.00@ 7.90	4.50@ 6.50	4.50@ 6.50	4.75@ 6.40
Common to choice butcher heifers	5.25@ 9.85	4.00@ 6.50	4.00@ 6.00	4.00@ 5.75
Common to choice butcher cows	3.50@ 8.35	3.00@ 5.50	3.00@ 5.50	3.00@ 5.00
Bologna and beef bulls	3.50@ 7.40	3.00@ 4.00	3.00@ 4.50	2.00@ 3.25
Canners, cutters, cows, heifers	2.00@ 3.65	2.00@ 2.75	1.50@ 3.00	1.50@ 3.00
Canner steers	3.50@ 5.50	2.75@ 3.25	2.75@ 3.50	2.50@ 3.50
Medium to choice light veals	7.75@10.25	7.60@ 8.50	7.00@ 8.50	7.75@ 8.25
Common to choice heavy veals	4.00@ 8.75	6.00@ 7.00	4.00@ 7.00	
Com. to choice feeders (1000 lb. up)	5.75@ 8.75			
Com. to choice feeders (750-1000 lb.)	4.75@ 8.60	4.00@ 5.50		5.00@ 5.60
Common to choice stocker steer	4.00@ 8.50			
Com. to choice stocker cows, heifers	3.50@ 6.00			
HOGS.				
Top of market	7.40	8.25	8.50	7.00
Bulk of sales	6.50@ 7.25	7.00@ 8.25	7.50@ 8.25	6.25@ 6.75
Heavy (250 lb. up)	6.50@ 7.20	6.75@ 7.75	6.50@ 8.00	
Medium (200-250 lb.)	6.60@ 7.30	7.25@ 8.25	8.00@ 8.25	6.40@ 7.00
Light (150-200 lb.)	6.55@ 7.30	7.50@ 8.25	8.25@ 8.50	6.25@ 7.00
Light lights (130-150 lb.)	6.50@ 7.25	7.25@ 8.00	7.75@ 8.25	6.00@ 6.75
Smooth packing sows (250 lb. up)	5.75@ 6.45	5.50@ 6.25	5.25@ 6.00	5.50@ 5.75
Rough packing sows (200 lb. up)	5.25@ 6.10	5.00@ 5.50	4.00@ 5.25	5.25@ 5.50
Medium to choice pigs (130 lb. d'n)	5.90@ 7.00	7.50@ 7.75	7.50@ 8.00	
Stock pigs		7.00@ 7.50	7.75@ 8.00	5.25@ 5.75
SHEEP AND LAMBS.				
Mdm. to prime lambs (84 lb. d'r.)	13.60@15.85	10.00@12.00	9.50@11.00	10.50@13.00
Culls and common lambs	8.00@13.25	8.00@10.00	7.00@ 9.00	7.00@10.50
Medium to prime yearling wethers	10.00@14.00	8.00@ 9.00	7.00@ 8.00	7.00@ 8.00
Medium to prime wethers	4.50@ 8.25	6.50@ 8.00	6.00@ 7.50	5.00@ 6.00
Medium to choice ewes	2.50@ 7.00	3.00@ 6.00	3.50@ 6.00	3.75@ 5.00
Culls and common ewes	1.25@ 4.00	2.00@ 3.50	2.00@ 3.50	1.50@ 3.75

Yakima Fruit Prospects Are Bright

Good Yields and Good Quality Assured; Market Is the Doubtful Element

By RALPH ERSKINE

There is a better outlook for a bumper fruit crop in the Yakima valley this year than there has been for several years. From all indications the crop will exceed previous records. The early rains were abundant and the weather favorable for the growth of both early and late fruit crops.

It is the custom each year for many of the warehouse men and other authorities to make a general survey and estimate what the tonnage will be for the entire season. This year there were six estimates made, among which were those of W. L. Close, district horticultural inspector, and H. A. Glen of the Northern Pacific railway and other men who are familiar with the crops.

A summary was made from a number of individual estimates, the conclusions being that the 1923 crop will run from 18,500 cars to 22,000 cars.

The highest record known in the Yakima valley for fruit shipments was 17,500 cars, which was produced in 1921. This shows that it is not unreasonable to estimate the 1923 crop 1500 cars better than the 1921 crop, which would put this year's estimate at 19,200 at the lowest.

The above estimate includes 13,500 carloads of apples, which is the average of all the figures obtained. They ranged from 13,500 to 1600 cars. The record production of apples was also in 1921, when 12,000 cars were shipped. The same year there were 1000 carloads that went to by-product plants. There have been many acres of apples that have come into bearing since that time, a large part of which increase can be shown in the Tieton project, which is now one of the best producing districts of the valley. Even last year, when the production was far from the maximum, there were 10,000 cars of apples shipped out of the Yakima valley.

Pear Prospects.

As for the prospective pear crop, growers all say that it has never been better. There have been no pears taken out lately and many young orchards have come to maturity. The estimate runs from 2200 to 2750 cars and from all appearances the general average of 2350 cars is conservative. The record for pears is 2400 cars, which was made in 1920. In fact, the growers look for a record crop of pears this year and there seems no reason why all other production figures are not surpassed.

Peaches should come back to the record production of 2200 cars which was made in 1919 just before the heavy damage from freezing weather took place. The crops have been light ever since that year, but the damaged trees have been pruned back and are again in full head and promise a heavy production. Experts put the figure at from 1200 to 1500 cars. The general average of 1350 is considered almost too conservative.

The estimate for the strawberry crop was less than half of the actual crop. Climatic conditions this year could not have been better, according to many of the producers. There were just enough rains to bring the plants along during the early part of the season and the weather later on was mild enough to ripen the fruit admirably. There were a total of 55,000 crates shipped, or approximately 55 cars. The estimate had been 25 cars.

The cherry crop was not all shipped when this article was written, but at that time there had been 150 cars taken out of the valley and there were yet from 30 to 50 cars to go, according to estimates. This, of course, was only for freight shipments, but if all express and all less-than-carlot shipments were counted there would doubtless have been close to 250 cars in the total count.

There seems to be little variance in the crop of plums and prunes and the 150 cars of last year seems to be about the figure that will be reached this year. The acreage of apricots is gaining each year. The crop last year produced 30 carloads and there is little doubt but that there will be more this year. The same will hold true with the grape crop. In the lower part of the valley the plantings have been increased and this year's crop is estimated at 100 cars.

It is interesting to note the estimate on the number of mixed cars. These will include express shipments and packages sent by parcels post, in all of which there has been a steady increase during the last few years. Last year the shipments were nearly 1400 cars and there is little doubt that there will be 1500 this year.

While this year's crop is very apt to set a new high record for production, it will not indicate the possible peak that may be reached and it does not show the hundreds of acres that are coming into bearing. There are also many new plantings that have been made and will in time be counted among the bearing orchards. There is a strong tendency toward soft fruits that will have their tonnage contracted to the canneries on 15-year agreements. Such fruits are largely sour cherries, apricots and cling peaches.

Quality Is Excellent.

A point that looks still better to the growers than the good crop is the fact that the quality of the fruit promises to be much better this year than it has been in some previous years. Some growers claim that the season has been unfavorable to the codling moth and that there is not the need for such heavy spraying as has usually been necessary. Others feel that the pest has been cleaned up by the extra caution this season that has resulted from the heavy infestation of last year.

Pruning methods have had something to do with the condition of this year's crop, although this will show up to a greater extent during the next few years than it has this year. For several years the trees have been headed back and pruned heavily. This has resulted in the loss of wood growth and caused the water sprouts that must be removed to keep the frame of the tree open.

A more recent practice has been to do more thinning of the branches and follow what is termed the "long system" of pruning. This plan tends to go to the other extreme and allow too much growth. The growers are coming to the conclusion that they must strike a happy medium and apply both methods if they are going to get the maximum production from their orchards.

Thinning has done much to improve the quality of the apple crop and there are very few orchardists now that do not believe severe thinning pays. Those that get the best returns from the practice get the job done early in the season before too much of the strength of the tree has gone to the fruit

Some growers are finding that it pays to thin pears, since the size and quality can better be controlled in this way, although the practice is not general. The state college has put on a number of thinning demonstrations each spring through the extension service and there has been ready response to this work. A. E. Lovett, county agent, has a few trees in different orchards this year that are to be recorded at picking time to compare their crop with other trees which have not been thinned or were thinned at different rates.

Much interest has been created in the stationary spray outfits that have been in use in the Wenatchee district. Many of the Yakima growers are considering putting in similar equipment. They are finding that by having the spray pipes under ground and hydrants at the right intervals they can save time in spraying the trees and there is practically no damage done to the trees nor as much wear on machinery as is the case where a spray wagon is hauled through the tree rows with a team.

The grower finds that he can do much of the work himself and get it done more thoroughly than when he has to depend on hired help. Since there is a scarcity of men this year it is still more important that more of these labor-saving methods be adopted. So far only a few have installed the stationary rigs, among whom are: Erwin Wickersham of the Harwood district, A. F. Linse of Knob Hill and William S. Barr of the Englewood community.

New Grading Rules.

There is another factor that will affect the fruit men this season and that is the new grading rules. Last year there was no little dissatisfaction in the rules, which allowed small stings in the fancy grades of the green and yellow varieties. The ruling allowed stings to go on apples that had the extra fancy color, but since the green and yellow varieties have practically the same color in all grades, there was a chance to run a high percentage of apples with stings.

The new ruling calls for the extra fancy or second grade to "consist of apples that are of one variety which comply with specifications for extra fancy grades (except for color) except that they may be fairly well formed and that scab spots affecting not to exceed a total area of one-fourth inch in diameter, or limb rubs, slight drought spots, slight hail marks or heavy russet, slight sun scald, and two small healed stings on red varieties showing extra fancy color shall be permitted."

Another change has been made which

(Continued on page twenty.)

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THE crankshaft and the crankshaft ball bearings of the McCormick-Deering 10-20 and 15-30 tractors are guaranteed against breakage, not for a month or a year, but *during the entire life of the tractor.*

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King County Cow Testing Tour

"I am always willing to learn and I am as busy as any one. At present I am getting a milk shed built and attending to other pressing work, but I decided to take the day off and bring the family along to see what the other members are doing," said one of the men who attended the King county cow testing tour held in the Snoqualmie valley June 22. In fact, this seemed to be the sentiment of all who made the trip and many of them left important work in order to attend.

The one big object of the tour was to demonstrate the real value of testing cows for butterfat and to let each breeder tell in his own words how he managed to maintain his records for the last 12 months. The trip was both interesting and instructive, and although there were but four herds visited, they all had a lesson that was well worth studying.

Selects the High Producers.

The most interesting thing at the John Odell farm near Duvall, which was the first stop, was to hear how John built up his herd of grade cows by selecting only the high producers from herds on which there were cow testing association records. His herd now contains 35 cows that have an average of 436 pounds and only three mature cows made less than 400 pounds. One 10-year-old Jersey is high cow of the herd with 542.8 pounds of fat and 10.420 pounds of milk.

A "guessing contest" was held at this stop and the crowd was asked to place three cows in the order of their production. When they had all handed in their decisions there was only one who placed all three cows right and seven placed the second cow highest. They all agreed that it is not always hard to determine whether a cow was a good producer of milk, but that it was next to impossible to tell what her butterfat test is.

At the H. L. Allen farm, also near Duvall, were three generations from pure bred Jersey sires. The cows were all placed in different lots in the barnyard and it was interesting to learn which ones were descended from the first herd sire, Melia Anne Golden Woolsey. This herd had a butterfat average of 339.4 pounds for 28 cows, while in 1922 there were only 25 cows in the herd and they made an average of 375 pounds. This was an increase of 36.4 pounds per cow, and there were 10 2-year-olds in the number.

Boys' Judging Contest.

The boys' dairy club of Duvall held a judging contest for their members with three cows from this herd. Rev. George R. Abbott is in charge of the club and he asked Mr. Allen to place the animals and give the boys some instruction in judging.

The picnic lunch was held under the large black walnut trees in the yard of the Allen home and Mrs. Allen served strawberries and cream to the visitors as well as a big part of the dinner.

After the meal a few short talks were made. C. B. Hall, banker of Duvall and Tolt, gave a very striking comparison of the herd that had been tested and the city store that kept a careful set of books. A business man would be foolish to operate his store without knowing where he stood, he said, but yet there are many dairymen who are doing the same thing and just making a living.

W. W. Henry, the county agent, who was in charge of the tour, gave an explanation of the chart which showed the records of the cows of the entire association in groups, according to their production. He emphasized the fact that the cows in groups up to 300 pounds of fat were showing an actual loss to their owners when all costs were considered. To make a profit the dairyman must have cows that will average above this mark, he said, since no herd is any better than its average production. Another point was that the herds with higher averages were showing a lower cost of production of a pound of butterfat and greater returns to their owners.

Other speakers were L. J. Clark of Bellevue, secretary of the association, and E. W. Trezise of Tolt.

There were eight heifers in the Trezise herd, near Tolt, the next stop, which made an increase of 81 pounds of fat over their dams. These were all daughters of Olympia's Fern, once a world record cow. This is a registered herd and the average fat production for 16 cows was 383 pounds, which included nine 2-year-olds. This is an increase of 54 pounds of fat and 535 pounds of milk over last year, when there were 11 cows tested. Mr. Trezise credits his increased production to the records obtained in the testing association.

There was a real treat awaiting at the A. E. Moore farm near Fall City, where a herd of grade Guernseys had an average fat production of 409.9 pounds. There were 16 cows in the barn and they were all neat looking Guernseys that showed every qualification of purebred animals except pedigree. The herd average for May was 62.2 pounds of fat and for June it was 50.1 pounds. The startling thing about this herd was the fact that one cow made 110 pounds for May and 104 pounds for uJne. All of the cows are running on pasture and are getting a mixed grain ration according to their production.

The tour ended at this farm. One stop, at the Methow Valley Live Stock company, near Tolt, had to be cancelled because of the death of Mr. Cushman, the superintendent. There were between 30 and 40 who attended and had it not been so near haying season there would have been a larger crowd.

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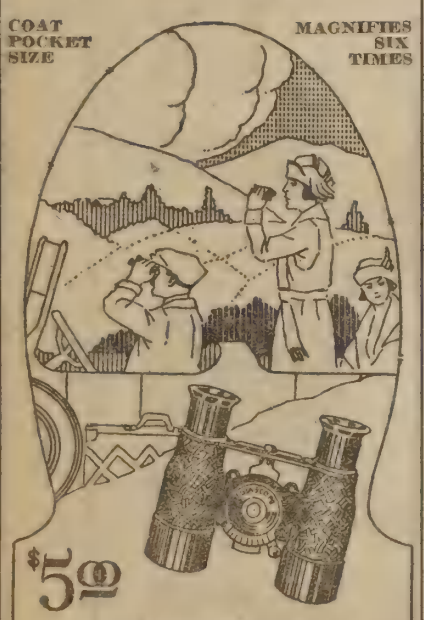

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LIVESTOCK AND DAIRY

Neutralization

By E. V. ELLINGTON,
Head Dairy Husbandry Department, State College of Washington.

Would you please advise the kind of a preservative the creameries use to sweeten cream for churning? If a preservative is used please state how much to use per gallon of cream. W. C. G.

The material used for this purpose is not a preservative as you seem to indicate in your letter. The material used is perfectly harmless, slacked lime, bicarbonate of soda, or magnesium lime, the one most commonly used being probably magnesium lime. This may be prepared by mixing two pounds of magnesium lime and then mix with water to make one gallon. From this stock mixture take a cupful and dilute with water to about a quart and use this last mixture to add to the cream. Cream is usually slightly warmed when the "neutralizer" is added, but great care should be taken to have the cream cooled again to the churning temperature for two or three hours. The cream should be stirred while the neutralizer is being added. About the only guide as to how much to add is to taste the cream. Cream should taste but slightly sour when properly "sweetened."

Neutralization or "sweetening" of cream as practiced in creameries has become rather general because of so much poor quality cream being sent them. The best butter made any place is made from sweet cream. Good butter may be made from cream that is slightly sour, but not from old, sour cream. Neutralization helps to reduce the sourness of the cream. For these reasons the practice of neutralization should be resorted to only as a temporary expedient and not as a general practice. The practice was developed because of poor cream and those who use the process confess that they are using cream that is not first grade and probably not even second. There may be cases where the use of neutralizer is justified, but we should try to keep our cream in such shape that it is sweet or nearly so when ready to churn.

Our public educational institutions, local and state, are advocating churning from sweet cream and the U. S. government itself is setting the example by buying only sweet cream butter for the navy.

Benefits From Testing

The benefits to be derived from official testing may be summarized as follows:

1. It provides a basis for proper selection, breeding and feeding so essential for developing a high-producing and profitable herd.
2. It increases the value of the cow, her offspring and her other relatives.
3. It stimulates personal pride in the development of the kind of dairy stock which will improve the herd.

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No. 2*	300 lbs.	6	30.00	$5.00	$5.00 for 5 Mos.
No. 2†	300 lbs.	6	35.00	$5.00	$5.00 for 6 Mos.
No. 4†	350 lbs.	7	40.00	$5.00	$5.00 for 7 Mos.

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Holstein Standards

By R. D. TUCKER,
Superintendent of Official Testing for Washington.

There are three principal divisions of the Holstein-Friesian advanced register or three different classes of records which entitle a cow to be entered in the advanced register. They are the seven-day record, that 365-day record and the 305-day record. The Holstein-Friesian association is the only one that now accepts a seven-day record. A cow calving on the day she is 2 years old or younger must produce 10 pounds of butterfat in seven days to be entered in the advanced register. For each day that she is older than 2 years at the time of calving the requirements are increased .00548 pounds. This brings the requirements of a 5 year-old or mature cow up to 16 pounds of fat in seven days.

The 365-day record is the most commonly used long-time record. To be entered in this division a cow calving on the day she is 2 years old or younger must produce 318 pounds of fat in 365 days. For each day that she is older than 2 years old at time of calving her requirements are increased .1479 pounds. This brings the requirements for a mature cow up to 480 pounds of fat in 365 consecutive days.

The third division of the advanced register is the 305-day record. To qualify for this division a cow must produce 85 per cent of her 365-day fat requirements, and in addition produce a living calf within 14 months of the previous calving. This record is gaining in popularity. There is a subdivision of the 305-day record known as the farmers' class, or subdivision B. The requirements for this record are the same as for the regular 305-day record, the only difference being that the cow may not be milked more than twice a day after the 45th day on test.

Holstein bulls are entered in the advanced register when they have four daughters in the advanced register.

Feeding the Calf

At birth a 50-pound calf needs about eight pounds of milk a day, while a 100-pound calf will use 12 pounds. Underfeeding at the start, says the bureau of animal industry of the department of agriculture, is better than overfeeding. Some beginners make the mistake of giving the calf all it wants. This would probably be a good practice if the calf were fed every two or three hours, as is the case when it runs with the cow. However, when a young calf has been without feed for from eight to twelve hours there is danger that it will gorge itself if allowed to consume all it wants, which may cause digestive trouble.

A uniform temperature of about 90 degrees Fahrenheit is necessary if the milk is to agree with the calf and produce the best results. Some feeders attempt to make up for any lack in quality of the milk by increasing the quantity. For instance, they will feed much more skim mik than whole milk in the belief that the increased quantity will make up for the lack of butterfat. This is wrong, as the same rule about overfeeding holds good with skim milk as with whole milk.

If, on account of age, souring or dirt, the quality of the milk is poor, the quantity should be reduced rather than increased. The calf will not lose so much in development through a reduction in feed as he would from digestive disorders.

Why Calves Get Sick

Nearly all disorders or diseases of calves, says the United States department of agriculture, are caused either directly or indirectly by lack of cleanliness. Filth, whether it is in feed, pens, bedding, or pails and utensils, is dangerous to the health of the calf. To be on the safe side use nothing but clean milk (sweet or sour), scald the pails or sterilize them with steam, remove old feed from the boxes and clean them daily. Filth and dirt are the natural breeding places of many bacteria that will cause disturbances in the young animal's stomach. Freedom from filth usually means freedom from disease.

HOG CHOLERA CAUSES LOSSES.

The department of agriculture estimates that hog cholera cost the farmers of this country about $28,000,000 last year. Greatest losses occur in the fall. The way to control the disease is to vaccinate the animals with hog cholera serum. If a herd is treated as soon as the first evidence of the trouble is seen most of the animals can be saved.

DO NOT LET FOUNDATION ROT.

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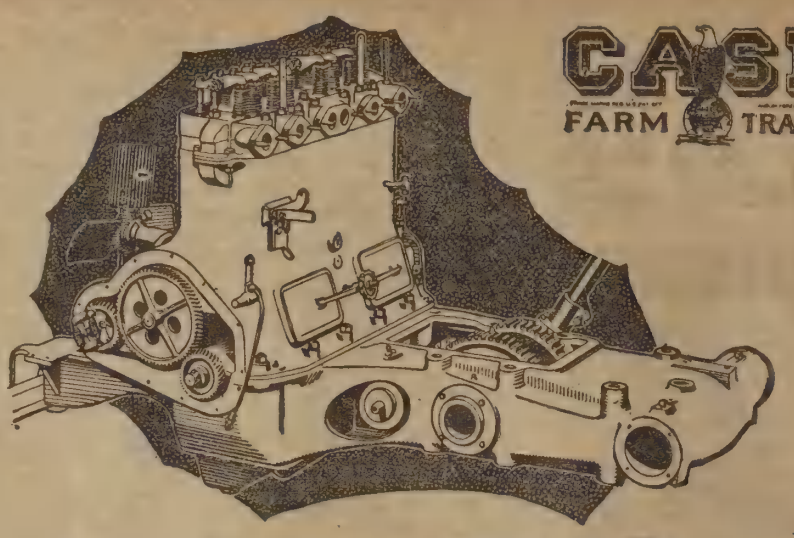

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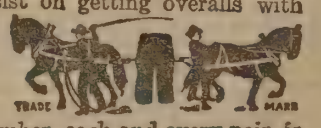

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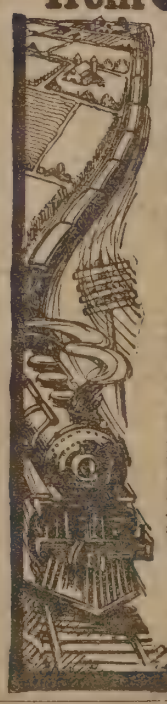

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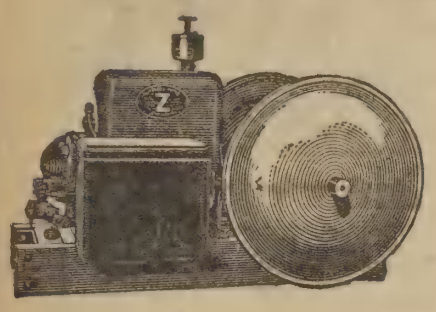

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Breeds Up Herd

Jenner Started With Small Foundation of Guernseys

The fire that swept away the cattle barn and the greater part of the hay crop on the Fred L. Jenner farm near Oso last summer was the cause of a serious loss, but it has resulted in the erection of a better barn in a more convenient location and farther away from any danger of the kind in the future. The new building is a modern one, has a concrete floor, steel stanchions, large hay loft and a feeding shed adjoining.

The 17 head of registered Guernseys are some that Mr. Jenner has bred up from a small foundation herd and a good bull. He made his selection from the Dellwood farm at Mount Kisco, N. Y., and this first herd bull proved so prepotent that his former owner bought him back at double the original cost. The present herd sire is Regent's May King of Dellwood, from the same farm, sired by Regent of Allenwood.

The foundation cow, Masher's Buttercup, now 9 years old, is the dam of three full sisters that are still in the herd. There is much similarity between these heifers, and they all show the splendid characteristics of their sire.

Diamond's Little Rose, an animal purchased from the Miller herd, near Arlington, made an official record of 226 pounds during the first 173 days of her test. She is out of a daughter of Lover Bold, and is by a son of Lover Bold. She is a very promising animal, and Mr. Jenner expects to get some good records from her. Another heifer in the herd was bred back to her own sire, and produced a heifer calf of apparent quality.

Twelve of the cows and heifers now in the herd are from the foundation herd sire, while the rest of the young heifers are from the present herd bull. They are all typical Guernseys, with uniform udders, and promise to become a splendid producing herd. Mr. Jenner is a good caretaker and understands Guernsey pedigrees. There is no doubt but that within a short time he will have one of the higher classed herds in the county.

There are 160 acres on the farm, 40 of which are cleared. He raises practically all of his own hay, and pastures the animals on the logged-off land adjoining, part of which is hill land which would be hard to cultivate or crop in any other manner.

Mr. Jenner got his start in Washington as a logger, and did much of this kind of work in the neighborhood of his own farm during the first few years he was getting a start with Guernseys. He now has a herd large enough to demand his entire time. Although he is somewhat isolated from the main dairy communities of the county, he ships milk to the Arlington condensary daily, and reserves enough at home to feed his calves and pigs.

Money in Hogs

"It has been my experience that $100 invested in hogs will pay better than $700 invested in dairy cows," said Dr. H. K. Stockwell of Monroe, Snohomish county. "I had five brood sows last winter, and sold $1100 worth of pigs this spring, and still have enough to handle my clover pasture and to utilize all of the waste feeds we have. The sows averaged 13 pigs to the litter this spring, and one of them had 17. They are all registered Hampshire and I find there is a good demand for them for breeders as well as stock pigs in this neighborhood.

"I seeded a small patch of Dwarf Essex rape in last year's hog pen, and intend to pasture it when it has attained proper growth. The main hog pasture will be a two-acre patch of clover, which contains alsike and white clover that was seeded five years ago. Last year we applied 800 pounds of superphosphate to the acre, and it has greatly improved the growth of the clover. There is still a good stand and I believe it will last five head of brood sows and the young pigs all summer, provided it does not get too dry."

Dr. Stockwell keeps a mixture of minerals before the pigs at all times, and finds that it helps their growth. Limestone, salt and charcoal are some of the ingredients, and lately other bone-building materials have been added. Some mineral supplement of this kind is absolutely essential while the hogs are on pasture unless minerals are added with the feed.

LIVE STOCK MONEY AVAILABLE.

The Wool Growers' Service corporation of Yakima, Wash., of which A. D. Dunn is president and J. F. Sears is secretary and general manager, announces that it is now making loans on cattle and sheep with funds obtained from the federal intermediate credits banks. The rate of interest is 7 per cent in advance. "The terms are of sufficient length in time to permit the borrower to liquidate his debt from the operation of his business," says the announcement. The bank has already loaned about $300,000 to live stock men of this state.

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POULTRY AND RABBITS

Loss Is Small

Only 62 Chicks Out of 1600 Die

When a bunch of day-old chicks can be raised with the mortality of only 62 out of 1600, it shows that the stock were good in the first place, and that excellent care was given during the first few weeks of their lives.

J. Shafer of Shelton has obtained just such a percentage, and attributes much of his success to the new Mason county accredited hatchery, which has made it a point to furnish the very best kind of stock. He feels that there would have been a still smaller loss had not a number of them smothered during the first few days that the brooder was operated.

"The only mistake that I made was in not getting 3000 chicks to begin with," said Mr. Shafer. "I am merely getting started with poultry, and have 350 of last year's pullets, which will be culled over and used for breeders to furnish eggs to the hatchery next spring. In addition there are 350 hens which have laid between 190 and 220 eggs all spring. Last December they laid close to 70 per cent, since they were given lights at that time, but they dropped off early in the spring because of some bad feed. I am fattening 160 young cockerels in a small house, and will soon have them ready for market.

Increases Berry Acreage.

"This farm is ideal for keeping a flock of hens, since I am building up a berry farm in addition to poultry. There are 40 acres on the entire place, and I am increasing the acreage of berries each year, and expect to have a large part of the place to small fruit in the course of a few years. The berry patches make a very convenient place for the hens to range, and they get a large part of the green feed. During the winter they are fed kale, carrots and mangels, and I always mix up my own dry mashes and chick feeds.

"I am trying an experiment with cooked potatoes for a fattening ration for cockerels and so far it has worked successfully. It consists of two-thirds corn meal, one-third ground barley and a small amount of fish flakes. I put one cup of salt in five gallons of sour milk and mix a thin slop with one-half part potatoes and enough of the grain to thicken to the right consistency. I have plenty of potatoes this year, and believe the combination makes one of the cheapest rations I could feed.

"When I get the entire farm built up to where I want it I will have from 3000 to 4000 hens, from 15 to 20 acres of berries and four or five cows. I think this will make a very good combination for a one-man farm, and it should produce a reasonable income, provided it is properly managed."

Poultry Problems

By W. D. BUCHANAN, Poultry Extension Specialist, State College of Washington.

Some of my hens get large hard balls on the bottoms of their feet and on their toes. If I do not touch them they have to be isolated and limp around for weeks, but if I cut them open they have a discharge of whitish water. When the cut heals the blister disappears, only to return again in a few weeks. Please tell me wat to do for them. H. T.
Bothell, Wash.

This is so-called bumble foot and is caused by a bruise or a thorn or something in the foot. Let the whitish water form a pus, then lance, clean out and dip the foot in a 2 per cent solution of zenolium. If you can locate the cause of the trouble, remove it.

My chicks turn their heads from side to side. One had her head on her back, turned over completely, had spasms. I killed and burned her, but others are getting this, too. I feed commercial scratch, shorts, they have free run on range, open house, we keep it clean. What is the matter with them? MRS. A. S.
Kennewick, Wash.

This is either ptomaine poisoning or a very bad case of indigestion. Commercial scratch and short is not a balanced ration; but, unless moldy, would not produce the condition which you describe. Look for putrid meat, dead rabbits, field mice, etc.

Will you please send me a formula for mixing mash for growing chicks where they have lots of grass and outside range and plenty of clabbered milk. I am using bran middlings and corn, equal parts.
Centralia, Wash. MRS. G. L. F.

A good mash under these conditions could be made by mixing 100 pounds of bran, 100 pounds of middlings (or 200 pounds of mill run), 100 pounds ground corn, 20 pounds meat meal and 15 pounds bone meal. If they are over 3 months old, and still have plenty of milk, the meat scraps may be reduced to 10 pounds; if over 4 months old, cut out the meat scrap if they appear to be maturing too rapidly.

What causes small brown spots in the white of egg? How is the best way to rid chickens, a large flock, of lice and mites? Would you advocate this automatic sprayer? Is it lice or mites that make chickens bald headed?
Pateros, Wash. MRS. W. E. S.

Brown spots in the whites might be caused by shells coming in contact with oil or filth. The best way to rid a flock of lice is to dip them (on a hot day) in a solution of warm water and sodium fluoride, using one ounce of the sodium fluoride to each gallon of water. The best way to rid a flock of mites is to spray the roosts and roosting closets with oronite shingle stain. There are many causes for bald heads in chickens; but, if caused by depluming mites, the dipping will kill them.

I have 15 White Leghorn chicks that are very thrifty. I feed them chick feed and mash, coarse charcoal, and I boil one egg hard for them every day. About a week ago they began to get lame in their toes and now I have five that go with their toes doubled up. They don't have much use of their legs. What is the cause of this and the cure? T. L. B.
Seattle, Wash.

This is a case of indigestion. If you are feeding hard-boiled egg, be sure it is crumbly and tender. If you are feeding commercial chick mash, in connection with eggs, mix it equal parts mash and bran. Feed all grain in deep litter and give them outdoor life, plenty of fresh air and green feed.

What is the matter with my hens? Their right eyes are swollen shut and when I pull the eye open it seems to have cancer grown on the inside of the lower lid and pus comes from it. MRS. A. H.
Pullman, Wash.

You are so close to the state college that I would advise you to take an affected hen to the poultry department for examination. It might be roup or chickenpox or an infection of some sort. It is impossible to tell without seeing the birds.

I have 20 little chicks. I have been feeding them chick feed and a chick mash, but don't know the amount to feed them, so am using my own judgment. They have straw and chaff to scratch in. They have plenty of room and are warm. Would you advise me to feed them chick developer? Please give me a balanced ration for 100 chicks from now until they are ready to lay and when they are laying. MRS. C. E. H.
East Stanwood, Wash.

It is impossible to give a balanced ration for chicks without knowing their age. A simple mash for chicks from 1 to 2 months old could be made by mixing 100 pounds of bran, 100 pounds shorts, 100 pounds middlings, 40 pounds meat meal and 15 pounds bone meal. After they are 9 weeks old the meat meal should be gradually reduced, so that at 5 months it is not over 10 pounds. When you want them to lay increase the meat meal to 50 pounds. This is assuming that they are eating 50 pounds of grain to 40 pounds of mash.

Baby Chick Men to Meet

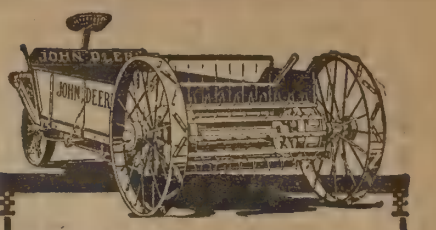
The eighth annual convention of the International Baby Chick association will be held in Washington, D. C., Wednesday, Thursday and Friday, August 8, 9 and 10. The dates have been changed from the first, second and third to the eighth, ninth and tenth, in order to bring the International Baby Chick association and the American Poultry association conventions on adjoining weeks and thus facilitate the joint attendance of persons at both conventions.

It is anticipated that this eighth annual convention will be the biggest and most rousing meeting that the International Baby Chick association has ever held.

CROSSES PHEASANTS AND BANTAMS.

J. D. Sanford, Sequim, Clallam county, has an experimental turn of mind and besides growing a half dozen test plots of various kinds of vetches he has raised four young China pheasant hens which he is crossing with a bantam rooster. He has already collected a number of eggs and expects to make his first setting soon.

In writing advertisers, be sure to say you saw their advertisement in The Washington Farmer.



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ORCHARD AND GARDEN

Selling Vegetables at a Profit

By A. B. G. BOUQUET.

The season for marketing vegetable crops is fairly under way. What lies before many growers along this line depends upon a good many things. A great deal depends upon the grower himself. He should take steps to look into the methods of handling his crop as he has handled it in the past, study to see whether or not improvement can not be made and how his general marketing conditions can not be bettered so that greater profits may be the result.

Too often the cause of unsuccessful vegetable selling is due to the kind of produce the grower is trying to make the market absorb, and also the manner in which that produce is offered for sale. It is an old adage that good stuff helps the market by stimulating consumption, while poor stuff causes a blockade that even holds up the good stuff from moving very freely. We see an example at this time of the year in greenhouse tomatoes. While greenhouse tomatoes sell at a comparatively high price you must remember that these fruits not only have excellent quality, but they look well in the package and, therefore, even at their figure they move along. Every year we have gluts in one line or another and, while I know perfectly well that some of these are caused by an absolute overproduction of an article more than the market can absorb, too often the glut is caused by a lot of inferior stuff piling up because it is ungraded, poorly put up and people are not attracted to buy that class of stuff.

Careful Harvesting Important.

The grower can help his cause along in the first place by being sure that he is taking his crop or crops from the field when they are in the right condition. Careful and accurate harvesting in the field is more important than it is often given credit for. A recent California bulletin mentioned the fact that one of the hardest things to be driven home to the California grower was the requirement that he handle his stuff in the field in the right way and at the right time. The qaulity of the vegetable as it is on the market is largely due to the above mentioned factor. Lettuce must be solid before being cut; corn, to be good, must be neither too young nor doughy; beans must be in the snap stage and not old, and so on.

One of the greatest evils of many of the vegetable and fruit growers of England is their habit of "topping" their packages, that is having a different grade of stuff on the top layer than those beneath. This evil has gone on for years and years until it is almost a national trait in the preparation of produce for market. Active steps are now being taken to eradicate this trouble in the habits of the better class of growers. There will always be those who will never do anything else than "top" their packages. This question is, of course, one of proper and uniform grading. More of our local vegetable growers should work along the same lines, namely studying the market demands and grading their vegetables accordingly and as laid down by an approved plan which calls for specific grades for each crop.

How Grading Helps.

The retailer who handles the grower's goods is much better able to move the stuff along if it is at least reasonably graded. Definite grading rules, as suggestions, have been laid down by the department of agriculture at Washington, D. C., and copies of grade rules for many different kinds of vegetables may be obtained free by writing to the department of agricultural economics. While these rules may not be absolutely fitting to every grower's needs, they at least are suggestive and give him an idea as to what United States Nos. 1, 2, 3, etc., grades constitute. A well-graded package gives the handler of your product the impression that you recognize the relative value of the vegetables that you are growing and that prices for each grade should be set according to the value of each.

Summer Maintenance of Vegetables.

The best growing months of the year are in the summer, therefore the vegetable grower has the greatest opportuiity to get results from his plantings if they are given good care during the warmer months. There are two things of importance to every garden, first the keeping down of insects, and second, the provision of sufficient moisture for the growing needs of the crops.

The northwest during the last 10 years has come to be a regular mecca for a great number of different kinds of insects which are injurious to vegetable plants. Some of these bugs did not seem to be nearly as numerous as they have been of late and the situation in many cases is very serious. One grower put it recently that he was a new comer in this region and he was plainly discouraged at the poor growth of his vegetables and the damage that was done them by many different kinds of insects. It is evident that part of vegetable gardening consists, therefore, in scrapping with the enemy in the form of one kind of insect or another, depending upon the kind of crops which are being grown. The worst enemy of the tomato is the flea beetle, but this is simply controlled as compared with some others. The greatest pest of cabbage, sunflower, Brussels sprouts and kale is the root maggot, which is one of the most difficult insects to be controlled. Beans are readily attacked by the 12 spotted beetle; eggplant is very liable to be chewed up considerably by the flea beetle, while sweet corn is very susceptible to the ravages of the earworm working on the ears after they are formed.

In the last few years dusting material has come to be more widely used for the control of garden insects because of its easiness of applying, its ability to control the insect, and the rapidity with which an area can be gone over with the material. Added to these advantages also is the fact that several kinds of dusts are already prepared for different purposes, so that there is no necessity on the part of the grower to go to the trouble of compounding a spray

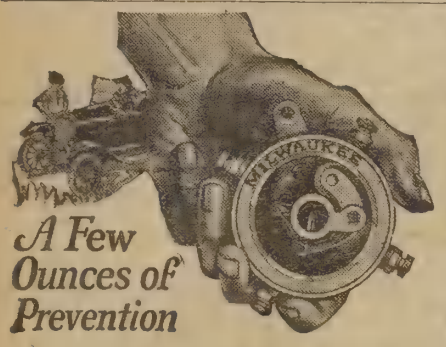
Taking a situation as it now exists, we find that gardens everywhere are now planted to late cabbage, the plants being yet small and probably not yet injured by worms or aphis. Now is the time to dust these clean young plants with the dusting mixture so as to repel the insects, which is a better way than trying to control them after they have once begun to attack the plants.

The moisture situation is almost fully as important as that of keeping the insects in check. Plants suffer severely from drought during the months of July and August, two of the months when they should be making their best growth. The only way this growth can be obtained is for the grower to try and furnish the necessary moisture. Tomatoes dry rot badly when suffering from moisture; other plants often get to the wilting point under the stress of hot sun and decreasing moisture. Water is the limiting factor as to what the crop will amount to in many cases. Watch the response of the plants after a good soaking, together with the warm weather as a stimulant, and be converted to the fact that irrigation for home gardens is necessary just as much as it is for the commercial grower. Bigger yields, better quality, greater uniformity and getting away from insect injury are the direct results of the application of water to vegetable crops. It is better to apply irrigation water to growing plants before they get to the wilting point. It is also considered the best practice to make a thorough application of water rather seldom than to apply a light amount frequently, although the type of soil will largely determine this point. One of the best tools with which to irrigate is the hoe, for in between waterings any tool that will cultivate the ground and keep a good mulch is worth as much as a watering.

To summarize, then, keep the garden clean and, therefore, free from being stunted by applying control material for insects such as dusts. Keep the plants steadily growing by irrigating as often as need be for the needs of the crop. These are the two biggest garden maintenance factors for the months of July and August.

FEEDING UNWELCOME GUESTS.

The department of agriculture says that two hours of every day's work on the farm and in the garden and orchard go to produce feed for farm and fruit pests that have been introduced into this country from foreign lands. It is to keep pests and diseases out of the country that the federal plant quarantine work is carried on.



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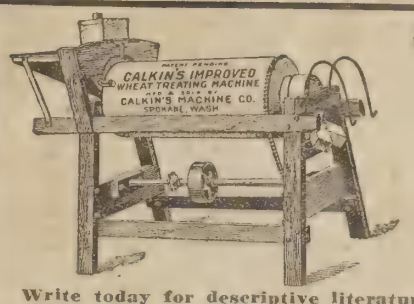

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SPOKANE DIAMOND SEED QUALITY COMPANY

"CORONA" COPPER CARBONATE COMPOUND

Manufactured by Pittsburgh Plate Glass Co.

SPECIALLY PREPARED FOR WHEAT TREATMENT

18% copper mineral. All passes 200-mesh screens.

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It eliminates all the wastes of the old system of distribution and shares the savings with you.

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Send us your Booklet telling how I can buy high-grade implements under the Moline Plan and save money.

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5000 Farmers

Attend Skagit County Picnic

When 5000 farmers can meet for an all-day gathering, a picnic dinner and a general good time for old and young it is hardly necessary to say it was a real picnic. But this is the way they do things in Skagit county. It was held at Sedro-Woolley on June 20 and was under the auspices of the county dairymen's association and the county farm bureau.

The morning program consisted of athletic contests and features, for which the stores of Sedro-Woolley gave prizes of merchandise to the winners. There were two bands on the grounds and the dairymen's association sold ice cream at cost. Coffee and cream was furnished and the family dinners were spread on the long picnic tables and on the grass under the trees which helped to make the affair a true picnic.

After dinner the crowd gathered at the bandstand, where the speakers gave their talks. D. M. Donnelly, mayor of Sedro-Woolley, made the address of welcome and W. J. Knutzen of Mount Vernon, president of the Skagit County Dairymen's association, made the response. J. A. Scollard, president of the United Dairy Association of Washington, outlined the growth and development of the association and credited its splendid success to the spirit of cooperation that has prevailed among the members.

Asked to outline the plan of marketing the dairy products from the different county plants, U. M. Dickey of the Consolidated Dairy Products company, which handles a large part of the output from the association, told how they had increased their sales by 14 per cent since 1921, all because of handling a high-quality product and selling at a reasonable price. Our sales have increased fully 50 per cent since a year ago, he said, and we have plenty of room to expand, since our market now is largely in western Washington and California.

Mrs. W. E. Barnhart, president of the Washington State Federation of Women's Clubs, made a strong appeal to the people to work for the welfare of the children of the state. A careful check shows that over 30 per cent of the children are underweight, she said, and in need of better diets in which more milk and its products are used. The welfare of the nation depends on the welfare of its children and it is for this reason that the federation has sponsored the filled milk and butter substitutes measure, for which the dairymen are now fighting.

Other speakers on the program were President Berry of the Frasier Valley Dairy association, in British Columbia, who gave a few points about the work among the dairymen in Canada; Pete Omdahl of Mount Vernon, David McLeod of Bellingham and L. W. Hanson, state dairy inspector of Seattle.

Mail-O-Grams

By State College Specialists

A. B. Crane, agricultural engineering: This is a good time to plan for the construction of a septic tank. It can be put in more conveniently from now until September than later. Be sure you have your water system in first.

B. A. Slocum, apriculture. Bees place a little nectar in each cell, consequently they require plenty of room to ripen honey.

Don G. Magruder, dairy: Put steamed bone meal in box and let cows run to it. Cows digest mineral best when on green feed.

Leonard Hegnauer, farm crops: Go over the seed fields and pull all weeds. All mixtures of other varieties of seed must be removed and nothing left except the variety grown.

M. D. Armstrong, horticulture: (East side.) Look closely for signs of red spider. Spray applied early when they first appear is most important in controlling these insects. (West side.) Carefully supervise the berry picking; green, overripe and imperfect berries mixed with the first-class fruit will surely reduce the returns.

C. M. Hubbard, live stock: One county breed association has appointed a committee to cull the spring boar crop, castrating all inferior purebred boars. Be sure to alter all grade boars.

George L. Zundel, plant pathology: Farmers in 16 eastern Washington counties treated their seed wheat with copper carbonate this year, resulting in the sowing of 734,000 acres of treated wheat.

W. D. Buchanan, poultry: Cull out all weak, sickly or poorly developed pullets. They are a menace to the flock.

Approve Hay Growers' Plans

A meeting of the hay growers and business men of Kittitas county was held recently and plans of the proposed Northwest Hay Growers' association were presented by Boyd Oliver of San Francisco and L. A. Hunt, manager of Oregon Hay Growers' association, of Hermiston, Ore. The farmers considered the proposed program and were pleased with the prospects of the association's being able to take care of surplus hay and to stabilize the hay markets. The plan was unanimously approved and an organization committee consisting of J. O. Sorenson, H. H. Adams, A. W. Gregory and J. C. Wilson were appointed to take care of the organization work in this county. The meeting was presided over by Soren Sorenson, president of the Washington state farm bureau. Growers will be given opportunity to study this pan before definite sign-up work is undertaken.

Home Ownership

Essential to Highest Development

That home ownership and permanence of the home are essential to the highest development in country life was the thought stressed by Dean Edward C. Johnson in an address at a picnic of settlers on the state land settlement project at White Bluffs, Wash., June 16. While at all times we must look at farming as a business, handle it as a business and succeed in it as a business if we are to live on thel and, said Dean Johnson, we also should look at it as a mode of life and as an occupation profoundly interesting and of superior dignity. We should look at the farm not only as our home where we and our children will want to live and work, but where our grandchildren and great-grandchildren in turn will live and work and then pass it on to their descendents. Then will life on the farm acquire in full measure that dignity and standing so essential to its highest development. Every true pioneer has something of a spirit of this kind. Every true farmer loves the land upon which he works. As their numbers increase they will grow in wealth, in power and influence. The community, the public at large and the state increasingly will honor these families who, generation after generation, live on the old homestead, cultivate the land and build a true community.

IF LEGUMES FAIL.

If legumes fail due to acidity of the soil, liming becomes essential to the establishment of a permanent system of agriculture.

TOO FEW PUPS TO SUPPLY DEMAND CREATED BY TRIO ADVERTISING

Albany, Ore., June 8, 1923.

The Pacific Northwest Farm Trio,
Spokane, Wash.

Dear Sir:

I am well pleased with the results obtained from the advertisement I had in the Farm Trio of Newfoundland pups for sale. Through my ad in your paper I could have sold more pups than I had.

FRED SCHNEIDER,
Route 1.

—Adv.

Your Dollar Buys
Entertainment
as Well as Information

FARMING is a BUSINESS and The Washington Farmer does its best through market quotations, regular departments and special articles to help its readers who are engaged in this vital business in every nook and corner of Washington.

However, the business of farming is not all there is to farm life. Not by a jugful. Recognizing this, The Washington Farmer aims to give its readers full measure of entertainment, and to make even the soberest facts interesting.

Our new serial, "Cattle Ranch to College," is just one of the features of an entertaining kind, none the less popular because it transports the reader into an environment beyond the range of his own daily life.

This story by an able writer, Russell Doubleday, is in its early chapters. You can easily pick up the threads with the installment in this issue. If you do so, we feel sure you will enjoy the weekly visits of your state farm magazine even more for following the exciting developments of this story. Here is a story which in book form would cost you $1 or $1.50; yet is only one among a wealth of varied features in a magazine which costs you only $1 for five years.

We say to our friends: "Send your subscription order direct. Get your neighbor to do the same. We will give you and your neighbor the benefit of every penny which would ordinarily go to the agent handling the subscription."

If you believe in cooperation, help us make our plan an even greater success during the coming year than it has been in the past. Send in your offer if you have not already done so and let as many neighbors as possible know about our money-saving plan.

Subscription Rates of The Washington Farmer:

$1.00 for Five Years 25 Cents for 1 Year. 50 Cents for 3 Years.

In Canada add 1 cent a copy for extra postage.

July 12, 1923.

THE WASHINGTON FARMER,
Review Building, Spokane, Wash.

I desire to take advantage of your Cooperative Plan in securing new and renewal subscriptions.

I enclose herewith $.....for a.....year subscription to

THE WASHINGTON FARMER.

Name .....

Postoffice .....

R. F. D. ..... Box ..... State .....

If your subscription is already paid in advance, it will be extended from the date to which it is paid.

FARMERS' WANT ADS

This is the farmers' "want," "sale" and "exchange" department for small advertisements of farmers, including live stock and poultry.

Advertising rates for ads running 1 to 3 times, 10c per word per insertion, with a special rate to Farmer subscribers, as follows: Ads running 4 to 12 times, 9c per word per insertion; ads running 13 times or more, 8c per word per insertion.

All commercial and land advertising, 10 cents per word per insertion. Open also to nonsubscribers.

In using these columns advertisers must observe (1) No advertisements will be inserted for less than $1.00. (2) Every word, number and initial, including name and address, must be paid for. (3) New advertisements, changes of copy or cancellations must reach general office, Spokane, Wash., 10 days in advance of publication date. (4) Cash must accompany order.

Above rates include insertion in The Washington Farmer, The Idaho Farmer and The Orgeon Farmer, which constitute the Pacific Northwest Farm Trio, 46 Review building, Spokane, Wash.

MONUMENTS F

COMPLETE STOCK. WRITE FOR DESIGNS and prices. Inland Monument Co., N1001 Monroe, Spokane.

HELP WANTED—Male 3

MEN WANTED—TURN YOUR SPARE TIME into cash or devote your whole time to a highly paid, congenial business; good money year around; cash weekly. Middle-aged men find this attractive. Many of our men receiving $4000 to $5000 yearly under our plan. Experience not required. Washington Nursery Company, Toppenish, Wash.

WANTED — SALESMAN WHO CAN SELL high-grade, dependable nursery stock; several counties in Oregon, Wash., Idaho now open for assignment. Our selling contract will interest you. Address Albany Nurseries, Inc., Albany, Ore.

SALESMEN TO SELL OUR COMPLETE LINE of "trees that please." For particulars write Capital City Nursery Company, Salem, Oregon.

SCHOOLS AND COLLEGES 26

EARN $110 TO $250 MONTHLY, EXPENSES paid, as railway traffic inspector; position guaranteed after 3 months' spare time study or money refunded; excellent opportunities. Write for free booklet G-157, Stand. Business Training Inst., Buffalo, N. Y.

FRESH FOOD PRODUCTS 51-3

FISH—4 LBS. SMOKED SALMON, $1; 4 LBS. Alaska salmon bellies, $1; 4 lbs. black cod, $1; 3 lbs. best codfish, $1; delivered by mail. Coffin Fish Co., Seattle, Wash.

BEES AND HONEY 53

NEW CROP ALFALFA HONEY. POSTPAID, 2d and 3d zones, 5-lb. pail, 95c; 3 5s, $2.70; 10-lb. pail, $1.85; 3 10s, $5; 60-lb., $8. You send the money, we send the honey. Kittitas Valley Apiaries, Ellensburg, Wash. Rt. 2.

EXTRACTED HONEY — ONE 60-LB. CAN, $6.50; two 60-lb. cans, $12.75, collect; three No. 10 pails, prepaid, third zone, $5. Wells D. Rose, Sunnyside, Wash.

QUEEN BEES—BUY THE BEST. UNSURpassed Italian queens, 1, $1; 6, $5.75; 12, $11; 50, $45; 100, $85. Circular free. J. D. Harrah, Freewater, Ore.

HAPPY HOME HONEY—ALFALFA AND clover; 60-lb. can, $6.50; two cans, $12.75; case six 10-lb. pails, $7.75. H. N. Paul, Mabton, Wash.

EXTRACTED HONEY—TWO CANS, SIXTY pounds each, $11; one, $6. J. M. Ruyts, Buhl, Idaho.

VALLEY BLOSSOM HONEY; QUALITY GUARanteed; 1 60-lb. can, $7.50; 2, $14.40. Ernest Sires, Route 7, Yakima, Wash.

MISCELLANEOUS—FOR SALE 60

SASH AND DOORS—O. B. WILLIAMS CO., 1943 First ave. So., Seattle. Chicken house sash, 20" wide by 25" high, 80c; a dozen different sizes in stock for immediate shipment. Skylights for chicken houses, 36"x40"; price, glazed, $2. This is the size recommended by the Western Washington experiment station. We carry them in stock for immediate shipment. Sash and doors for all purposes at lowest prices. All orders receive prompt attention. Our large illustrated catalog No. 35, showing full line of building material and built-in fixtures for the home, free on request. O. B. Williams Co. Established 1899.

WATCHES AT WHOLESALE—7-JEWELED, $7.05; 15-jeweled, $9.05; 15-jeweled Elgin, $14.05; 15-jeweled N. Y. Standard, $9.25; in fine nickel cases, screw back and bezel; 16 size, thin model; prepaid on receipt of price. Free, a dandy pair of cuff links with each order. The Herbus Supply Co., Kuna, Idaho.

PIPE—GET PARTICULARS ON OUR SPEcial flue pipe, 1¼, 1½ and 2 inch. Big saving on it. We also have all sizes second-hand and new standard pipe at low prices. We also save you on roofing, belting, pumps, engines, cables, etc. Alaska Junk Co., S120 Adams, Spokane, Wash.

CORN HARVESTER, CUTS AND PILES ON harvester or windrows; man and horse cuts and shocks equal corn binder; sold in every state. Only $25 with fodder tying attachment. Testimonials and catalog free showing picture of harvester. Process Harvester Co., Salina, Kansas.

LEAF TOBACCO—FIVE POUNDS CHEWING, $1.75; ten, $3; twenty, $5.25; five pounds smoking, $1.25; ten, $2; twenty, $3.50. Pipe and recipe free. Send no money, pay when received. United Tobacco Growers, Mayfield, Ky.

WALL BOARD—WRITE FOR SAMPLE OF Washington plaster wall board; won't warp, won't burn. Manufactured by Washington Building Products company, 6851 E. Marginal Way, Seattle, Wash.

NATURAL LEAF TOBACCO—CHEWING, 5 lbs., $1.75; 10 lbs., $3; smoking, 5 lbs., $1.25; 10 lbs., $2. Pay when received. Pipe and recipe free. Farmers' Cooperative Tobacco Union, Paducah, Ky.

HOMESPUN TOBACCO—CHEWING, 5 LBS., $1.25; 10 lbs., $2.50; smoking, 5 lbs., $1.25; 10 lbs., $2. Farmers' Union, Mayfield, Ky.

TOBACCO—FINE, YELLOW MAMMOTH chewing; 10 lbs., $3; smoking, 10 lbs., $2; 20 lbs., $3.50. Farmers' Club, Mayfield, Ky.

FILMS DEVELOPED FREE BY KODO, THE Picture King, S15 Stevens, Spokane, Wash.

GRAIN BINS AND TANKS 90

METAL GRAIN BINS SAVE YOU MONEY. Write for circular T and prices. Spokane Culvert & Tank Co., Spokane, Wash.

MACHINERY—For Sale 93

TWO LATE TYPE, SNAPPY RUSSELL STEAM engines; two Rumley oil pulls, several separators, several small used gas engines. Fallquist Bros., W20 Riverside ave., Spokane, Wash.

THRESHERS, STEAM ENGINES, TRACTORS, trucks; all kinds of machinery. Exchange Machinery Co., W20 Riverside, Spokane.

EMERSON STANDARD MOWER REPAIRS. Spokane Farm Machinery Co., Spokane, Wash.

TWELVE HORSEPOWER STOVER GASOLINE engine, $150. Albion L. Gile, Chinook, Wash.

MACHINERY—Wanted 96

WANT A SMALL THRESHER AND TRACTOR. Write James R. Brown, general delivery, Spokane.

AUTOMOBILES—FOR SALE. 112

WE HAVE A FEW EXCELLENT USED CARS at prices that will surprise you; stop in or write. Inland Empire Chevrolet Sales Corp., 916 2d ave., Spokane. Open evenings. Open Sunday.

AUTOMOBILES AND TRUCKS BOUGHT AND sold. Barton & Fleming, 1020 1st., Spokane.

AUTO ACCESSORIES AND PARTS 119

FRONT AXLE BOLTS AND BUSHINGS, spring bolts and bushings. Wire and disc wheels. Sales and service. Pacific Gear & Auto Parts Co., 1022 First ave., Spokane.

STOVE REPAIRING. 128

WRITE MYER RUBENS, SPOKANE, ABOUT stove repairs, welding broken parts, nickel plating.

FUR-BEARING ANIMALS 170

SILVER AND CROSS FOXES FOR SALE. William Rambo, 407 Sprague, Spokane.

PETS—Dogs, Birds, Etc. 171

CLOVERLAND AIREDALES—THE PERFECT farm dog; will guard property, protect flocks, herd cattle, sheep; watch over and play with children; kill rodents, hunt and retrieve game; Ideal companions; registered puppies, $15 to $25. Write for particulars. Arthur Saum & Son, Cloverland Farm, Gooding, Idaho.

COLLIE PUPPIES, REAL WORKING STRAIN. Males, $10; females, $5. A. J. Dennis, Fish Trap, Wash.

FOXHOUND PUPS, FROM GOOD TREE stock; $5 and $6 each. Harry Hull, Oakland, Ore.

POULTRY (Continued) 174

WHITE LEGHORN PULLETS — MARCH, April and May hatches. From thoroughbred, mature hens, mated with cockerels of 225 to 265 egg record, Hollywood, Tancred or Gilbert strains; 8 weeks old, $1.20 each; 12 weeks old, $1.40 each; shipped with a guarantee of being satisfactory or any undesirable ones may be returned within three days and refund will be promptly made. Send 25 per cent with order; balance C. O. D. Mention this special offer when ordering. Queen Hatchery, 1430 First ave., Seattle, Wash.

CERTIFIED WHITE LEGHORN QUALITY chicks for summer and fall months, from selected free range, high egg producing breeding flocks, inspected and accredited by the Sonoma county farm bureau. Send for catalog and attractive prices. Safe delivery and full count guaranteed. Must Hatch Incubator Co., Inc., 445 Seventh st., Petaluma, Calif.

250,000 ACCREDITED BABY CHICKS FOR sale during May and June. Send in your order early. "A" grade, $6 for fifty; $11.50 per hundred; $110 per thousand. "AA" grade, $8.50 per fifty; $16 per hundred; $155 per thousand, f. o. b. Petaluma. Member of the Sonoma county farm bureau accredited hatchery list. White Hatchery, Petaluma, Calif.

SUMMER SALE OF "HENACRES" LEGhorns—2000 hens, 5000 pullets, 200 cocks, offered at special low prices. Direct from either our own breeding plant or commercial egg farm. "Henacres" quality at bargain prices. Write for sale price list. "Henacres," Box A, Prosser, Wash.

WHITE LEGHORN BABY CHIX FROM flocks mated to males having sire's dam record of 240 to 297 eggs per year. Full particulars and interesting literature on request. We are accredited by Sonoma county farm bureau. The Pioneer Hatchery, 422 Sixth street, Petaluma, Cal.

DANIEL'S WHITE ROCKS AND S. C. WHITE Leghorns; trapnested continuously; 8 week pullets and matured breeding stock at reduced prices. Free list. Ideal Poultry Yards, Hoquiam, Wash.

DOLLARS FOR YOUR EGGS—WE PAY THE top market prices for your eggs and poultry. Daily cash remittances. McClintock-Trunkey Co., produce department, Spokane.

ANCONA AND R. I. RED PULLETS, 3 months old; all from prize stock; 70c each, while they last. Peerless Poultry Farm, Sherwood, Ore.

JERSEY BLACK GIANTS, PEDIGREED MATings; 15 eggs, $3.50; 8-week-old chicks, $3 each. E. M. Chambers, Bovill, Idaho.

WHITE LEGHORNS—OLD HENS, 50C; splendid layers and breeders. Chic-U-Want Poultry Yards, Roseburg, Ore.

LIVE STOCK. 177

WE GUARANTEE TO PAY THE HIGHEST market prices for your poultry and live stock. Veal market growing stronger. Owing to the constant changes in the market we are unable to quote prices in this paper from week to week. We will furnish tags and prices when you are ready to ship. Write us what you have to sell. Prompt returns. John Lewis & Co., Spokane, Wn.

TOP PRICES PAID FOR CREAM, EGGS, poultry, pork, veal, also fruits, berries and vegetables in season. Inland Products company, Second at Cedar, Department E, Spokane, Wash.

WE PAY TOP RICES FOR YOUR LIVE OR dressed veal, hogs and poultry. Your check by return mail. Shipping tags on request. M. & J. Packing Co., Spokane.

FOR SALE—EIGHTY HEAD GRADE SHORThorn young cows and heifers and calves; practically beef price; some registered. Write C. H. Kidwell, Laurier, Wash.

WE PAY THE HIGHEST CASH PRICE AND remit every day for strictly fat dressed veal and pork and live poultry. Address Dept. T, Welch's, Spokane, Wash.

THOROUGHBRED CHESTER WHITE PIGS, 8 to 12 weeks; gilts 2 for $25; boars, $10 each; also bred sows. R. J. Borne, Farmington, Wash.

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TWO SAANEN MILCH GOATS, FRESH, 3 QTS. each; two doe kids; bargain. Hotel Oregon, Forest Grove, Ore.

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REGISTERED SHROPSHIRE RAMS AND ewes. Write McK. Edwards, Valley, Wash.

FOR SALE—REG. HOLSTEIN BULLS; HERD fed accredited. Whitla Ranch, Mica, Idaho.

TWO GUERNSEY BULLS, CHEAP. G. M. Brown, Grandview, Wash.

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SEND FOR FREE HARNESS AND SADDLE catalog today; cut out the middleman, buy direct from the manufacturer. Lowest prices in the west; satisfaction guaranteed. Established 1881. Write Pierce Harness Co., Dept. T, Spokane, Wash.

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6 PER CENT MONEY—BANKERS RESERVE system. 6 per cent loans are made on city or farm property to buy, build, improve or pay indebtedness. Bankers Reserve Deposit Company, Denver, Colorado.

JOB PRINTING. 372

WEDDING ANNOUNCEMENTS AND INVItations, catalogs, booklets, high school annuals, letter heads, envelopes, cards, butter wrappers, etc. Union Printing Co., 412 First ave., Spokane, Wash.

200 SHEETS PRINTED WRITING PAPER, 100 envelopes, Hammermill bond. Write for samples. Parker Printing Company, 405 Pacific block, Seattle, Washington.

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"VAPO" CLEANS YOUR RUGS WITHOUT REmoving. Makes them like new and is guaranteed not to injure them. Easy to apply. Send $4 for lifetime brush and one package of cleaner, enough for 3 rugs. Vapo Products Co., E1500½ Riverside ave., Spokane, Wash.

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ANY KIND OF HIDE TANNED WITH HAIR on, or for leather. Fur and taxidermy work done to order. M. R. Mohr Co., 321 Sprague, Spokane, Wash.

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FIX BROKEN PLASTER WALLS WITH PERfection plaster wallboard; nailed on like lumber; takes calcimine or paint; sample and booklet from Western Wallboard Co., Seattle, Wash.

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FARM SEEDS—ALFALFA, CLOVER, SWEET clover and corn are our specialties. It is to your interest to get our samples and prices before buying. Also garden and flower seeds. Send for catalog. Let us know your requirements in grass and field seeds. Darrow Bros. Seed & Supply Co., Twin Falls, Idaho.

HUNGARIAN VETCH SEED, 10C POUND. Write for prices on common vetch. Red and alsike clover seed. We have the best. Corvallis Feed & Seed Co., Corvallis, Ore.

TIMBER LANDS FOR SALE 645

¼ SECTION TIMBERLAND, IN LAUREL, Wash. Inquire C. H. Abelson, Idaho Falls, Idaho. R7.

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STOCK FARM FOR SALE—ON ACCOUNT OF the death of the owners, the undersigned administrator will sell at private sale, 260 acres rand, surrounded by national forest reserve, with ample accessible open range and water; about 120 acres in cultivation; spring water, rich, black soil, no crop failures; good crop of hay now growing on this land; ample barns and outbuildings; two small houses; located 13 miles from Republic, Wash.; farm implements, machinery and tools, cattle and work horses can be purchased with the land. This is an ideal stock layout. In order to settle the estate this property will be sold at a bargain. For further information address G. J. Tompkins, Admr., Republic, Wash.

CUTOVER LANDS, EASY TO CLEAR; $8 TO $20 per acre; 25 miles north of Spokane; on hard surfaced highway; Great Northern and Milwaukee railways; excellent opportunity for dairying and stock raising with Spokane markets and creamery near at hand. Will help the man who will live upon this land and agree to clear a part each year by giving lumber to help start his buildings, and a purebred Jersey bull to groups of farmers. Interest and payments low. Write Milan Farms Development company, Dept. T, Old National Bank bldg., Spokane, Wash.

POTATO, POULTRY, BERRIES. ALL cleared and in meadow. A few feet from paved highway; located a half mile from railroad station, good store and sawmill; excellent neighbors, fine schools, close to several good towns. Priced at only $100 an acre. Sold in 5, 10 or 20 acre parcels. Small payment down, balance in 10 years at 6 per cent. This is the best land at the price that we know of. Write or call for full information. Carter, MacDonald & Miller, 208 Columbia st., Seattle, Wash.

HIGHEST TYPE FARM LAND, WHERE SETtlers get steady and permanent employment and live at home. Level bench and river valley land; all good soil; an already well developed farm district; schools, markets, roads, etc. Around Onalaska, Washington, and near Pacific highway (15 miles southeast Chehalis); 20 acres or more, $15 to $50; long, easy terms. A clean cut and fair proposition. Go to Onalaska or write Graham Land Company, American Bank bldg., Seattle.

150 ACRES GOOD LAND; FENCED; 25 stump free and in clover; 80 plow land, garden, house, barn, blacksmith shop, orchard, running water, also trout stream; public road; 2 miles station; 1 mile lake; highway, telephone, saw timber, stull, cordwood; 25 cut; open range; household goods, implements, stock, crop; everything goes for $2700; $700 mortgage; immediate possession. Owner, Cody Wilson, Medimont, Idaho.

BIG OPENING SALE OF YAKIMA VALLEY farm land, under an assessed state and government approved irrigation project; best, deep soil; close to town and good roads. Price $25 per acre and up. Very easy terms. Western Lands, Inc., owners, 918 Green bldg., Seattle.

FARM LANDS FOR SALE (Continued) 651

FOR SALE—450 ACRES DAIRY AND STOCK farm; on Puget sound; 60 acres upland, cleared; 100 rich bottom land, cleared; running water; balance good shot clay, seeded to pasture; all fenced; new, modern dairy barn, creamery; 7-room house, spring water; on good road; close to market; crops in. $4000 down, balance terms, 5 per cent interest; will consider leasing to live farmer who is responsible. J. M. Dempsey, owner, Auburn, Wash.

LOGGED-OFF LAND IN STEVENS COUNTY, Washington, at greatly reduced prices. Most of land sells at from $5 to $20 per acre. Thickly settled community. Good schools. Hard surfaced and paved road to Spokane. Best county in state for dairy and stock raising. In most places water can be found at shallow depths. Write for folder. Phoenix Lumber Co., Dept. T, Spokane, Wash.

15 ACRES, WELL IMPROVED; FULLY equipped; Puget Sound grape, berry and poultry ranch; seven acres cleared, remainder easily cleared. Thickly settled neighborhood; good school; excellent markets. Net income, 1922, over $1500. Price $6500; $2500 will handle. K8 Washington Farmer, Spokane.

SOUTH AMERICAN LANDS—BOLIVIA COLony land; will sell 50 more sections at $1 per acre; all tillable; markets better than in United States; abundance rainfall; grass knee high, always green; no winter; no taxes. "Booklet" 50c. Other literature free. Bolivia Colonization Association, Portland, Ore.

LONE STAR RANCH—A REMARKABLE fruit farm; ideally located; on Lincoln highway, Placer county, California; 28 acres, of which 21 in fruit; fenced; irrigated; equipped with modern buildings, with all conveniences. Full particulars on request. Frank J. Rumpf, Box 490, Stockton, Calif.

BIG LUMBER COMPANY LAND SALE—IN Skagit county; 40-acre tracts, $1400; $200 cash, balance easy. Lots work for the settler. Splendid district, roads, schools, towns. Information free. H. C. Peters, 726 3d ave., Seattle.

FOR SALE—AT A SACRIFICE AND ON VERY reasonable terms; one 18-foot caterpillar, self-propelled combined harvester; in excellent condition and ready for season's run. Address P. O. Box 1091, Wenatchee, Wash.

160 ACRES, CHEAP; NEAR SCHOOL; 50 acres farm land, balance timber and pasture. Price $1500; $500 down, balance to suit. Chas. Wyman, owner, New Meadows, Idaho.

FOR SALE—AN IDEAL STOCK AND HAY ranch; 1½ miles from town; good school; good buildings; 65 acres under irrigation; would lease. Box 43, Hooper, Wash.

319 ACRES OKANOGAN LAND; PART IN Methow valley; account of age will sell at bargain. For particulars write W. Pelton, Auburn, Wash. R1, Box 157.

80 ACRES, ALL CROP; RUNNING WATER year round; ideal for dairy and diversified farming. Best buy in Yakima valley. J. W. Palmer, Toppenish, Wash.

SELL YOUR PROPERTY QUICKLY FOR cash; no matter where located. Particulars free. Real Estate Salesman company, 501 Brownell, Lincoln, Neb.

200 BEARING TREES, ON 20 ACRES FRUIT land; Council district; 280 acres timber and pasture; all for $2100; terms. Box 15, Indian Valley, Idaho.

75 ACRES; GOOD HOUSE AND BARN; PLENty lowland pasture; fine place for cows. Wm. Bennett, Springston, Idaho.

RANCH FOR SALE VERY CHEAP—160 acres good soil. Write John Hansen, Aeneas, Wash.

40 ACRES GOOD FARM AND STOCK LAND; near sawmill. Owner, E1623 Rich ave., Spokane.

11 ACRES FRUIT, BERRIES AND CHICKEN ranch. Write Clarence Severson, Vaughn, Wn.

IMPROVED AND UNIMPROVED CANADIAN farms. Write F. Averill, Leslieville, Alberta.

FARM LANDS—Wanted 654

NO COMMISSION—SELL YOUR FARM through Washington Farm Bureau Exchange, represented in 45 states. Lists of farms for sale by owners mailed free. 312½ Lindelle, Spokane.

I HAVE INQUIRIES FOR FARMS IN NORTHwest. Describe fully and state price. R. A. McNown, 310 Wilkinson bldg., Omaha, Neb.

WANTED—TO HEAR FROM OWNER OF land for sale. O. K. Hawley, Baldwin, Wis.

IRRIGATED LANDS—For Sale 663

CORBIN ADDITION TO GREENACRES—IN the beautiful Spokane valley; 30 minutes from Spokane; paved road; 40 inches of water for irrigation; gravity flow. Ask for booklet with all information.

Return coupon—The Fred B. Grinnell company, Spokane, Wash. I am interested in the Spokane valley. Please send booklet and all information to

Name .....

Address .....

FOR SALE OR EXCHANGE 702

FOR SALE OR TRADE—40 ACRES ALL creek bottom land; 5 miles to town; 8 acres under plow and balance pasture; orchard; 3-room house, barn, chicken house; spring water piped to house. Price $2500; government loan, $1300. J. T. Smith, Box 31, Chehalis, Wash.

FOR SALE OR TRADE—160 ACRES; 25 UNder plow, balance pasture; 7 houses; 2-story store building, store and postoffice; railroad and sawmill on place; income from buildings $45 per month. Price $7500. T. F. Verner, Chehalis, Wash.

FOR SALE OR TRADE FOR SMALLER place—72 a. Boise valley bottom land; adaptable for dairy and poultry; good 6-room house, silo, flowing well. Ernest Baker, Caldwell, Idaho R. 2.

FOR SALE OR TRADE FOR SMALLER PAlouse or coast ranch; 320 a. level land, with eight good horses and machinery; no crop failures. Doctor advises change of climate. Max Greening, Sumatra, Mont.

FINE DAIRY FARM; ON HIGHWAY; JOINS town; running water; account health must change climate; will sell or trade for Oregon or California land. Salome Ashley, Springdale, Wash.

FOR SALE OF TRADE FOR PROPERTY ON west coast; 175 acres, improved; irrigated farm; near Tucson. I. M. McElhinny, Rillito, Arizona.

TO EXCHANGE—Real Estate 705

PART OR ALL 1200 ACRES WASHINGTON or Alberta wheat land for coast ranch or city. Owner, 104 Bridgeport ave., Spokane.

GOOD BULLS, COWS, CALVES, SWINE, SHEEP, GOATS, DOGS, POULTRY

bought and sold in great numbers by those who read and also use our "Want Ad" service.

Cattle Ranch To College

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CHAPTER II.

The Young Brave's Daring.

The men lay crouched behind their barricade, silent, alert, ready for what might come. The three pickets made their way back to the breastworks and reported that the advance guard had shown itself coming down a coulee half a mile away, and the main body, probably 50 strong, was straggling after when the pickets last looked back. A long night of vigil and hurried preparation had told on these watchers and they were anxious to begin the work and end the suspense. The short 10 minutes which elapsed seemed 10 hours. Then two Indians rode to the top of the ridge and looked down upon the preparations for their reception. They were a long rifle shot distant and the defenders had no ammunition to spare. Moreover, if unprovoked, the redskins might go without firing a shot. To tell the truth, however, especially when they saw the unlikelihood of making a successful assault, most of the little garrison were in the mood to feel disappointed if the attack ended so harmlessly.

"If those fellows are hard up for a fight," said Big Bill Smith, "maybe they'll tackle us; but I never saw an Indian yet that would ride a quarter of a mile in the open under fire even when he wanted something to eat," and Bill knew Indians.

"They won't leave without tryin' us," said Casino. "You'll see if I ain't right."

A moment later two painted and befeathered savages appeard to the left, and rode full tilt along the hillside in direct view of the camp, yelling and waving their blankets in derision: a tantalizing sight to the waiting men.

"Keep steady, there," called Mackenzie, sternly, as several rifles were raised. "There's no use shooting now; they're only trying to draw our fire and find out how strong we are. There'll be more presently. Wait for them."

A few minutes later half a dozen braves repeated the ruse. The flying figures, almost naked, being poor targets, the fire of the little garrison was still reserved. A dozen then made the run, one following the other at regular intervals. More and more of the painted, yelling, gesticulating savages followed, dashing along the slope in single file and disappearing over the ridge to the right, until what was a short line became a procession.

Presently they began to creep down the hill, each rider advancing beyond the one preceding him, all yelling epithets of contempt as they came ever nearer the silent garrison.

This was the regular mode of Indian attack; it afforded them an opportunity to fire and yet gave their enemy a very poor chance to do any damage.

A desultory firing began; each Indian letting go his reins, fired his rifle as best he could as he rushed past. The shooting was naturally bad, for there was no chance to take careful aim. If the savages planned, however, to draw the fire of the besieged and so determine their strength, the scheme failed, for not a shot was fired from the camp, though the provocation was great.

The rushing line came closer and closer. The colors of the war paint and fluttering feathers could now be plainly seen. It was within easy range, but still the fire was withheld. Each Indian had worked himself into the frenzy which is so necessary a part of a brave's courage.

As the distance was lessened, the savages' aim became better, and several bullets struck the wagons and the barricade. The situation began to be interesting; any shot might now reach its human target, and the temptation to return the fire was almost irresistible.

But the sheriff only said, "Not yet."

The bullets were striking freely and the yelling enemy were within easy revolver range.

At last Mackenzie, who showed signs of suppressed eagerness, said, just loud enough to be heard: "Boys, don't shoot when your man is opposite; wait till he has passed, then aim at his back and shoot straight. You can't hit him otherwise. Ready now. Fire!"

This was not a military company, but a band of frontiersmen, which a common danger united under the leadership of one man. The volley which followed, therefore, was not one of precision, for every man took his time and pulled the trigger when he was ready.

The Indians, anticipating a return fire, rode by at full speed, their bodies hugging their horses closely. They made difficult targets, so the first few shots did nothing more than kill and disable a horse or two; but soon the fire became more rapid and accurate. A big buck was seen to fall out of his saddle, another was thrown violently from a wounded horse, several were hit in arms and legs. The yelling diminished and the line moved further up the slope, scattering as it went.

As the file, now rather scattered, turned the ridge at the right, firing as it moved, a young buck, in full war regalia and mounted on a beautiful bay pony, bounded into view. He dashed out of the circle of Indians, and rode boldly down toward the white men, yelling defiance.

He was a young chief endeavoring to earn the approval of his tribe and the consequent advancement and influence, according to the custom of the Sioux. Down the hill he came with a rush right into the thick of the fire, and yet, though the bullets whistled on all sides of him, he was unharmed. Nearer and nearer he drew, until he reached a point within 200 yards of the white man's guns. Then he stopped, turned his pony half-way round and flourished his revolver derisively, yelling imprecations at the garrison the while. He then fired a shot which came so close to John, that he was sure he could feel the wind of it—the sound was unmistakable.

After this reckless feat, the young chief trotted slowly back to his own people, but kept his face always toward his enemies. The daring of the deed took both sides by surprise, and for a time hardly a shot was fired by white man or red. It was a tribute to the young brave's courage and bravado.

It would not do, however, to let him escape unharmed. Other warriors might be inspired to emulate the rash act, and if they took it into their heads to rush the stockade there would certainly be much loss of life.

The Indians now began firing again, covering as well as possible their comrade's retreat. Those behind the barricade also woke up.

"Shoot that fellow, boys," cried Big Bill. "He mustn't get away unhurt. We've got to discourage that sort of thing."

Every man aimed at the fleeing Indian, but still he rode with his face toward his foe, gesturing defiance. The feathers in his war-bonnet fluttered in the wind, and the quirt hung on his upraised right wrist swayed with the motion of his pony.

Of a sudden a single rifle spoke from the white man's intrenchments, and, in an instant, the young chief was changed from a superb living bronze statue to a lump. He fell, clawing at his saddle and yelling shrilly. His well-trained war pony slowed down and circled back to where his master lay.

All this occupied much less time than it takes to tell it.

During this distraction, half a dozen Indians, who had been unhorsed, rose from their brush coverts and ran for their lives to gain the more substantial refuge which the ridge afforded.

Four escaped, but two were dropped in their tracks before they could reach the shelter.

Though bullets had dropped all around the white men, none had been hit.

"Had enough?" said the sheriff. "Found the camp stronger than you thought, eh?"

Such seemed to be the case, for, after a long parley, which was held discreetly out of range, the band disappeared, leaving their dead on the prairie.

An attempt had been made to rescue the fallen, but the risk was too great, and it was given up.

The Indians had been gone some time before the little garrison crept carefully from under cover, for the Sioux were notoriously tricky and their apparent departure might simply be a ruse to put their enemies off their guard.

Finally, however, the sheriff turned to his men. "Casino," said he, "you, Singing Jim, and Calamity Jake follow their trail and see what becomes of them. If they start to come back you hump yourselves and let us know. You'd better go along, Hodson, and look after your stock."

The men appointed saddled up and started out without delay. The good wishes of those remaining went with them. It was a perilous undertaking, for there was no telling where the war party might be or what they might do.

After the scouts had left, guards were set to keep watch and prevent a surprise, though it was thought that there was little danger of an attack by daylight.

The sheriff and the rest of the men began to count noses, not only of men, but of stock, for it might be that in the excitement some one or some animal had been hit unknown to the others. In fact, it would be a marvel if one bullet had not reached its mark, since, at times. they had dropped around like hail.

All were found intact, but several of the wagons had been pretty badly riddled.

A barrel of molasses which rested in one of the wagons was punctured by a .45-caliber bullet, and the sticky stuff leaked down on and in a trunk marked "Charles R. Green, Boston."

"Belongs to a tenderfoot who got stalled with the rest of his outfit near the railroad," Casino had explained, when some one remarked on the strange object.

Certainly the "tenderfoot" was having rather a novel introduction to the hardships of frontier life. As Charley Green said afterward, "he was stuck on himself for fair."

Mr. Worth and John now thought of the family at the Sebell's, and at the first lull they made their way back between wagons, around and through bunches of cattle, mules, and horses to the house. It was hard to tell which was most glad to see the other, but a stranger coming in would not have realized that this was the return of a father and son after several hours' exposure to all the perils of Indian warfare. There were no tears of joy, no outward demonstration of happiness. The frontiersman had learned, perhaps from the Indian, perhaps from stern nature herself, to keep his feelings to himself. Even John and Ben was not demonstrative.

"I suppose you did 'em up?" said the latter to his more fortunate brother. "How many were there in the party?"

John dropped to the floor, for the experience of the night before was, at least, trying. "Sure we did," he answered. "They didn't come till daylight and so were in plain sight, while we were under cover, see? Same bunch we saw the other day, I guess. Phew! I'm tired."

He had hardly got the words out of his mouth before he was sound asleep, and, not long after, his father was also in the land where none but phantom enemies are seen.

The Indians evidently had enough, for they disappeared, taking with them, however, some of the N bar N stock. The two herders accepted the situation, each in his own fashion.

"I told you so," groaned Calamity Jake. "These pesky Indians ought to be wiped off the face of the earth."

Singing Jim, however, merely grinned, and said as he ran his fingers through his hair: "Well, I'm glad this thatch is not decorating some Sioux tepee. I think it looks better on me than it would a lodge pole."

After this, things went on in much the same old way in the little frontier town, for the Indians did not venture another attack.

In spite of its small size, Bismarck was a busy place and was the distributing point for a large unsettled territory.

Freighters came in from points on the distant railroad with provisions for the cattlemen, trappers, and miners, and the constantly changing population of the town. Their wagons were in long trains, one hitched to the other, the whole drawn by many teams of mules and driven by one man, who rode the near mule next the first wagon, controlling his team by a single "jerk line," which ran to the front near animal. This mule, who was picked for his intelligence, knew that one pull on the line meant turn left, and two short jerks indicated that a right turn was wanted; moreover, he knew just how wide a sweep to make to clear an obstruction.

When the trapper came to town to bring in his pelts for shipment east, and to get a supply of pork, beans and coffee—his standbys in the matter of diet—and when the cowboy raced in with a couple of pack ponies to get supplies for his outfit, the rare opportunity was always taken

(Continued on page twenty.)

He dashed out of the circle and rode boldly toward the white man.

Bits of Fun for Everyone

Confessing His Age.

Comic Artist—Capital joke, isn't it?

The Editor—First rate! First time I heard it I laughed till the tears ran down my bib!—Tit-Bits.

Ambitious Johnnie.

Mother—Never put off till tomorrow what you can do today.

Johnnie—That's right, ma; so I finished up the other part of that cherry pie right away.—Answers.

A Friend Indeed.

Jones—Hevaen bless him! He showed confidence in me when the clouds were dark and threatening.

Robinson—In what way?

Jones—He lent me an umbrella—Youth's World.

Checking Up.

"What are you reading, Charley?"

"It's a book called 'Child Training' that I borrowed from Mrs. James," returned the young son.

"Do you find it amusing?" laughed his mother.

"I'm not reading it for that. I merely wanted to see if I had been brought up properly."—Country Gentleman.

A Speed Contest.

It was during a session of the superior court, says the Boston Globe, and a case of breach of contract was on trial. The plaintiff, a voluble Italian, talked as fast as his knowledge of English would permit—yes, even faster.

Looking down at the court stenographer, the Italian noticed for the first time that his testimony was being reduced to writing—the stenographer was trying his best to keep up—and thereupon he began to talk faster than ever, until finally he burst forth, "Don't writa so fas'; I can'ta keep up with you."—The Youth's Companion.

Not Weally!

Algy—The bwute! He threatened to blow my bwains out.

His Friend—And did he?—Youth's World.

Unflavored Drink.

"Give me a plain soda without any flavor."

"What kind of a flavor would you like it without?"

"Oh! I'd like it without vanilla flavor."

"Sorry, sir! I am out of vanilla. You will have to have it without chocolate, sir."—Boys' Life.

Everybody Accommodated.

Tommy (just off train, with considerable luggage)—Cabby, how much is it for me to Latchford?

Cabby—Two shillings, sir.

Tommy—How much for my luggage?

Cabby—Free, sir.

Tommy—Take the luggage; I'll walk.—Boston Transcript.

Some Dog.

"Who fiddled while Rome burned?" asked the schoolmaster.

"Hector, sir!"

"No, not Hector. Try again."

"Towser, sir."

"Towser! What do you mean?"

"Well, if it wasn't Hector or Towser," said the voice aggrievedly, "it must have been Nero. I know it was somebody with a dog's name."—Youth's World.

FAMILY CIRCLE

ALICE W. BARLAND
EDITORIAL CONTRIBUTOR

BE HOPEFUL.

Be hopeful, friend, when clouds are dark
And the days are gloomy, dreary;
Be hopeful even when the heart
Is sick and sad and weary.

Be hopeful when it seems your plans
Are all opposed and thwarted:
Go not upon life's battlefield
Despondent and faint-hearted.

And, friend, be hopeful of yourself.
Do bygone follies haunt you?
Forget them and begin afresh.
And let no hindrance daunt you.

Though unimportant your career
May seem, as you begin it,
Press on, for victory's ahead:
Be hopeful, friend, and win it.

—FRANCIS STRICKLAND.

Dear Mrs. Barland: Everybody nearly has expressed his ideas on dancing and smoking, but nothing has been said about the evil of the pool hall and pastime places. I think they are worse than any of the other things that one could do or go to. Women and girls are not allowed in such places and I don't think it right that places should be allowed to exist where women are not permitted to go.

Outside of other things that go on there, men spend money which is needed for the comfort of their families. There are plenty of good, clean places where men can take their families and where young men can take their girl friends and have a pleasant time together.

These talks on smoking are surely doing good. I know of several who have been reading these letters who have quit smoking. My husband had been smoking for years and he doesn't smoke at all now.

"MICKEY."

Family Circle Girls

Dear Mrs. Barland: I have been an interested reader of the Family Circle for some time. The instructions of "A Bachelor" on how to make bread without taking a "day off" for the purpose are fine! I think some of us girls might profit by that recipe. My mother taught me how to make bread when I was 10 years old and, although I am not much of a cook in other ways, I think I can compete with almost any woman in making bread which is wholesome and light. I am not boasting, either. "Bachelor," I am going to copy your recipe to use when I must be away all day, as mine won't allow me to forget my bread in that fashion!

As to the questions under discussion: A woman is supposed to be more pure than a man, and it is her duty to keep herself so. The trouble is that there are lots of girls who are willing to lower themselves, and incidentally the boys in question, too. I have had invitations to go on wild rides, into the seclusion of a dark corner at a dance, or the back seat of a car, and I have always said "No." I believe, too, that I have had as good a time as those who didn't. Maybe I didn't get as many "dates," but I'd rather have none than to "pay" for them that way.

You asked us what we liked to do best. I may seem rather lazy, but I like to travel. Not on the train or in a ship, but on the highway in an automobile. Nothing is more interesting to me than to ride along, seeing new things, new towns, new people. I have been in the heart of the Rockies, and smelled the pine and the fir, and lain down to sleep under the stars. Maybe not so pretty, but almost as interesting, is a trip through the sagebrush country. A different, but pleasant odor there, a different landscape, but the same stars. They are in the prairie country, too; and I have a genuine love for that, because there is where I was born. But Oregon is best when the cold northwest wind blows and covers it with snow.

I am going on a camping trip soon, and I am sure a great many other girls are, too. When we all get back, why don't you have us tell our experences? I, for one, would be only too glad to. Many interesting things happen in the tourist world, and I am sure it would be fun for those who do not go to get some of the benefit of them.

"THE RAMBLER."

Dear Mrs. Barland: I like THE FARMER. We have taken it for several years. I like it even better now that we have the Family Circle Girls. I always turn to it first thing and see what others have to say on questions in which I am very interested. In answer to the letter of P. E. M., I'll tell her what to do for recreation instead of dancing. I am 17 years old and next year I will be in my senior year in high school. First of all, there are the high school affairs that are not dances. Our girls' organization has some parties that are not dances. There are games, track meets, debates and picnics, besides some parties that are not all dancing. Second, I belong to a Christian Endeavor society. Although the first aim of the organization is religious, it has its social side as well. It seems there is hardly a week goes by but what there is a "weinie roast," party, taffy pull or something.

All of our family are great lovers of the mountains and we go on picnics to the near-by canyons. I like to read also and manage to find time for quite a bit of it. The trouble with me is that I can not find time for all the things that I would like to go to that are not dances.

Washington. A HAPPY GIRL.

Family Circle Boys

Dear Mrs. Barland: We have been taking THE FARMER for several years, but nothing interests me but the Family Circle, as I am not a farmer. Although we live in town, we own a large ranch several miles out of the city.

You ask us to tell of our plans for the future and our present occupation. I am taking a business course in high school. When I finish I think I will be able to obtain a position in the bank where my father has a good position.

I also believe in enjoying life. I am only 18, but I go to dances and parties and my main pleasure is car riding.

I surely enjoy reading the different opinions of the writers; I like R. V.'s letter; it is unusual.

Hoping there will always be a corner for the Family Circle, I remain,

"SPEED."

Dear Mrs. Barland: The Family Circle is more interesting than any I have ever seen and your advice to boys and girls is fine.

I haven't smoked for several years, as it is bad for the health. I injured my health by smoking.

I go out car riding many times. One can have more fun with the wild girls, they will go most any place at any time and the good girls won't go. For having fun I would rather go with the wild girls, but if I were to marry I would rather have a nice girl, as there would be less chance of having trouble in the family. I think the girls would make the same choice, too.

I enjoy music and dancing and think it good for the health. There are three dances here every week. E. A. B.

Dear Mrs. Barland: As the Family Circle is taking an important place in our home and I have an invitation to write, I will do my best to make the letter interesting.

I live on a ranch of 800 acres, 25 miles from the railroad. My brother and I are in partnership and are just beginning to like it here. Out of our 800 acres about 400 are under water; we have our own reservoir and don't have to pay for any rights. Our ranch lies right in the foothills on the old Asmoon trail and our nearest neighbor is six miles away.

We are milking 10 cows at present, which seems to me to be a day's work. We have all the mountain trout we want within one-half mile and plenty of sage hens and grouse. Circle readers, let us forget about the kissing and smoking question for a while and write and tell each other about our plans for this summer. It will be just as interesting. I am a very poor writer, as I left school far too early. I have lived on a farm all my life and think it the best place for young people.

Idaho. J. W.

Family Circle Men

Dear Mrs. Barland: In reply to C. S. W., who wants a cure for seasickness, will say that it can not always be avoided, but several ounces of prevention can be used for resistance.

Even old sailors get seasick sometimes and when one has it there are two stages; the first stage is where you are afraid you will die and the second is when you are afraid you won't.

I have crossed the Atlantic four times and the Pacific twice. I will give some instructions that were given me by some old sailors and which I followed with good success.

Don't think about being sick nor begin worrying. Give your system a good cleansing before starting on your journey, eat plenty of food that is easy to digest, such as vegetables and fruit, all but bananas. Use very little sugar or salt and no greasy food.

Choose your stateroom amidships and take plenty of fresh air. Try exhaling when the ship goes down and inhale when she comes up. If this doesn't work satisfactorily reverse the breathing process. Begin this system of breathing when you first begin to feel symptoms of seasickness.

My trips have been on cargo boats; the longest time at one stretch was 29 days.

"SALTY."

Fragile Clay

By Julia M. Martin.

Fleeting and fragile is sentiment,
Only the treacherous plastic,
Only the impotent pattern
Dreamed in the clay insecure.
Carve we our dearer relations
Finely in character's marble.
Chaste, then, and firm in its beauty,
Long will the image endure.

AGES AND MARRIAGE.

The proportion of women married and neither widowed nor divorced rises steadily in our country with the age of woman until the year 33, after which it declines steadily. In other words, of women of all ages a larger percentage of those aged 33 are living as wives than of women of any other age. About 82 per cent are at that age wives, unwidowed and undivorced.

Among men, however, the percentage married and neither widowed nor divorced rises with the age of men, by age groups, until the period between 45 and 54 years of age, at which about 81 per cent are husbands of living and undivorced wives.

Water for House and Barn

R. H. Ensign of St. Clair has harnessed a small stream which runs through his place by means of a hydraulic ram which pumps the water 68 feet and supplies both the house and barn with drinking water. Only a 15-foot head was obtainable, but it has sufficient flow to operate a ram, and so far it has worked with maximum efficiency. The tank holds 110 gallons and it is kept full at all times except when drawn on heavily. Mr. Ensign expects to pipe the overflow to a water trough in the main cow pasture, so that the herd will have fresh water without going clear down to the creek.

BETTER THAN ALFALFA.

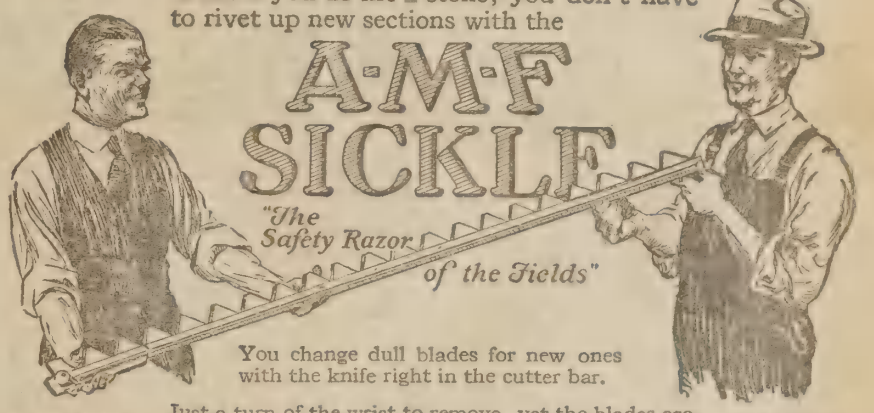
Alsike, red clover or vetch is better than alfalfa on clay bottom soil or on prairie land. The "king" of forage crops requires good drainage.

You Change Blades Right in the Machine

What if you do hit a stone; you don't have to rivet up new sections with the

A-M-F SICKLE

"The Safety Razor of the Fields"



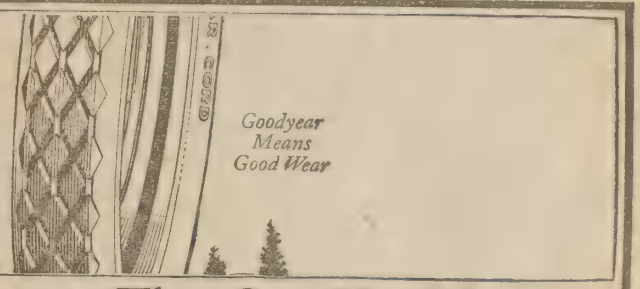
You change dull blades for new ones with the knife right in the cutter bar.

GUARANTEED FOR ONE YEAR

Just a turn of the wrist to remove, yet the blades are locked so tight they cannot come loose. You keep a "dozen" package of new blades in your tool box, and *keep your mower working.*

ASK YOUR OWN DEALER

American Machine & Foundry Co., 511 Fifth Avenue, New York



Goodyear Means Good Wear

Advantages That Save You Money

Consider for yourself the advantages that save you money in the new Goodyear Cord Tire with the beveled All-Weather Tread:

MILEAGE

The tread on the new Goodyear Cord is made from an extraordinarily dense, tough, improved rubber compound that gives longer wear.

ENDURANCE

The carcass of this tire is made from highest grade, long-staple cotton and embodies the patented Goodyear principle of group-ply construction.

STAMINA

The sidewalls of the new Goodyear Cord are thicker and heavier, offering greater resistance to curb and rut wear.

LONG LIFE

The double-molded process employed assures stronger unions between plies and between carcass and tread.

SMOOTHNESS

Reinforcing rubber ribs at the base of the blocks of the tread result in a stronger, smoother-running tread design; the beveled feature reduces vibration and strain as wear proceeds.

SAFETY

The non-skid qualities of the famous All-Weather Tread are preserved without sacrifice, insuring the utmost in slipless, safe travel.

ECONOMY

In quality and construction this new tire is the finest Goodyear has ever made; it costs less to use in the end.

SERVICE

The new Goodyear Cord with the beveled All-Weather Tread is sold by Goodyear Service Station Dealers, pledged to help you get from the tires you buy all the mileage built into them at the factory.

The new beveled All-Weather Tread Cord Tire is made in all sizes for trucks and passenger cars

GOODYEAR

Copyright 1923, by The Goodyear Tire & Rubber Co., Inc.

President Visits the Northwest

(Continued from page two.)

financing. But I have been heartened by the convincing evidence I have already seen of the wonderful results where water meets the land.'

"The government is interested to aid your effort from the standpoint of adding to the national wealth by the transmutation of arid spaces into fertile fields. It is interested also in the protection of the national finances, so that money advances to prosper this work may not be dissipated in doubtful projects or jeopardized in experiments. We must look for plans that are safe; plans so conceived that they will not unduly burden the settler in the days when he is reducing the land to production; plans that will be reasonably broad, and that will not commit the government to unwise and unreasonable expenditures."

Both Secretary Work of the department of the interior and Secretary Wallace of the department of agriculture, who accompanied the president on his trip, emphasized the point that there was in the east a general sentiment of opposition to the development of more agricultural lands at the present time. They declared that there was much to be overcome in congress before the necessary advancement of money for the proposed Columbia basin project and other northwestern projects could be made. Secretary Wallace manifested less personal favor toward the project than did Secretary Work, the latter frankly picturing the day when the project as proposed would become a reality.

From Spokane the presidential party went to Meacham, Ore., where it participated in the Old Oregon Trail celebration on July 3. In his address there the president paid glowing tribute to the spirit of the pioneers who had made development in the northwest possible. On the following day, July 4, the president was the speaker at Portland's Fourth of July celebration. His address there covered fundamental points of national and international issues, being of an especial patriotic nature. On the following day, July 5, he addressed the people of Tacoma and surrounding territory before sailing for Alaska. At Tacoma he laid special emphasis upon the necessity of a strong merchant marine if this country is to prosper in its international commerce.

After the president has completed his study of conditions in Alaska he will return to the states, stopping first at Seattle, where, on the 27th, he will be the guest of honor at the stupendous patriotic presentation of the "Americanus." He will go thence to San Francisco, returning east by the southern route.

* * *

The French chamber of deputies, which corresponds somewhat to the house of representatives in the congress of the United States, last week voted in favor of ratification of the five-power treaty that was drawn up at the conference on limitation of armaments held in Washington, D. C., at the call of President Harding two years ago. The other four nations that were parties to the treaty have already ratified it—this country, England, Japan and Italy. Before French ratification is complete the senate of that country must ratify it, and it is not known what the sentiment of that body is. The failure of France up to this time to ratify the treaty has resulted in world-wide uncertainty as to the naval situation of the world. The leading naval countries have delayed the scrapping of portions of their navies as provided in this five-power treaty, fearful that the failure of France to accept the treaty would result in international disturbances greater than those under naval rivalry. It has generally been assumed that the delay of France in ratifying the treaty has been due to an effort on her part to force England to come around to the French attitude on the Ruhr occupation and the general enforcement of payment of German reparations. It is probable, however, that France now proposes to ratify the treaty to prove to England and the world that this has not been the cause of her delay.

The action of the chamber of deputies is greatly pleasing to President Harding, who was directly responsible for the drawing up of the five-power treaty. It was the outstanding result of the international conference called by President Harding on the armament question.

* * *

The significant announcement is made that organized manufacturers of the United States, 20,000 strong and representing directly or indirectly invested capital of $40,000,000,000 and employing nearly 6,000,000 men, are planning a united effort along the four following lines:

1. Opposition to the enactment of a soldier bonus law along the lines of recent proposals.
2. Enactment of what the manufacturers regard as a constructive immigration law permitting the entry into the country of selected groups of workers when the need for such workers is manifested by a labor shortage in their respective trades.
3. A legislative moratorium for the railroads.
4. Revision downward of tax burdens upon industry.

* * *

A political organization to be known as the federated farmer-labor party was launched in Chicago, July 5. The farmer-labor party, as an organization, has refused to participate in the new movement, according to published reports. The new organization is reported to be extremely radical. It endorses the third internationale at Moscow, Russia.

* * *

Though unable to land a knockout blow on Tommy Gibbons, Jack Dempsey, world champion heavyweight pugilist, was awarded the decision in the championship contest at the end of the 15 rounds fought in Shelby, Mont., July 4.

* * *

A monument in honor of the American volunteers in the French army who lost their lives in the World war was unveiled in Paris, July 4.

Wenatchee Apples

Crop Increases Over Last Year

By E. H. McPherson.

The district inspector of horticulture at Wenatchee estimates the total 1923 apple crop of the north central Washington district at a little over 16,500 carloads, which is a gain of 2500 cars over the total shipments for 1922, an increase of nearly 20 per cent. This is the largest yield ever predicted, the 1921 crop being 15,000 cars and the 1922 crop 14,000 cars.

District Inspector Nielsen adopted a new policy this year of delaying a forecast of the apple crop until July 1, it being his theory that any estimate made before the June drop is necessarily inaccurate. To be sure, Inspector P. S. Darlington, his predecessor, had a record of only missing the size of the crop once in 10 years, and then only by a little over 7 per cent. The rest of his estimates came within 2 per cent of the actual total production as shown by the shipments.

Last year Mr. Nielsen took over the duties of his office July 1 and estimated the yield at a little over 14,000 cars, though the usual estimates ran from 15,000 to 16,000 cars. The loss from worms and from failure to get cars amounted to about 1500 cars, but the worm loss was already apparent when Mr. Nielsen made his estimate, and he took it into consideration in making up his estimate.

A slight decrease is indicated in the yield of Grant, Douglas and Okanogan counties, also in the Lake Chelan district, but this is more than made up by the heavy gain forecast for Wenatchee, Cashmere, Peshastin, Dryden, Monitor and all points in the main Wenatchee valley. East Wenatchee and Rock Island have a particularly large crop, much greater than ever before. Many orchards will yield twice as many apples as ever before in their history.

Despite the reported damage by frost and hail in the Okanogan valley, the crop there will be approximately the same as last year, of which 575 will be Winesaps, 285 Jonathans, 160 Delicious and 120 Spitzenburgs.

From Okanogan station shipments are estimated at 550 cars, compared with 575 for last year, and of these 240 cars will be Winesaps, 90 Delicious, 85 Jonathans and 50 Spitzenburgs. From Malott the shipments are estimated at 375 cars, compared with 425 last year.

Shipments of nearly 5000 cars are estimated for Wenatchee and immediate vicinity, an increase of nearly 1500 cars. This will be by far the largest volume of fruit ever handled through the local packing and shipping warehouses, and in addition to this nearly 1000 carloads of summer fruit will go forward from the local warehouses, according to present estimates.

The grade and pack certification rules for 1923 have been issued by the state department of horticulture. There are no changes in the color requirements of any of the varieties compared with last year, but there is a decided change in the requirements as to stings and condition of the fruit when picked.

Under the 1923 rules all apples must be mature or at the proper stage of maturity to insure the proper completion of the ripening process when picked.

Apples must be clean, reasonably free from dirt and from excessive spray material. They must be well formed, having the shape characteristic of the variety in the locality where grown.

Drought marks, slight hail marks, slight russeting and slight sun scald are all defined, and especial emphasis is laid upon the definition of "worm stings" as follows:

The term "worm sting" means a thoroughly healed worm sting, as the healing of the sting is the only evidence which shows that it is not infected. "Small healed stings" are further defined as those in which the diameter of the dark discoloration caused by the sting, exclusive of any encircling green ring, shall not be more than one-eighth inch.

Apples to go in the extra fancy grade must be clean, hand picked, well-formed, free from bruises, limb rub, spray burn, sun scald, russeting, drought spots, hail marks, visible water core, broken skin and other damage caused by disease, and up to the required specification as to color.

In the fancy grade the color requirements are less, and apples may have scab spots not exceeding one-fourth inch in diameter, slight drought marks, hail marks not over one-half inch in diameter, slight sun scald and not more than two healed-over stings, provided they are extra fancy as to color requirements.

In the C grade the above imperfections are allowed provided there is no infection, and color requirements are less rigid. The fourth grade permits more healed-over worm stings provided they are free from infection, and a combination grade is provided under which extra fancy and fancy may be packed together, or combination fancy and C grade, provided, however, that such combinations must always contain 25 per cent of the apples of the higher grade.

When apples comply with the requirements of the rules in every other respect a "tolerance" of 10 per cent is allowed for a total of defects.

Wheat Is the Big Thing

(Continued from page three.)

bottom land having a water table near the surface," said Mr. Hill. "An experiment conducted at Moro, Ore., for nine years showed an average yield of one bushel more per acre on ground not harrowed. The four years' results at Waterville are as follows: Harrowed as soon as the ground was dry enough to be tilled, yield 23.3 bushels; harrowing delayed until two weeks later, 24.7 bushels; harrowing one month after the first field work was started in the spring, 26.4 bushels; ground not harrowed, 27.1.

"The greatest injury from harrowing has resulted in years when the grain came up late in the fall or early spring and by setting the wheat back by harrowing the wireworms have killed more plants than on the unharrowed ground. In years when the grain obtains an early start in the fall harrowing has not increased or decreased yields to any marked degree, it has only been time wasted. The fact that the ground has a dry crust is conclusive evidence that the capillary rise of moisture has been checked and instead of closing the cracks by harrowing the crust is broken up as deep as it is cracked. The growing plants soon take up any moisture near the cracks, and the farmer's time is better spent in conserving the moisture on the ground to be summer fallowed where early tillage is so important for obtaining the best yield the next year."

CONTROL SHEEP SCAB.

No widespread infection of sheep scab is expected by state officials following the discovery of one infected herd in the Yakima valley. So far the trouble is confined to that herd and precautionary measures are being taken to prevent its spread.

Farm Business and Markets Outlook

(Continued from page five.)

ards, 25c dozen; mixed color standards, 24c. Selling price, Front street: Selects, 29c; candled ranch, 27c. Association selling prices, cash at store: Selects, 28c; firsts, 26c; pullets, 26c.

CHEESE—Prices to jobbers, f. o. b. Tillamook: Triplets, 27c; longhorns and loaf, 28c per pound.

POULTRY—Hens, 14@22c; broilers, 18@22c; ducks, 15@22c; geese, nominal; turkeys, nominal.

SPOKANE, July 7.—POULTRY, live weight—Hens, 4 lbs. and over, 18c; light hens, under 4 lbs., 15c; springs, 15c; old roosters, 8c; ducks, 15c; geese, fancy, 15c.

FRESH RANCH EGGS—$5@6 case, according to quality.

BUTTERFAT—42c lb.

SEATTLE, July 7.—EGGS—Select local ranch, white shells, cases included, 25c per doz., f. o. b., Seattle; mixed colors, 23@24c per doz.; pullets, 19@20c per doz., cases returned to shippers, 1c less; do to country stores, f. o. b., 21@22c per doz.; Eastern Washington, case count 20 per doz., f. o. b., Seattle.

BUTTERFAT—f. o. b. Seattle; A grade, 45c per lb.; raw milk, $2.25 per cwt.

POULTRY—Hens, 4½ lbs. and up, 21c per lb.; do 3½ and under 4½ lbs., 15c per lb.; broilers, 1½ lb. and heavier, 21c per lb.; do leghorns, ¾ to 1½ lbs., 23c per lb.; hens, 3 to 3½ lbs., 12c per lb.; do dry picked, 2c above live; capons, live, fat, 6 to 10 lbs., 35c per lb.; do dry picked, fancy, dressed, 37c per lb.; do roosters, 9c per lb.; Belgian hares, 3½ lbs. and heavier, 12c per lb.; geese, fat, live, 15c per lb.; ducklings, live, 3½ lbs. and up, 16c per lb.; ducks, old, over 3 lbs., 15c per lb.; turkeys, fat, dry picked, 8 to 10 lbs., 30c per lb.; do live, 25c per lb.; squabs, large, dressed, $4.50 per doz.; pigeons, $2; guineas, $8 per doz.

BEEF—Steers, fancy, 7@8c per lb.; cows, fat, 6c per lb.

VEAL—Fancy light, 13@15c per lb.; do medium, 10@12c per lb.; heavy, 7@9c per lb.

MUTTON—Fat, 9c per lb.; spring lambs, fat, 17c per lb.

HOGS—Good block, 60 to 150 lbs., 10@11c per lb.; do heavy, 7@9c per lb.

Try this

Modern Magic in Jelly Making

New PEN-JEL makes jelly "jell" instantly. Boil two minutes and your jelly is ready for the glass. It never fails. No anxiety lest your jelly be a failure.

PEN-JEL is effective with any fruit juice. Supplies pectin, the active fruit property which makes jell. Perfect results assured with fully-ripe fruits. Made from fruit, hence its absolute purity is sure.

Improves the taste, too, because the delicate, natural flavor is not boiled away. Insures clear, firm jellies. Saves fuel, energy, time, and sugar.

Once you've tried PEN-JEL you'll always use it. Order from your grocer. Should it be possible he hasn't it, send 15c in stamps for a full-size package, enough to make six 7-ounce glasses.

A valuable book of recipes and information in each package. Full directions for making delicious jams and jellies from every kind of fruit. SEND YOUR 15c TODAY.

LEO PECTIN CO., St. Joseph, Mo.

NEW PEN-JEL MAKES THE JELLY JELL NEVER FAILS

JELLY RECIPE

Put 2½ cups fruit juice in kettle (about 6 quart); add 1 package New PEN-JEL, stirring until boiling vigorously. Add 3 level cups sugar, boiling vigorously from 2 to 4 minutes, depending on fire. Pour into glasses.

You should try PEN-JEL for making delicious jams and jellies with strawberries, cherries, blackberries, raspberries loganberries and all other fruits.

15¢

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ABSORBINE STOPS LAMENESS

from a Bone Spavin, Ring Bone, Splint, Curb, Side Bone, or similar troubles and gets horse going sound. It acts mildly but quickly and good results are lasting. Does not blister or remove the hair and horse can be worked. Page 17 in pamphlet with each bottle tells how. $2.50 a bottle delivered. Horse Book 9 R free.

ABSORBINE, JR., the antiseptic liniment for mankind, reduces Painful Swellings, Enlarged Glands, Wens, Bruises, Varicose Veins; heals Sores. Allays Pain. Will tell you more if you write. $1.25 a bottle at dealers or delivered. Liberal trial bottle for 10c stamps.

W. F. YOUNG, Inc., 571 Lyman St., Springfield, Mass.

Read the "Want Ad" page this week for good offers of all kinds.

Just Folks

Is there such a thing as doing too much in a collective way for the people?

I have just been in some of the biggest cities of the country and I marvel over the costly privileges offered to all freely or at a nominal cost.

Sometimes it seems to me that the more the public does for the individual the less the individual does for himself.

The home seems to become less and less, to a vanishing point, in the big cities. The theater party is not a home affair. The public library not only supplements home books, but verily discourages home libraries. One good book in the home is worth a dozen from the town library.

The educational value of art galleries, museums, parks filled with rare animals and plants, to be found in the big cities, is largely destroyed by the dominating idea of entertainment. Education has a hard side to it as well as an easy side. The ways of life may be made too easy. Cities especially are forgetting that social perils lie in the pathway of ease.

A writer in the June Atlantic declares: "Living in an air of indulgence, we are soft, flabby and morally short of wind. If a thing is disagreeable, we do not do it!"

The supreme advantage of life in the open country is the fact that more common life difficulties must be met and overcome than in the cities. You must do more for yourself on the farm than in the city.

EAS

Home Recipes

Filled Cookies—One-third cup shortening, 1 cup sugar, 1 egg, ½ cup milk, 1 teaspoon vanilla,, 3½ cups flour, ½ teaspoon salt, 4 teaspoons baking powder,. Cream shortening and add the beaten egg, milk and vanilla, add flour, salt and baking powder which have been sifted together. Roll thin on slightly floured board, cut out with cookie cutter and place one teaspoon of filling on a cookie and cover with another and press edges together. Bake in a moderate oven.

Filling for Cookies: Two teaspoons flour and ½ cup sugar, ½ cup water, ½ cup each of chopped raisins and figs. Mix the flour and sugar together, add the fruit and cook till thick, being careful not to scorch.

Strawberry Shortcake—Two cups Flour, ½ teaspoon salt, 4 teaspoons baking powder, 3 tablespoons shortening, 2 tablespoons sugar, 1 egg, ½ cup of milk. Sift dry ingredients, mix in the shortening, add the beaten egg to the milk and add the dry ingredients to make a soft dough. Divide the dough into two parts and without rolling press into layer pans well greased, placing one on top of the other after spreading butter between. Bake in a hot oven 20 or 25 minutes. Split while hot and spread with crushed strawberries. Serve with cream, plain or whipped.

Rhubarb Conserve—Stew enough rhubarb to make ½ dozen quarts; put 1 package of raisins and ½ dozen oranges through the meat grinder and ad dto the rhubarb and to ever ycup of fruit add a cup of sugar. Cook slowly for three hours. I have made this many years.

Mrs. H. H. Ackley, Wash.

Clear Baby's Skin With Cuticura Soap and Talcum

Soap, Ointment, Talcum, 25c. everywhere. For samples address: Cuticura Laboratories, Dept. U, Malden, Mass.

Kill All Flies! THEY SPREAD DISEASE

Placed anywhere, DAISY FLY KILLER attracts and kills all flies. Neat, clean, ornamental, convenient and cheap. Lasts all season. Made of metal, can't spill or tip over; will not soil or injure anything. Guaranteed.

DAISY FLY KILLER at your dealer or 5 by EXPRESS, prepaid, $1.25.
HAROLD SOMERS, 150 De Kalb Ave., Brooklyn, N. Y.

When answering advertisements don't fail to mention this paper.

Latest High Class Patterns for the Home

Please order the patterns you desire at least two or three weeks before you wish to use them. Desiring to obtain the latest high-class patterns for its readers, THE FARMER has made arrangements to have them sent direct from the east, and under present mailing conditions it takes about that time for them to reach you.

4396-4048. Lady's Costume. Blouse 4396 cut in seven sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. Skirt 4048 cut in six sizes: 25, 27, 29, 31, 33 and 35 inches waist measure. To make the dress for a medium size will require 8 3-8 yards of 32-inch material. The width of the skirt at the foot of the lower flounce is 2 1-4 yards. Two separate patterns. 10 cents for each pattern.

4108-4049. Lady's costume. Blouse 4108 cut in six sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. Skirt 4049 cut in seven sizes: 25, 27, 29, 31, 33, 35 and 37 inches waist measure. To make this model for a medium size requires 6 yards of 40-inch material, with 1 1-8 yards of 18-inch material to face the cascades. The width of the skirt at the foot without overlapping portion is 2 1-8 yards. Two separate patterns. 10c for each pattern.

4443. Girl's Dress. Cut in 4 sizes: 4, 6, 8 and 10 years. A 6-year size requires 2 yards of 36-inch material. Price 10c.

4436. Boy's Play Suit. Cut in four sizes: 2, 3, 4 and 5 years. A 3-year size requires 2 3-8 yards of 27-inch material. Price 10c.

4428. Lady's House Dress. Cut in seven sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. A 38-inch size requires 5 yards of 36-inch material. The width at the foot is 2 1-4 yards. Price 10c.

4004. Miss' Dress. Cut in three sizes: 16, 18 and 20 years. A 16-year size requires 4 5-8 yards of 36-inch material. The width at the foot with plaits extended is about 2 1-4 yards. Price 10c.

4447. Girl's Dress. Cut in four sizes: 6, 8, 10 and 12 years. A 10-year size requires 2 7-8 yards of 32-inch material. Price 10c.

4003. Lady's "Apron Frock." Cut in four sizes: Small, 34-36; medium, 38-40; large, 42-44; extra large, 46-48 inches bust measure. A medium size requires 4 1-4 yards of 36-inch material. The width at the foot is about 2 1-8 yards. Price 10 cents.

4270. Lady's House Dress. Cut in six sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. A 38-inch size requires 5 1-4 yards of 32-inch material. The width of the skirt at the foot is 2 1-2 yards. Price 10 cents.

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4432. Lady's Blouse. Cut in seven sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. A 38-inch size requires 2 1-2 yards of 40-inch material. Price 10 cents.

4449. Lady's "Wrap" Skirt. Cut in six sizes: 25, 27, 29, 31, 33 and 35 inches waist measure. A 29-inch size requires 2 3-8 yards of 54-inch material. The width at the foot is 1 7-8 yards. Price 10 cents.

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NATURES GREATEST CLEANSER

Amalia Schall is very much interested in her flower garden this spring. She also has a vegetable garden. Amalia won second prize of 50 cents in a spelling contest at the recent school meet. She lives in Adams county, Wash.

Martha Pierce attends the Central school. It is called "Central" because it is near the cross roads. This summer Martha says she is going to wear overalls and go barefooted, so she can wade in the creek. She is an eastern Washington girl.

Hattie Pierce rides to school in a buggy her papa made. When winter came he put canvas over it and it was like a little house. Her classmates in the fourth grade are Chester Porter and Martin Crowe. We were glad to hear from this cousin in Garfield county, Wash.

Little Nellie Hurst, who is 6 years old, expects to start to school this fall. She reads, spells, writes and does arithmetic problems already and she is sure that she will like to go to school. This is our first letter from Nellie She lives in Mason county, Wash.

Chester Porter and Martin Crowe are schoolmates and are in the same class in the Central school, in Adams county, Wash. Hattie Pierce is in the same grade. Chester says there is much around their school.

Maple Schlief shares her Junior Farmer with the girls and boys at school who are not Corner cousins. She has promised us a pioneer story and we shall all be on the lookout for it. Maple's house is in Okanogan county, Wash. (Aunt Nellie appreciates your good report card, Maple.)

BEDTIME STORIES

By THORNTON W. BURGESS.

BULLY MAKES A MISTAKE.

An independent spirit is a thing to highly prize,
But too much independence is an evil in disguise.

If there is one thing above another on which Bully the English sparrow prides himself it is his independence. He says so. He is forever talking about it. He says that the way to get on in this world is to look out for yourself and never mind any one else; let them look out for themselves. Of course, that is one of the oldest and most mistaken ideas in the world, but Bully hasn't learned it yet in spite of the fact that what he calls independence is forever getting him into trouble.

He had been wandering through the old orchard with nothing to do but try to bully whomever he met, when at last he came to the far corner, where Johnny and Polly Chuck live. In the very tree under

Bully looked up to see a trim-looking gentleman with a white waistcoat sitting on a branch of the old apple tree.

which they have made their house he discovered a nest different from any nest which he had ever seen before. In his usual bold way he started over to look at it.

"Better keep away from there!" said a sharp voice.

Bully looked up to see a trim-looking gentleman with a white waistcoat sitting on a branch of the old apple tree. He was larger than Bully, but not nearly as large as Welcome Robin or Goldie the oriole, both of whom he had whipped that very morning. At least he thought he had whipped them, though the truth is they simply had refused to fight.

"I could whip that fellow with my wings tied," thought Bully and went right on.

"I told you you had better keep away from there!" said the trim-looking gentleman with the white waistcoat.

"Who'll make me?" demanded Bully.

"I will!" retorted the other.

"Let's see you do it!" retorted Bully.

The words were hardly out of his mouth when something hit him and knocked him sprawling. Before he could quite get his breath it seemed to him that the air was full of sharp bills. When he tried to strike back there was no one there. It was too much for Bully, and he turned tail and flew away. But as he flew he was knocked down again and lost several feathers. So it went for quite a distance back through the old orchard, Bully trying his very best to get away and this trim gentleman with the white waistcoat knocking him down and pulling out feathers until Bully's coat was a sight. It was with something like a sob of relief that at last he found himself free.

"I guess I made a mistake," said Bully to Mrs. Bully as he explained how he had got his clothes so badly torn.

He was right. He had made a mistake. He had tried to bully Scrapper the kingbird, who is a famous fighter.

(Copyrighted by J. G. Lloyd.)

Birthday Greetings

THURSDAY, July 12—Mildred Smith, 9 years old.

FRIDAY, July 13—Inez Brown, 11 years old; Violet May Clark, 10; Wallace Cole; William Leettola, 10.

SATURDAY, July 14—Edna Doris Melton, 10 years old; Hazel Reeves, 11.

SUNDAY, July 15—Leona Tuisku, 11 years old.

MONDAY, July 16—Merritt Galbraith, 9 years old; Katherine Lund, 10; Carl Moody; Mildred Stiles, 11.

TUESDAY, July 17—Hazel Puckett, 9 years old.

WEDNESDAY, July 18—LaVonne Elm, 9 years old; Cecilia Hansen, 10; Doris McDonnell, 10.

LETTERS WELCOMED BY AUNT NELLIE.

Among recent letters received by Aunt Nellie are those from cousins whose names follow. A few of these will be published each week in the regular edition of THE FARMER and others will appear from time to time in The Junior Farmer:

Grace Carlson, William Johnson, Josie Peretti, Leona Tuisku, Doris McDonnell, Alma Deife, Renata Looff, Evelyn Moore, Agnes Stensaa, Marguerite Edline, Walter Huck, Marian Friese, Myrtle Myers, Ruth and Wilma Cross, William Goetzenberger, Hilma S. Johnson, Mildred Greenwood, LaRoy McBee, Irene Mabie, Myrtle Nelson, Iva L. Easterling, Anna Johnson, Grace Forbes, Elsie Brand, Helmi M. Johnson, Irene Kleweno, Esther Kiehn, Ethel Lucille Boawn, Katie Harvey, Helen Jackson, Freda Stump, Mary E. Fassett, Leslie Smyth, Viola Domerude.

Tynnie Kokko, Martha Kokko, Lela Minden, George Boebel, Mildred McDougal, Virginia Haines, Helen Staadt, Laura Dartt, Dorothy Peterson, Grace Cameron, Adeline Thompson, George H. Burr, Frances Haxton, Sylvia Alder, Elsie and Roy Schutz, Rosalie Clemon, Josephine Bobner, Helen Wirta, Gertrude and Henrietta Pinster, Cornelia Strahm, Marie Strahm, Gwendolyn Phelps, Theodore Peper, Annie Johnson, Wilma Kaiser, Ercel Lynch, Elizabeth Bise.

Florence Sialia, Esther Hellinger, Norma Clayton, Thelma Bulard, Ruth Hedges, Viola Schoessler, Carol Spencer, Marjorie and Roy Cuyle, Miriam Eddie, George A. Nelson, Genevieve Warren, Laura Mill, Iva L. Easterling, Helen Ruth Grube, Amy, Bernice and Mildred Dicken, Elva Townsend, Alice Sanstrom, Anna M. Burns, Marjorie Iva Cress, Raymond Linnall, Esther R. Neff, Hattie Becker, Marie and Fern Daugherty, Catherine Burley, Mildred Klowunder.

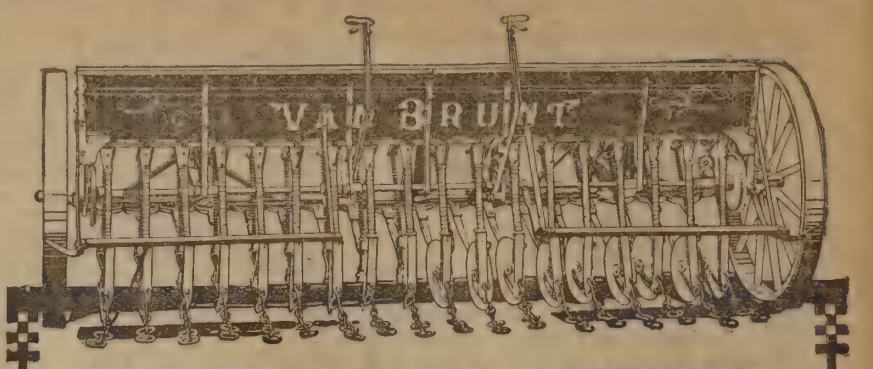
Lois Catherine Engleson, James Patterson, Hilda Patterson, Emma Jeske, Esther Jeske, Esther Eastgard, Evelyn Holmes, Ralphael and Leon Weedman, Marie Albin, John Otter, Hugo Hakala, Irene Mabie, Helen Wise, Karl F. Lind, Lillie Puffert, Pearl Dugger, Marie Litt, Lois Bayes, Nina Hendersen, Jesse Hendersen, Genevieve Gooley, May Fassett, Nina Toivonen, Vesta Rogers, Myrtle Bjerke, Madoline Hays, Margaret C. Anderson, Grace L. Anderson, Max Clizer, V. Evelyn Powe, Lauretta Mabelle Schuman, Sadie Engebretson, Elnora Engebretson, Nettie Beeman.

Johnny Besel, Laura Stahly, Dick Shaw, Esther Schorzman, Victoria Wengler, Viola Robbins, Frances Martin, Helen and Howard Tomlinson, Margaret Peters, Elmer Ohlinger, Nadine Hutchens, Frances Himes, Bessie Harvey, Dorothy Bailes, Esther Martin, Evelyn Dwyer, Ida Difenauer, Levina Viola Bertholf, Mary J. Enroth, Bertha Kalb, Alice Guiberson, Eva Pavola, Maxine Mae Adams, Gertrude, Hilda and Elsie Stark, Dorothy Galbraith.

Weeks Slip By

One by one the weeks go, and with each of them goes one installment of our serial story. We urge our readers not to overlook the early chapters of the new story, "Cattle Ranch to College," for it is so easy to lose a paper and thereby fail to get started into the story at all. We have all done the like, and we have all regretted it when it was to late.

The first chapter of this new western story of adventure appeared in the issue of July 5. The second is in this week's issue, beginning on page 14. We know that you will read all of this wholesome, interesting story if you once begin it.



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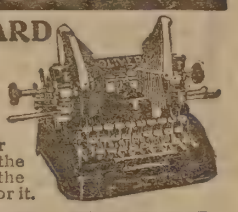

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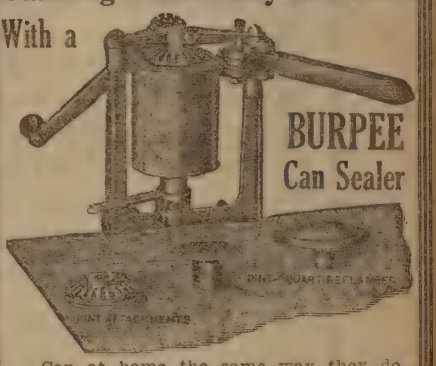

Can at home the same way they do in the large canneries. The cans cheap and may be used three times. The device for sealing the cans is inexpensive and makes canning a pleasure. You can can from your garden and orchard to supply your family with the best of food for every meal the year round. Meat, fish, clams, etc., may be canned with perfect success.

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Please mention THE WASHINGTON FARMER when writing advertisers.

Guernsey Excursion

Two Days by Boat; One on Land

The second annual Guernsey excursion to the Guernsey Islands of America, namely, the San Juan islands and Whidby island, will be held July 18, 19 and 20. The trip this year will be two days by boat, and one day by land and the crowd will return by way of the Clinton ferry by Everett. The steamer Potlatch will again be chartered for the first two days, but the excursionists will be taken to some point either on Whidby island or to Whatcom county, where the breeders will act as hosts for the third day of the trip.

The boat will leave Seattle on the night of July 17th, and the first day of the trip will be spent visiting herds on Orcas island. A barbecue dinner has been planned for the crowd on Mount Constitution, one of the scenic spots of the island. Plans are not yet complete as to the third day, but the time will either be spent visiting the herds on Whidby island, or in Whatcom county. In either case the excursionists will be taken care of until the evening of the second day, when the Potlatch will return to Seattle, and any who desire may return to Seattle with her.

This excursion is the second of its kind, and the three days spent among the islands last year was considered one of the best breed excursions ever held in the state. It is an ideal outing for any one who is interested in any breed of cattle, whether Guernseys or not. Meals are usually furnished by the hosts, and only one meal a day, breakfast, was served on the boat. The trip includes berth during the two days and what meals will be necessary on the boat. A good crowd is expected this year, since every one that attended last year expressed their desire to go again this year if possible.

The expenses of the trip have been estimated at $14 for the two days spent on the Potlatch, while the cost for the third day will be very light. Those wishing to make reservations for the trip should write to Leland J. Clark of Bellevue, secretary of the Washington State Guernsey Cattle club, or to E. L. Westover, 211 Northwestern Bank building, Portland.

Stimulate Patriotism

When Professor Edmond S. Meany of the department of history of the University of Washington wrote "Americanus" he was inspired by a desire to counteract various present day activities that seek to break down fundamental American institutions. "Americanus" is one of the most stupendous pieces of pageantry, combined with drama, oratorio and grand opera, that has ever been attempted in this country. It will be presented in the University of Washington stadium at Seattle each evening of the week of July 23-28, under the direction of Montgomery Lynch, producer of the "Wayfarer," which was presented in Seattle last year and previously.

"Americanus" will portray six important episodes in American history, from the colonial days to the present time. Such characters in history as Washington, Jefferson, Lincoln, Roosevelt, General Grant, General Lee, General Pershing, Wilson and Harding will be portrayed by men selected for their personal resemblance to the originals and their ability to play the parts.

It is understood that President Harding looks upon the feature as of sufficient importance to justify him in arranging his present western itinerary so as to return from Alaska during the week of "Americanus" to attend one evening's performance.

Ten thousand persons will take part in the performance, including a 1000-piece band. Choruses will be sung by 5000 voices.

An especially important episode in the pageant is that dealing with the Monroe doctrine, the 100th anniversary of the pronouncement of which is being celebrated this year.

While the spirit of patriotism inspired the author and those taking the leading parts in this great spectacle, the net proceeds from its presentation will be turned over to the student body of the University of Washington to help pay off the debt against their stadium.

REPLACES HOLSTEINS WITH JERSEYS.

"Six of the prettiest grade Jerseys a man could ask for," is the way Anton Adolphsen of Lewis county described the herd which L. B. Hope of Chehalis recently assembled to take the place of five purebred Holsteins which he sold to Albert Hamilton. Five of the animals were purchased from John W. McCutcheon of Adna, who has been using purebred sires for 20 years, and the sixth from Adolphsen.

HERD PREFIX RESERVED.

"Golden Glen" is the herd prefix and farm name reserved by the Holstein-Friesian Association of America for the use of Willson & Boyd of Sunnyside, Wash.

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It is conceded that the two greatest cows, combining type and production, that the world has ever produced, are TILLAMOOK DAISY BUTTER KING DE KOL, with a four-year-old record of 32,450 pounds of milk and 1260 pounds butter, grand champion cow Pacific International Live Stock exposition, 1922, proclaimed by Judge Moscript as America's greatest show cow, and LADY AAGGIE ORMSBY OF ROCK, with approximately 30,000 pounds milk and 1100 pounds butter, grand champion cow Pacific International, 1921. The sire of the former is our senior herd sire, SIR BESSIE FAYNE DE KOL FOBES. A full brother of the former, and a son of the latter, are our junior herd sires.

As a result of this breeding, we have ninety head of purebred cattle, all having straight top lines, square udders, and not a sloper in the herd. Our blood lines, in combining superb type and production, are unequaled and unapproached by any other breeder.

We are offering scientifically bred young bulls and heifers of our blood lines at prices within your reach and upon terms that are reasonable. HIGHLAND GROVE FARM.
F. R. BEALS, Proprietor. Tillamook, Ore.

Hollywood Holsteins A fine individual son of our junior herd sire out of 796-lb. 4-year-old dam.
HOLLYWOOD FARMS, Hollywood, Wash.

Jersey Bull for Sale

Two-year-old registered Jersey bull, Cleo's Poppy's Lad. Sire, Anoka's Poppy's St. Mawes. Dam, Hester's Cleo, was producing 504 lbs. of fat in year and 50 lbs. of milk per day shortly after dropping this bull. Price $200. See bull at O. L. Moore's farm, Colton, Ore., or write
MRS. A. M. CLARK, Portland, Ore.
294 Fargo St.

Jersey--Gold and Silver Medal Sire

Ashnook Farm offers a few heifers and young bulls, sired by the gold and silver medal sire, Silver Chimes, of S. B., sire of ex-world champion heifer, Silver Chimes Gwendola, and 20 register of merit daughters, and more qualifying.
DEL PERKINS, Carlton, Ore.

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Sired by Gertie's St. Mawes and out of tested dams with good records.
C. F. BATES, Rt. 5, Salem, Ore.

Silver Medal Jersey Dams First four two year-old daughters of Susie's St. Mawes Poppy, average 575 lbs. fat, with first calf. Young bulls at attractive prices.
JOHN KOPPLIN, Gaston, Ore.

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Bull calves by Foothills Corporal, record of merit bull and grand champion at Pacific International, 1919, and Jackson county fair, 1922, the only times ever shown. Sire of champion and grand champion calves. Correspondence solicited.
KIRTLAND FARM, Central Point, Ore.

Milking Shorthorns Cows and young bulls by Peerless Knight, by Beau of Glenside, carrying 93¾ per cent of champion milch cow, Rose of Glenside.
J. E. DANILLS, Murphy, Ore.

Read the "Want Ad" page this week for good offers of all kinds.

Richly Bred Holstein Bulls Grandsons of the great Matador Segis Walker and out of dams on yearly test, making good records.
A. J. EVERS, Forest Grove, Ore.

Richards Champion Durocs

We have 25 last fall gilts, bred to farrow during July, August and September; also boars ready for service and the best lot of spring pigs we ever raised. All sired by our champion boars and out of big sows. They are priced way down to sell quick. Write for prices. Satisfaction guaranteed.
RICHARDS LIVE STOCK COMPANY.
Virginia, Idaho.

Bargains Weaned Duroc boar pigs from heaviest prize winning herd, Wash. and Ore. state fairs. Champion stock, $25; 1st prize stock, $20; all others, $15.
S. D. CORNELL, Grandview, Wash.

4 Poland China Bred Sows

And herd boar. Best big type blood lines. Good individuals. Bargain prices to close out.
J. L. BROGDEN, Hillsboro, Ore.

Big Type Poland Chinas Weaned pigs, bred gilts at farmers' prices. My pigs please from California to Alaska.
H. J. STILLINGS, Hermiston, Ore.

Polands Big type male pigs, weaning age; Archdale, Peter the Great 2d, Designer, Peter Fashion, Chess, Clansman, breeding; reasonable prices.
B. F. KAMMERZELL & SONS, Colfax, Wash.

Berkshires An exceptional lot young boars. Breeding unsurpassed. Offered on a year's time. Write for sale plan.
Cedar Canyon Farms.
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Red Poll Bulls

For sale, at farmers' prices.
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BREEDER OF RED POLLS.

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COMP D O
EXPERIMENT STATION
URBANA ILL

Cattle Ranch to College

(Continued from page fourteen.)

advantage of to enjoy what pleasures the town afforded. The gamblers and saloonkeepers did a thriving business, though a perilous one, for on the slightest provocation the frontiersman was ever ready with his shooting irons.

It was only a few weeks after the Indian attack described before the parching heat of summer began to give way before the dreaded wintry breath of the north.

John and Ben, when they went out to guard their father's stock, gave up their daily swimming in the river and took up horse racing instead; and many a race was hotly contested. The boy, however, who rode Baldy, the big bay, always won.

Mr. Worth, as has been noted before, was a freighter; he was also a miner, opening up mines of coal in the deep-cut river banks, the coal so obtained being sold to the government for the fort garrisons.

On these coal-prospecting trips he usually went alone, carrying on his back the bare necessaries of life: a blanket, perhaps a string of bacon, a bag of beans, and a little coffee, besides the never-absent rifle and revolver.

Late in the fall, Mr. Worth set out on a prospecting trip. The garrison of Fort Lincoln and other outposts situated up the river were clamoring for more fuel, and no time must be lost if they were to be supplied before the heavy snows set in.

John went with his father a half day's journey, helping to carry his equipment. They started out afoot, and the mother, holding the baby in her arms, watched them.

"So long," called back Mr. Worth, as he started out.

"So long," returned his wife.

At dark, John returned and, in his self-sufficient way, began to prepare for the night. He and Ben each saddled a horse, of which there were several tied to a pole, and set out to round up the "saddle band" (as the ponies which were reserved for riding were called), and the work stock of mules and pack horses. They were not far off, nibbling the tufted buffalo grass, and soon were turned toward the corral, the boys riding on either side, ready to head off any animal that showed a disposition to separate or lead the "bunch" astray.

The stock safely disposed of, John and Ben went back to the shack, but were promptly sent out again for wood and water.

"Let's get a lot of wood," said Ben, "for it's colder than blazes tonight. Hope father will find a good place to turn in tonight."

"Oh, he's all right," replied John, between grunts, for the load of wood he was carrying was both heavy and bulky.

An hour or so later, the windows and door were barred, the embers of the fire scattered, and all hands turned in for the night. The beds were really bunks built into the wall, and were not exactly luxurious, spring mattresses being quite unknown; but the boys found them comfortable, and in a minute or two were rolled in their blankets like great cocoons and fast asleep.

Mr. Worth was not expected back for several weeks, for his journey was to be a long one and subject to many delays on account of bad weather and, worse, Indians.

It was about a week after he had left that Charley Green came up to where the boys sat on the doorstep braiding whips or quirts.

"Hullo, kids," he said, "Mr. Mackenzie wants—what are you doing?" His curiosity made him forget his errand.

"Braidin' a rope to hang a couple of horse thieves," said John, facetiously. "What did you think we were doing, branding calves?"

Even the kids made fun of the "tenderfoot," who was really a good fellow, just out from an eastern college, but densely ignorant as far as western ways went. He saw he was being laughed at and so hastened to come back to his errand.

"Mr. Mackenzie wants some old clothes, blankets, and other warm things for a man who turned up just now, half-dressed. He's almost frozen. White man, too," he added.

In a few minutes John and Tenderfoot Green reached the sheriff's shack, bearing clothes and blankets. The crowd that stood before the door parted and allowed them to pass.

In the far corner of the room, leaning over the fire, sat a man who turned his head as John and Green came in.

"Why, it's my father!" cried John.

(To be continued.)

CALL OFF TRANSPORTATION HEARING.

The hearing scheduled for Seattle July 17 by the interstate commerce commission to inquire into the inadequacy of transportation for fresh fruit during 1922 has been called off. The only hearing to be held in the state on this subject will be at Spokane July 30, immediately after the Wenatchee Southern hearing. Both will be held by Commissioner C. B. Aitchison. The Wenatchee Valley Traffic association will present a large amount of evidence at the Spokane hearing regarding the failure of the railroads to furnish adequate transportation for the fresh fruit crop of 1922, especially in the Pacific northwest.

Yakima Fruit Prospects

(Continued from page six.)

affects the packing rules. The text reads: "All apples packed under these regulations shall be arranged in the container according to the approved and recognized methods, with the stems pointing toward the end of the box except when jumbled and all packages shall be tightly filled, but the contents shall not show excessive or unnecessary bruising because of an overfilled package."

One of the big factors and one that will play an important part in the marketing of this year's peach crop is the new association that is known as the Yakima Peach Growers, Inc. This is a cooperative organization that was organized under the cooperative marketing law and requires that the state director of agriculture appoint one of the members of the board to represent the public.

The idea of the new body is to stabilize the prices of the peaches for the entire season and prevent under-bidding or price cutting, which has heretofore caused unsettled prices, according to many of the growers. By signing up practically 90 per cent of the crop on five-year-contracts the officers of the association feel that there should be less trouble in maintaining a fair price.

"The new body is to be strictly a selling organization that will sell to dealers and to the trade," said H. H. Lombard of Yakima, president of the board of directors. "It is our plan to have loading stations in many of the towns of the valley to load the fruit direct onto the cars. We are going to have inspectors of our own and we will also call on the state inspectors and ship every year under state certification.

"In this way we can handle our sales through brokers in the middle west and we feel that we can market the crop very economically. The organization was formed last year, but we were not incorporated and there were only 300 cars shipped out. This year we expect to give it a real trial and we see no reason for not making the plan a real success."

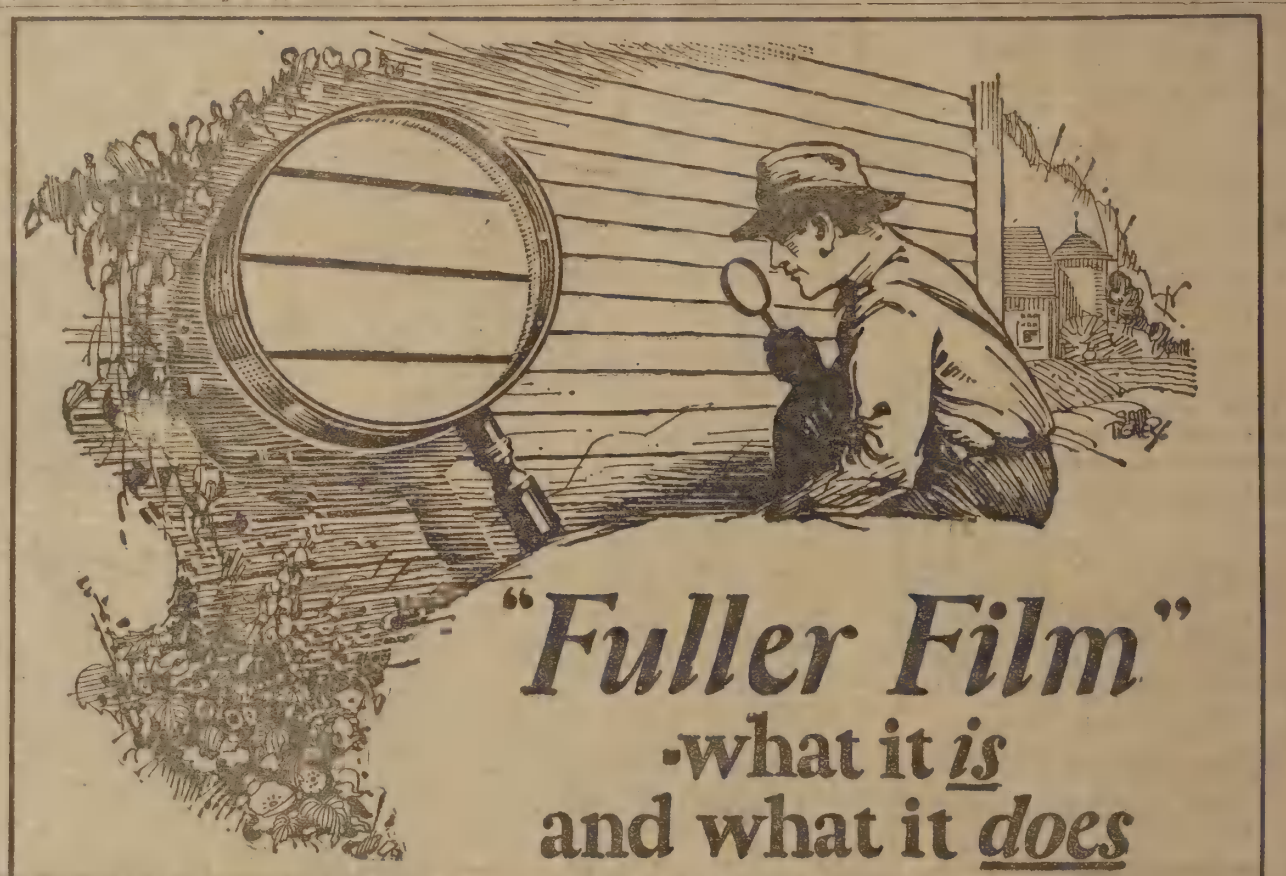
The officers of the association are: H. H. Lombard, Yakima, president; Bruce Wees, Donald, vice president; Ed Ballard, Buena, secretary; Fred Thompson of the Thompson Fruit company, Yakima, manager and treasurer, and John Bourgaize, Zillah, trustee. Mr. Thompson has had 30 years' experience in the valley as a fruit grower and shipper.

Market Created at Yakima.

The cannery at Yakima has created a market for a large quantity of fruit and a few vegetables as well as giving employment to from 200 to 300 men and women during the rush season. Operations begin at the plant about the middle of May with the early crop of spinach. This year there are 400 acres of the crop under contract.

Royal Anne and sour cherries are then ready and after that come table beets, Bartlett pears, peaches and apples. Last season this plant put out 70,000 cases of pears and there were nearly 100,000 cases of apples. The cannery has a concrete floor, which is 198x530 feet, and has six complete lines of modern canning machinery, with four large reports. The warehouse has a capacity for 135,000 cases.

A report has been made that the cannery will call for pears of a certain size this year, No. 1 pears to be two and three-eighths inches in diameter. In regard to this grade, G. B. Kile, superintendent of the local plant, says that as yet the officials have not called for such close grading, but that there is little doubt but that it will be demanded at some future time.



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THE WASHINGTON FARMER

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Of Darbalara,
a Wonderful
Milking Short-
horn.
(See Page 15)

Baruch Offers Interesting Advice to Organized Wheat Growers—Page 4

Beware of Swindling Game

Tricky Peddlers of Doubtful Stocks Promise Farmers Alluring Returns

THE fact having come to the attention of Spokane bankers that glib-tongued salesmen of oil and mining stocks and other worthless or doubtful "securities" are operating with renewed boldness in eastern Washington and northern Idaho, the clearing house association has named a special committee to warn farmers and other possible investors against tricky stock peddlers.

One salesman recently sold $50,000 of questionable oil stock in one community in the Palouse region, and boasted that he would place $200,000 there before fall. He persuades his victims that by buying shares of this stock they can easily make up losses incurred by short crops or low prices. He then takes the wheat grower's note and discounts it with the country or city banker, leaving the buying banker to collect from the unfortunate farmer next fall. Some of these salesmen have offered Spokane banks collections of farmers' notes running as high as $50,000.

BANKERS WHO BUY THESE NOTES.

Stock salesmen who are taking farmers' notes would have to quit the game if they were unable to discount them. Bankers who buy these notes are making it possible to fleece hard-working farmers and others in their own communities. If any of our readers should discover after harvest that their notes are in the hands of a bank, or of an individual connected with a bank, they would have a right to hold that bank to a strict accounting. In some instances these stock salesmen have been known to get from a local bank the names of prospective buyers of stocks, and then, supplied with a list of representative farmers, they go from place to place in search of victims.

Farmers in all parts of the Pacific northwest have been swindled, and many impoverished, by unwise ventures into the stock game. A federal reserve bank official recently said that money put into worthless stocks in southern Idaho during the good years after the war was sufficient to have met all the obligations of all the banks, in one county, when deflation set in. Many farmers, he said, made the lamentable mistake of putting their profits into these worthless stocks, with the result that they had no cash reserve to tide them over the bad years.

"BLUE SKY" LAW OF WASHINGTON.

Farmers in Washington state should understand that the "blue sky" law enacted by the last legislature and effective since June 7, instead of protecting them against peddlers of questionable stocks, is actually being twisted by stock salesmen to further their game. All companies issuing stocks for sale in this state must secure a permit from the secretary of state, and salesmen of corporations granted such certificates are showing them as evidence that the certificate is an indorsement of their scheme by the state. The truth was pointed out recently by Charles R. Maybury, in charge of "blue sky law" enforcement, who said: "The issuance of a certificate to sell stocks in the state by the secretary of state is in no way an indorsement or guarantee of that stock. The state can not indorse or guarantee the stock of any corporation."

GAMBLE WITH PEOPLE'S MONEY.

The odds are overwhelmingly against the buyers of these dangerous securities ever getting back a fraction of their original investment. Long observation convinces THE FARMER that buyers of mining and oil stocks have not one chance in a hundred of making a profit. Even with the best of these ventures, the promoters generally are gambling with other people's money—with the hard-

(Continued on page twelve.)

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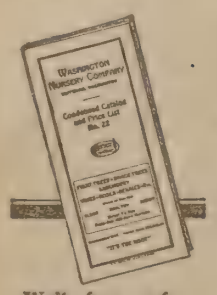

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Union **Non-Detonating** Gasoline is always **uniform.** It doesn't disintegrate, thus doesn't deteriorate in storage. It has all the power when you use it that it has when it leaves the Union plants.

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Union Gasoline

Kittitas County People Move a Mountain

Country and City, Men and Women, Unite in Making County Fair Grounds and Public Park in Two Days

By RALPH ERSKINE

In the days of our childhood we were told of moving mountains through the united efforts of a whole community, but little did we dream that we have just such a community of folks right here in our home state. On June 14 and 15 the farmers of Kittitas county and the business men of Ellensburg met 500 strong and literally did this thing. It was a necessary step in the building, during those two days, of a new fairgrounds, brief mention of which has been made in THE FARMER.

The work was all done under a well-organized system of superintendents and straw bosses, each of whom was responsible for a certain job. There were 500 men, 220 horses and four tractors that began work at 7:30 in the morning and worked until five that evening. They took only an hour off for lunch, which was served in exactly 12 minutes by 50 women who were delegated to prepare the eats. All work was donated, as were the supplies for the dinner, and the people of the county now feel that they have a real personal interest in their new fairgrounds as a result of their participation in its construction.

The story properly begins soon after the close of the county fair last year. For three years the people had been using an old building formerly occupied by a woolen mills near the business part of town. The women were dissatisfied with the building, which had housed all of their part of the exhibits and they all declared they would never show their articles there again.

When the subject of a new location came up, many difficulties presented themselves, the greatest of which was that of financing such a large undertaking and to secure an organization capable of handling it. A committee consisting of W. L. Davis, the county agent, as chairman, found three sites and called a general meeting of the following organizations, with whom they talked over the plans: The county commissioners, the fair board, the county farm bureau, the chamber of commerce, the city park and playgrounds association, the city park committee from the Elks, the Rotary and Kiwanis clubs, the state college extension service, the Ellensburg state normal school and the Ellensburg high school. The president and secretary of each body were invited.

This, of course, was their organization meeting and the problem of financing the scheme was partially eliminated by Dr. J. C. McCauley of Ellensburg, who was joint senator of Kittitas and Chelan counties who introduced a bill at the last session of the state legislature which allows a county of this size to capitalize for $10,000 for any purpose deemed necessary. This was called the McCauley pig and pumpkin fair bill. When the plan was first considered the bill had not yet passed, but the committee went ahead and got an option on the property that had been agreed upon and were ready when the law became effective three months after being signed by Governor Hart.

Committee at Work.

In the meantime the committee of three, consisting of Mr. Davis, Dr. McCauley and J. C. Caynor, had been working and had gone into details as to getting the cooperation of the park committee with the idea of having a city park on the same grounds. The plan met with approval and was looked upon with favor by the county fair board, since they realized that there were more than 11 months of the year when the fairgrounds were not in use.

The spot chosen was ideal in that it is near town, it lies in splendid shape for a fairgrounds and consists of 18 acres, part of which is on a side hill which can readily be beautified. There is a stream of water running through the property which can be used to make small ponds or wading pools for the children. It is also in a part of town that is desirable for a park site and it is at the end of one of the main streets of the city.

The new law went into effect June 7 and by that time many of the plans had already been made for a field day, on which the business men and farmers of the county were to cooperate in building the grounds. The same committee was appointed to continue with the plans for the work to be done that day and the rest of the story is told in the results that were accomplished that day.

The jobs that were to be accomplished were laid out and the men selected to act as superintendents and straw bosses, each to be held responsible for some one task. The names of all men that were available in the county were then gone over and each assistant asked to personally solicit his men and get them to promise to turn out early on the day that was designated, June 14.

The county engineer was asked to draw up the plans for all grading and filling, as well as for building all bridges and roads along the side hill and diverting the course of the creek that originally passed through the center of the grounds. This was done in order that all work could be done according to carefully prepared plans.

When the day arrived the men were all on the job sharp at 7:30 and every one worked hard at his own particular job in an effort to get as much done as possible. There were men from almost every walk of life; farmers, city business men, office men, doctors and lawyers, many of whom had done scarcely any hard physical work for years. They all stuck to their task and made the work lighter with sallies of wit and challenges until the sound of the dinner bell at the far corner of the grounds caused a general stampede.

Here the women had arranged 10 tables with five women at each. The men were lined up in 10 lines and marched along the tables and the women loaded the plates and handed them out as they went by. Mr. Davis said that he held the watch on them and found that it took only 12 minutes to supply the entire multitude. It was a simple meal, but substantial and tasted better to the workers than many a "table de hote" spread.

On the committee that prepared the dinner were Mrs. Henry Mitchel, Mrs. Charles White and Mrs. W. D. Carter. The tables were set in an orchard on one of the lots adjoining the grounds. They had so well organized their work that no sooner had they gotten the men through the lines than they were ready with their dishes and were offering seconds to those that had fin-

(Continued on page fourteen.)

The largest of these pictures gives a birdseye view of the proceedings out of which grew the fairgrounds at Ellensburg the middle of June. The other two show at closer hand how the crews worked on their respective tasks. It was an occasion for pleasure, but primarily pleasure in a lot of work being well done.

Seven Hundred Farm Folk Visit College Experiment Station

By JOE L. ASHLOCK

"Well, what new things have you got to show us today?"

"That's the way I like to hear farmers talk," said a member of the state college experiment station staff. "These western farmers are ready for the new thing just the minute they are shown that it's better than the old."

Two hundred and fifty automobiles from all parts of eastern Washington were parked under the trees and in the open places on the state college campus. Not less than 700 farmers were attending annual farm field day prorgram and taking part in the tour over the state farm.

The forenoon tour took in the dairy and beef cattle herds and the new poultry plant. A band of fine young calves pastured among big, leafy trees whose shade defies the hottest days known in the Palouse country, claimed particular attention. Judging by the way the visitors stayed in the calf pasture, one would suppose that the visiting farmers liked the shade about as well as did the calves. The day was warm.

The Noon Campmeeting.

Noon brought forth a big picnic luncheon under another flock of those big, shady trees. The stacks of fried spring chicken and the big round chocolate cakes made one think of campmeeting with everybody entertaining a preacher. Here in the comforting shade, chicken and cake and ice cream and new potatoes and peas and cherry pie and neighborhood gossip held the hour.

"Why, no, he's been dead for 12 years," came in a big, bass voice, from the left. "Three dishes of ice cream are enough for any boy," said a mother to her son. "Yes, he died 12 years ago sick only 10 days." "The man in the poultry plant said bran and sawdust were made of the same kind of stuff," drifted in from the right. "That reminds me of a fellow that fed his chickens sawdust—and they quit laying eggs and laid knotholes." "Who's going to be president?" From many directions the answers: "Ford—Jack Dempsey—Harding—Underwood—Walt would if he'd run!"

When Soil Wears Out.

The most serious concern of the wheat farmer, as brought out as the farm tour progressed, was that dealing with the crop-producing power of his land. Soil that is wearing out is not helped by the introduction of new crops. Before anything else can be done, the soil must be ready to produce.

A difficulty now experienced by wheat farmers is that the legume crops—red clover, alfalfa, sweet clover, peas and so on, suggested for use between grain crops, result in so much enrichment of the soil that the following grain crop "burns" or "lodges."

Lodging, or burning, though much different in aspect, proceed from the same cause. In one case, the red clover sod richly supplied with plant food, encourages, in early spring, more vigorous growth than the later and drier part of the season will sustain.

Or it may be that in some seasons rainfall continues through the months of crop growth. In this case, the grain becomes topheavy, is knocked down by the wind; that is, it lodges.

The use of the legume crop to give his soil a period of rest, or rejuvenation, thus gets the wheat grower into difficulties. Nevertheless, in all the systems of tillage and crop rotation worked out on the state college farm, no method is found doing quite so much to keep soil producing and in good health as is the occasional intercrop of red clover, alfalfa, peas or sweet clover.

In a field experiment worked out on the state college farm by F. J. Sievers, red clover land before being turned under for grain production, was dressed with straw at the rate of one ton to an acre. This operation prevents burning in a dry season, or lodging in a wet season. The method is recommended for use, and is already practiced by many farmers who use a legume in their system of crop rotation.

Wheat Is Overfed.

Occasionally a wheat grower, while satisfied as to the fact, wants to know the reason why. The "why" of this particular bit of farmology gets into chemical formulae unintelligible to any but the chemist. Stated roughly, setting aside a bit of the hair-splitting phraseology of the chemical laboratory, the nitrogen as left in the soil by a crop of red clover, is food to the growing wheat plant. Small wheat plants, like small children generally, overeat if given a chance. Overstuffed on nitrogen in the first few weeks of their existence, the wheat plants, like overstuffed children, become fat, overgrown; and when hit by the hot winds, they get thirsty. If it rains, they take a drink and grow some more. If it does not rain, they dry up—that is "burn."

Now, although clover, peas, alfalfa and other legumes leave the soil rich in nitrogen food, wheat straw does not. Wheat straw puts carbon into the soil. The clover sod is over-rich in nitrogen, and under-rich in carbon. So the addition of the straw pieces out the shortage, balances up the ration as it were, holds back and makes more stable the growth of the wheat plant.

All farmers know, of course, that straw thrown on their fields has a bad effect. That is the reason why so many of them burn it.

Straw for a Balancer.

Here, however, straw is recommended for use on a legume sod. Where farmers must use straw on their land on which legumes have not preceded the cereal, they are advised to summerfallow or plow it

(Continued on page fifteen.)

Turn to Page 12

Announcement of the winners in The Washington Farmer's recent slogan contest will be found on page 12 of this issue.

THE WASHINGTON FARMER

Successor to
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"Barney" Baruch Makes Suggestion to Wheat Growers

Bernard M. Baruch advises the American wheat growers to strengthen the United Grain Growers, buy out an established selling concern, such as the Armour Grain company, and handle the exportable surplus of the American crop. In a letter to the editor of The Washington Farmer Mr. Baruch says:

I hope you will give thought to the plan and make some comment upon it. I do not differ in any way from the Grain Growers or any farm activity which desires or is already operating under cooperative marketing. The idea back of my suggestion is simply to take a piece of machinery that is already well organized and functioning, retaining, if possible, the man or the men who have been the directing influence in its success. To me this seems a practical short-cut and a conclusive supplement to the cooperative grain marketing methods already in existence, for what we all want is the best plan to assure the success of cooperative wheat marketing, which is the only possible source of relief of the American farmer. And the emergency requires that it be brought forward quickly.

Mr. Baruch explains that to be effective at least 35 per cent of the country's wheat acreage would have to be a party to the cooperative scheme.

"Think of what this would do for the farmer," adds Mr. Baruch. "He would have a practical organization, with practical men to do what needs to be done. His organization would deal only in grain. Enough farmers would be asked to subscribe an amount sufficient to make a large part payment, the balance to be paid out of the cost of handling the grain. The farmers would receive a certificate of interest for their original subscription and for the profit made out of the grain until the profits had paid for the purchase. Armour & Co. would retain a certain number of directors and the farmers would have a certain number, until gradually, through the profits of the concern, Armour & Co. were paid in full, or until, by further subscription, the farmers paid off the balance. In the meantime there would be no control of the organization except by means of a certain class of directors who would provide the balance of power on the board and whose business it would be to see that the organization was run according to contract and to settle any disputes between the two parties."

A Chicago dispatch quotes George F. Mracy, president of Armour & Co., as saying that he was very much interested in Mr. Baruch's idea, and that "we are open to any proposition made to us." Mr. Baruch quotes Mr. Marcy as saying that if this plan had been in operation last year he believed the farmers of America, under the world conditions then prevailing, could have obtained 40 cents a bushel more for their wheat without costing the people of the United States any appreciable extra amount for bread.

We are not disposed, at this point, either to condemn or to approve the Baruch plan. Much would depend on the terms under which it is proposed that the grain growers would contract to buy the Armour Grain company. If a contract could be drawn that would be fair in price and protect the grain growers, the plan would be deserving of careful consideration.

When Is Oleo Not Oleo?

Everywhere the fight goes bravely on against bogus butter and other imitation dairy products. The big Dairymen's League Cooperative association, in annual session at Utica, N. Y., a few days ago, called upon the government at Washington to follow the example recently set by the Canadian parliament, which passed a law prohibiting the manufacture, sale and importation of oleomargarine and other substitute butter in the Dominion of Canada. Our government, the resolutions declare, should take the same action "in the interests of public health, agriculture and general welfare." Eighteen hundred dairymen from five eastern states, representing nearly 100,000 engaged in the industry, attended the Utica convention.

As fast as the dairymen stop the traffic in one kind of imitation butter, a new product bobs up on the market somewhere. The New York Produce Review reports the appearance on the market in Providence, R. I., of another kind of "oleo" called "Nut-Z-All." It is said to be made of vegetable oils, probably a combination of cocoanut and peanut oil. The product is colored to about the same shade of yellow as good, average June butter, and is packed in small cartons of triangular shape, labeled by the trade name as stated above and called a "cooking compound."

The manufacturers, when brought before the internal revenue bureau, claimed that it was not oleomargarine, and a ruling was made that it was not subject to the provisions of the oleomargarine act. More recently, though, the internal revenue bureau has withdrawn that first ruling and issued a new ruling holding that Nut-Z-All was subject to the oleomargarine act. The manufacturers are contesting the ruling in the courts. The case raises a technical question whether or not a compound made up of oils or fat other than butter fat, to imitate butter in every way except taste, comes within the statutory definition of oleomargarine, which defines oleomargarine by the use of the words, "in semblance or imitation of butter."

Experts who have seen the new product say that if they were in a store where butter is sold and saw it they unhesitatingly would buy it, thinking it was butter, unless they definitely cut into it and sampled it by taste. It is said that manufacturers and vendors of real oleomargarine are asking that this product be classified as oleomargarine, claiming that it is a fraud on their product as well as on butter to permit it to be made and sold without the statutory warning and labeling.

The Raspberry Saw-Fly

Spraying with arsenate of lead, one pound to 25 gallons of water, will effectually control the raspberry saw-fly, says Arthur Frank, plant pathologist of the western Washington experiment station.

If you are not on the mailing list for the bulletins of the western Washington experiment station, write and have your name put on the list.

In the July bulletin, just out, Mr. Frank tells of some common, but unfamiliar, fruit pests and how to control them.

During the last two seasons the work of the worms of the raspberry saw-fly on the leaves of the raspberry plants has been very prevalent. The worms are greenish-white, looking much like the under surface of the raspberry leaf upon which they are working. The body is covered with fine hairs. The adult is a medium-sized, wasp-like fly. The eggs are laid within the tissues of the leaves in May and soon hatch. The worms begin eating on the upper side of the leaf, cutting out perforations which increase in size as the plant grows. The larger worms eat irregular holes, leaving only the veins. When abundant they may also eat tender parts of green shoots and blossom buds of young fruit.

Farmer Must Fight On

Inch by inch farmers are fighting their way into the marketing game. The fight isn't over yet. The grain company organized by the Farmers' Union of Nebraska has just been denied membership in the Omaha Grain exchange. This is the second time membership on the exchange has been denied the union.

Washington State Gleanings

RECORD WHEAT STALKS.

The V. B. Tapps wheat in the Baker district between Ridgefield and Vancouver on the Pacific highway is attracting much attention. It is of the Scotch Fife variety. Stalks measuring six feet two inches tall with long heads, well filled, are being exhibited by Tapps, who believes it will thresh from 50 to 60 bushels to the acre.

CELEBRATE AT WOODLAND.

Three thousand persons attended the Planters' day celebration at Woodland June 30. The day commenced with a tour of the dike lands by automobile at 9:30 a. m., after which followed band concerts and speaking. At noon the barbecue was served at the fairgrounds.

This was the second annual Planters' day celebration, which is an annual day of thanksgiving on account of the great dikes at Woodland.

HAY GROWERS ENTHUSIASTIC.

Enthusiastic response to the idea of organizing an all-northwest hay growers' association was shown by the growers in the Touchet and Hermiston, Ore., districts, according to L. A. Hunt, manager of the Oregon Cooperative Hay Growers, who, jointly with Boyd Oliver of San Francisco, held some meetings in those districts. At Hermiston quite a few business men attended the meeting and indorsed the movement. Together with the growers, they pledged themselves to assist in seeing the organization campaign through.

PROSSER HAS LARGE CHERRY CROP.

The cherry crop from the Prosser section of the Yakima valley was the largest reported in the past seven years. Although only a limited amount of cherries are grown in the Prosser district, it is estimated that approximately $30,000 worth of the fruit will be sold during the next few weeks. Returns on the first carload came in June 21, which netted the growers $2500. Prices also are exceptionally high for cherries placed on the market at this time of the season; prices for commercial cherries range as follows: Bings, 10 1-2 cents per pound; Lamberts, 9 1-2 cents, and Royal Annes, 9 cents.

NEW ORCHARD PLANNED.

Having faith in the future of soft fruit growing in the Yakima valley, W. H. Wyman of Summitview will next year add to his holdings of developing orchard. Recently he acquired seven acres of land on a ridge in the Richland district and is having the land cleared and prepared for planting next spring. He will set the entire seven acres to Bing cherries. Last year Mr. Wyman planted five acres of pears near Cowiche and this spring added 10 more acres of pears on the same property. Mr. Wyman said he does not believe that the time will ever come when too many Bings are grown in the Yakima valley.

LARGE CHERRY YIELDS REPORTED.

F. Stanley Millichamp of Wapato realized a gross return of $1417 from 89 Bing cherry trees, 8, 9 and 10 years old. The trees, which occupy half an acre, yielded 14,170 pounds, which were contracted for at 10 cents a pound. Seedling cherry trees planted between the Bings and used as pollenizers are partly responsible for the size of the crop, Mr. Millichamp said he believes.

An average of 450 pounds of cherries for a large number of trees is perhaps as good a record as reported so far this year. Seth Brown of Naches harvested 38,760 pounds of cherries from 75 Bing and Royal Ann trees, making an average of 450 pounds a tree. The ground occupied by the trees is three-quarters of an acre.

One of the large yields from comparatively small cherry trees is that secured by William Hanlon on Summitview. Four Royal Ann trees yielded 1160 pounds, or an average of 290 pounds a tree. A Bing tree yielded 396 pounds of cherries. Mr. Hanlon attributes the satisfactory yield to opening up the trees in pruning.

PLAN FOR POULTRY SHOW.

Preparations for putting on the greatest poultry exhibit ever staged at the state fair are under way, is the announcement of Secretary H. P. Vermilye. In the first place the antiquated coops are to be removed and sent to the junk pile and 1000 new wire coops of the Keipper type installed. This will add greatly to the attractiveness of the exhibit.

E. A. McInnis of Yakima, proprietor of the McInnis hatchery, will be the poultry superintendent. Mr. McInnis took the course offered at the Puyallup experiment station and has been operating a plant at the edge of that city for the past year. D. F. Mitchell of Spokane will be assistant superintendent.

As a stimulus toward a better poultry show, Secretary Vermilye this year, in making up the premium list, increased the awards until they equal those offered by the Oregon state fair. He is assured already from breeders he has had communications from that there will be a bigger and better poultry show than ever this fall.

In the demonstration department at the model poultry house, Charles H. Westaby of Terrace Heights will exhibit 100 laying pullets of the White Leghorn class. There will be the usual demonstrations in methods of feeding and caring for a commercial flock.

POTATO BUG IS MENACE.

The potato bug situation in the Kennewick and Pasco districts is very serious and threatens the potato industry of those sections with destruction, according to W. E. Johns, deputy horticultural inspector, stationed at Kennewick. The Colorado bug (properly beetle) is very prevalent on the Pasco side of the Columbia river, and there are enough beetles on the Kennewick side of the river to infest the entire district by next year. This is the view taken of the situation after making a survey of the Pasco and Kennewick districts recently. The menace is not so much in the large fields as the growers there are spraying and keeping their fields clean, but it is in the small patches grown for home use and in the backyards in the towns that there is neglect.

"The danger lies not only in the ravages of the beetles in our fields, but the quarantine of our potatoes in the markets of other states," said Mr. Johns. "Already there is a quarantine on potatoes from many of the California districts on account of the tuber moth and on the potatoes from some other states on account of the Colorado potato beetle. It is safe to assume that as soon as it is known that the Colorado potato beetle is active here, a quarantine will be slapped on potatoes, not only for shipment out of the state, but into other potato growing districts of the state."

FARM BUSINESS AND MARKETS OUTLOOK

CONDITIONS in the cattle market were reversed last week as the preceding decline in prices together with the holiday choked off the run so that combined receipts at 10 markets fell off about 35 per cent. Dressed beef markets were aided by cooler weather and began to recover from the recent spell of indigestion.

Prime steers again reached a top of $11.50 at Chicago and much of the previous damage to prices on other grades was repaired, although common natives lagged on the upturn because of the abundance of cheap Texas beef, the arrival of the vanguard of Kansas and Oklahoma grassers at Kansas City, and the discriminating mood of the consuming public. Much the same behavior occurred in the butcher cow and heifer division. Receipts of calves were the lightest since February and prices advanced sharply, but declined again toward the close as the supply expanded.

That an increase in supply is on the cattle market horizon is indicated by records of former years. In the last nine years arrivals at the seven leading markets have increased from an average of 156,000 head in the second week in July to an average of 238,000 head in the last week in August, a gain of over 50 per cent. A further increase to 312,000 head in the third week in October has been the average history of the same years.

Expansion of Hog Production.

Expansion of hog production apparently has not yet been checked by higher prices for corn and lower prices for hogs. The survey by the department of agriculture not only shows an increase of 9-10 of 1 per cent in the number of pigs raised in the six months ended June 1, 1923, but an intention on the part of producers to breed 28.3 per cent more sows for fall pigs than farrowed in the fall of 1922. Conditions in the last six weeks and during the rest of the summer may discourage breeding and stimulate the sale of brood sows, but it is hardly likely that the full amount of intended increase will be overcome.

Light receipts for 10 days put top hog prices above the $8 mark early last week, but this advance attracted big runs, Chicago receiving on July 9 the third largest number for one day in the history of the market.

Domestic demand for hog product continues broad. Exports have shown a progressive decline for several weeks, most of the falling off being in lard. Clearances of lard in the last month have been the lightest for any like interval in more than a year.

Western Lamb Run Starting.

Receipts of western range lambs have been gradually expanding, although practically all of them stopped at Missouri river markets until last week, when Oregon, Idaho and Nevada contributed to Chicago. A sharp decline in prices resulted and a further break may occur as the range movement rises to high tide.

The wool market manifested a better tone last week and the end of the recent sagging tendency appears to be at hand. Most of the weakly held wools have been disposed of. Foreign markets are firm at the recent decline, especially at London, with continental countries the chief buyers.

Mills are still consuming wool at a high rate on old orders.

In the west conditions remain quiet. In the bright wool states 46 to 48 cents is the going price for most clips, with choice wools up to 50 cents or slightly higher.

Wheat Prices Below Dollar Mark.

Wheat prices declined again last week, the July delivery breaking below the dollar mark at Chicago, and reaching practically the lowest point since 1914. Increasing receipts of new crop wheat, greater hedging pressure, limited sales for export, dull flour trade, failure of a rust scare to develop in the northwest and bearish sentiment were elements in the decline.

The department of agriculture estimates the winter wheat crop at 586,000,000 bushels and spring wheat at 285,000,000 bushels, making a total of 821,000,000 bushels or slightly less than expected. The combined carryover on farms and in the visible supply is only 12,000,000 bushels larger than last year, or a much smaller increase than expected early in the season.

While the movement of new wheat from farms is increasing, it is slower than at the corresponding time last year or two years ago and demand is enough greater than receipts to make further inroads into stocks at terminals. The world's available supply in commercial channels has been declining rapidly in the last few weeks and stocks on ocean passage have fallen off 25 per cent in the last month, owing largely to lighter exports from North America.

Foreign crop prospects show no decided change recently. Canada still promises an enormous yield. Italy will have 44,000,000 bushels more than last year and France 33,000,000 bushels more, according to recent estimates. Reports of moderate exports from Russia in the next few months are persistent. The Argentine acreage for harvest next December and January is believed to be larger than last year.

Although the European harvest is a little later than usual, foreign buyers are not aggressive and have contracted for much less wheat than usual at this season.

The rye crop has deteriorated in the last month, the July 1 forecast being 68,700,000 bushels, compared with 72,500,000 bushels a month ago, and 95,500,000 bushels harvested last year.

Corn Crop Below Normal.

The estimate of the department of agriculture shows a slight increase in the acreage planted to corn, but because of poor condition the yield forecast is 2,877,437,000 bushels, compared with a harvest of 2,890,712,000 bushels last year and an average yield of 2,931,271,000 bushels in the five years, 1917 to 1921.

Cash demand has broadened again as industries are expanding, operations and purchases by feeders are rather persistent. The live stock production outlook suggests heavy domestic consumption during the next 12 months. Export sales are small. Clearances last week were only 175,000 bushels, compared with 6,716,000 bushels from Argentina.

Receipts of corn at primary markets have been gradually increasing and last week were the heaviest since April.

Oats prices declined to the lowest of the season last week. They are cheap compared with corn, receipts are not large and the visible supply is only 8,532,000 bushels, compared with 42,743,000 bushels last year. The new crop is estimated at 1,284,000,000 bushels, compared with 1,201,000,000 bushels last year.

Cash Grain Markets.

The range of cash grain prices for the week ended July 11 was as follows:

CHICAGO—Corn—No. 2 mixed, 81 1-4@86 1-4c; No. 2 yellow, 83 1-4@88 1-4c; No. 2 white, 82 1-4@88c; No. 3, 82 1-4@87 1-2c. Oats—No. 2 white, 40 1-4@43 1-4c; No. 3, 38 3-4@41 1-2c. Barley—60@69c.

Clover Seed Market Weak.

Clover seed prices are still weak and at the low point of the season, with alsike now quoted nominally higher than red. New crop prospects continue favorable. Timothy seed prices are stable.

Feed markets are declining again, as interior demand is dull, stocks are ample and offerings are increasing. Bran for September and October shipments is quoted at $1.50 below prompt shipment prices and new crop cottonseed meal is quoted at a discount of $3 to $5 below prevailing prices.

Prices per ton (100-pound bags) in carlots: Chicago—Bran for September and October shipment is quoted at $31; cottonseed meal, 36 per cent, $39.25; 43 per cent, $44.50; hominy feed, $32; gluten feed, $37.15; old process oil meal, $39; tankage, $57.

Hay Market Outlook Favorable.

The department of agriculture reports that the 1922 hay crop has been well cleaned up, with 90 per cent of the marketable surplus of timothy, 98 per cent of the alfalfa and 97 per cent of the prairie hay disposed of by June 15. A little more timothy, but less alfalfa and prairie, is on hand than at the same time last year.

Besides the rather light carryover, condition of the new crop on July 1 was placed at 81.1, compared with 88.7 last year, and a 10-year average of 85.5. The acreage is smaller than last year also. Much of the first cutting of alfalfa was spoiled by rainy weather at cutting time. Some of the best new hay is being warehoused in anticipation of a heavy fall demand from the southeast.

Prices per ton in carlots: Chicago—No. 1 timothy, $23@24; No. 2, $19@22; No. 1 light clover mixed, $19@22; No. 1 clover, $17@19; No. 1 and choice alfalfa, $16@25; midland prairie, $17@20; rye straw, $11@12; oat and wheat straw, $9@11.

Egg Holdings Largest on Record.

A record egg pack was shown by the official preliminary report, which showed holdings for the entire country on July 1 of 10,213,000 cases of eggs, a surplus of 402,000 cases, as compared with the same date last year. The movement into storage during June has been very heavy, as holdings on June 1 were smaller than on June 1, 1922.

Scarcity of good quality eggs lent support to the market last week and prices for this grade will probably begin to work higher. Production still exceeds current consumption and receipts show effects of hot weather, so that it is not probable that the general run of eggs will sell much better for a while.

Butter Market Develops Strength.

With an active demand for butter for storage in distributing markets and a shortage of top scores as a result of recent hot weather, the butter market developed strength last week and prices were maintained without difficulty. With widespread cool weather, plenty of rain and excellent pastures, maximum production and good quality should result, so that lower prices are probable later in July. Reports on the make for the whole country for the week ended June 30 showed a decrease as compared with the preceding week, indicating that the peak has been passed.

Cheese Market Firm.

The recent declines in the Wisconsin cheese market failed to have much influence over distributing markets, where prices were firm at from 1 to 1 1-2 cents over the country quotations. The decline in prices from June has resulted in more active trading, as many storage operators were waiting for lower prices before entering the market. Storing of cheese is going on on a larger scale, and stocks are heavier than last year, the preliminary report showing holdings of 35,769,000 pounds on July 1, compared with 33,730,000 pounds a year ago.

Fruits and Vegetables.

Potato prices advanced sharply last week. The total volume of shipments from producing sections has been declining gradually for several weeks. Shipments of new potatoes for the season to July 9 were only 24,602 cars, compared with 33,450 cars last year.

The acreage planted to white potatoes is 10 per cent smaller than last year, according to the government's estimate, and a yield of 382,000 bushels is forecast, compared with 451,000,000 bushels harvested last year and an average of 388,000,000 bushels in the five years, 1917 to 1921.

New apples now predominate in carlot shipments. They are not coming forward as freely as last year, however, as the total for the season to July 2 was only 126 cars, compared with 878 cars a year ago.

The commercial apple crop is estimated at 33,100,000 barrels, compared with 31,000,000 bushels harvested last year and an average of 25,700,000 bushels in the preceding five years.

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Range of Live Stock Prices for Week Ending July 11, 1923

CATTLE.	Chicago.	Spokane.	Portland.	N. Salt Lake.
Ch., prime heavy steers (1100 lb. up)	10.50@11.60			
Good heavy steers	9.75@10.65			
Medium heavy steers	8.40@10.15			
Common heavy steers	7.00@ 8.75			
Ch., prime light steers (1100 lb. d'n)	10.40@11.45			
Good light steers	9.75@10.50			
Medium light steers	8.35@ 9.90	6.50@ 7.75	6.75@ 8.35	6.50@ 7.25
Common light steers	6.00@ 8.50	4.50@ 6.50	5.00@ 6.75	5.00@ 6.50
Common to choice butcher heifers	5.50@10.35	3.75@ 6.50	3.50@ 6.00	4.00@ 5.75
Common to choice butcher cows	3.65@ 8.75	3.00@ 6.00	2.50@ 5.50	3.00@ 5.00
Bologna and beef bulls	3.50@ 5.40	3.00@ 4.00	3.00@ 4.50	2.00@ 3.25
Canners, cutters, cows, heifers	2.35@ 3.85	2.00@ 2.75	1.50@ 2.50	1.50@ 3.00
Canner steers	3.50@ 5.75	2.75@ 3.50	2.50@ 3.50	2.50@ 3.75
Medium to choice light veals	8.75@12.25	7.00@ 8.50	7.00@ 8.00	7.25@ 8.00
Common to choice heavy veals	5.50@10.00	6.00@ 7.00	4.00@ 7.00	
Com. to choice feeders (750 lb. up)	5.75@ 8.50			
Com. to choice feeders (750 lb. d'n)	4.50@ 8.40	4.00@ 5.50		5.00@ 5.60
Common to choice stocker calves	3.75@ 4.75			
Com. to choice stocker cows, heifers	3.25@ 5.75			
HOGS.				
Top of market	8.10	8.25	8.50	7.35
Bulk of sales	6.65@ 8.00	7.25@ 8.25	7.75@ 8.25	6.50@ 7.00
Heavy (250 lb. up)	6.50@ 8.00	7.25@ 8.25	7.75@ 8.25	6.50@ 7.00
Medium (200-250 lb.)	6.75@ 8.10	7.75@ 8.25	8.00@ 8.50	6.75@ 7.25
Light (150-200 lb.)	6.65@ 8.10	8.00@ 8.25	8.25@ 8.50	7.00@ 7.35
Light lights (130-150 lb.)	6.60@ 8.00	7.50@ 8.00	8.00@ 8.50	
Smooth packing sows (250 lb. up)	5.90@ 7.00	5.50@ 6.50	6.00@ 6.75	6.00@ 6.50
Rough packing sows (200 lb. up)	5.50@ 6.50	4.75@ 5.75	4.50@ 6.00	5.50@ 6.00
Medium to choice pigs (130 lb. d'n)	6.25@ 7.75	7.50@ 7.75	8.00@ 8.50	
Stock pigs		7.00@ 7.50	8.00@ 8.50	5.50@ 6.00
SHEEP AND LAMBS.				
Medium to prime lambs (84 lb. d'n)	12.50@16.25	10.00@12.00	9.50@10.50	10.50@13.00
Culls and common lambs	7.50@13.50	6.00@10.00	6.00@ 9.50	7.00@10.50
Medium to prime yearling wethers	9.25@14.25	7.50@ 9.00	6.00@ 8.00	7.00@ 8.00
Medium to prime wethers	4.50@ 8.50	6.00@ 8.00	5.50@ 6.50	5.00@ 6.00
Common to choice ewes	3.00@ 7.00	2.00@ 6.00	2.50@ 5.50	3.00@ 5.00
Canner and cull ewes	0.75@ 3.50	1.50@ 2.50	1.50@ 2.50	

LATEST QUOTATIONS.

The Live Stock Market.

PORTLAND, July 14.—Cattle—Choice steers, $7.75@8.35; medium to good steers, $7@7.75; fair to medium steers, $6@7; common to fair steers, $5@6; choice heifers, $5.50@6; choice cows and heifers, $5@5.50; medium to good cows, heifers, $4.50@5; fair to medium cows, heifers, $3.50@4.50; common cows, $2.50@3.50; canners, $1.50@2.50; bulls, $3@4; choice dairy calves, $8@8.50; prime light calves, $7.50@8.25; medium light calves, $7@7.50; heavy calves, $4@7.

Hogs—Prime light, $8.75@9; smooth heavy, 230@300 pounds, $7.50@8.50; do 300 pounds and up, $7@7.50; rough heavy, $4.50@6; fat pigs, $8.50@8.75; feeder pigs, $8.50@8.75; stags, subject to dockage, $2.50@4.

Sheep—Choice valley lambs, $10.50@11; medium valley lambs, $9.50@10.50; common valley lambs, $7.50@9; cull lambs, $6@7.50; light yearlings, $7.50@8; heavy yearlings, $6@6.50; light wethers, $6@6.50; heavy wethers, $5.50@6; ewes, $1.50@5.50.

SPOKANE, July 14.—Cattle—Prime steers, $7@7.75; good to choice steers, $6.50@7; medium to good steers, $6@6.50; fair to medium steers, $5.25@6; common to fair steers, $4.50@5.25; choice cows and heifers, $6@6.50; good to choice cows, heifers, $5.50@6; medium to good cows, heifers, $4.50@5.25; fair to medium cows, heifers, $3.50@4.50; canners, $2@2.75; bulls, $3@4; light veal calves, $7@8.50; heavy veal calves, $6@7; stockers and feeders, $4@5.50.

Hogs—Prime mixed, $8.50@8.75; medium, $7.75@8.25; heavies, $5.25@7.25; fat pigs, $8@8.25; stockers and feeders, $7.50@8.

Sheep—Prime lambs, $11@12; fair to medium, $10@11; yearlings, $8@9; wethers, $6.50@8; mutton ewes, $3.50@6.

The Grain Market.

PORTLAND, Ore., July 14.—Wheat—Soft white, $1.03; western white, $1.02; hard winter, northern spring, western red, 96c.

Grain futures—Wheat—Soft white, July, $1.03; August, $1.02; western white, July, $1.02; August, $1; hard winter, northern spring, western red, July, 96c; August, 94c.

Corn—No. 2 eastern yellow, shipment July, $37.50; August, $35.75.

SEATTLE, July 14.—Wheat—Hard, soft and western white, Big Bend Bluestem, $1.04; hard and soft red winter, 98c; northern spring, western red, $1.

PULLMAN, July 14.—Red, 81c; white, 84c.

WALLA WALLA, July 14.—Bluestem and Bart, 89c; club, 88c; Turkey red, 81c.

DAYTON, July 14.—Club, old, 89c; new, 84c.

LEWISTON, July 14.—Old red, 87c; white, No. 1, 92c.

RITZVILLE, July 14.—Bart, 88c; red, 84c; Fife, 80c.

DAVENPORT, July 14.—Bluestem, 89c; Gold Coin, 86c; club, 86c; dark northern spring, 86c; northern spring, 83c.

Hay and Feed Grain.

SPOKANE, July 14.—Wheat—Feed wheat, $44 ton. Oats—$42 per ton; rolled, $44. Corn—$44 per ton; cracked corn, $46 per ton. Barley—$40 per ton; rolled, $42. Bran—$31 ton. Bran and shorts—$32 ton. Shorts—$34 ton.

Alfalfa, $20 ton; timothy, $28 ton; mixed hay, $24 ton.

PORTLAND, July 14.—Millfeed—City delivery prices: Millrun, $33 per ton; middlings, $45; scratch feed, $50; rolled barley, $37, cracked

(Continued on page twelve.)

LIVESTOCK AND DAIRY

Relative Value

Timothy, Clover and Winter Vetch

By J. SOTOLA,
Department of Animal Husbandry, State College of Washington.

Can you tell me the relative value of timothy, clover and winter vetch in a cured form? Also in a green form as pasture.
R. E. T.
Scotia, Wash.

First of all I think a series of tables giving the chemical composition of these feeds as hay and as fresh green roughages will help you considerably in detecting any difference in these feeds. Their composition is as follows:

Hay—Per Cent Composition.

	Dry Matter.	Protein.	Total Digestible Nutrients.
Vetch hay	92.9	11.6	58.0
Clover	87.1	7.6	50.9
Timothy	88.4	3.0	48.5
Fresh Green Roughage.			
Vetch	20.4	2.7	12.3
Clover	26.2	2.7	17.1
Timothy	37.5	1.5	22.2

Winter vetch is fairly drought and cold resistant and yields from one and one-half tons to two and one-half tons of good, palatable hay per acre. The hay is sometimes richer in digestible matter than alfalfa hay. Many dairy men like the hay-oats-vetch combination better than just the straight vetch. This roughage affords good pasture for cattle, sheep and swine, and is particularly good for growing stock because of its high protein content.

Timothy hay is commonly called the best roughage for horses. However, it is not satisfactory for dairy cows because of its low content of protein material. For this reason it must be supplemented with expensive cottonseed meal or linseed meal. This roughage is not as palatable as vetch hay or clover hay, and if fed in too large quantities it has a constipating effect. Cows receiving the same grain feed produce about 17 per cent more milk on alfalfa hay rations than when timothy hay is fed. Of course, timothy has its advantage in that it is easy to establish a field of it. The seed is cheap and the crop cures easily into good hay.

Clover hay in a ration for fattening lambs or dairy cattle reduces the quantity of grain necessary for good results as compared to the feeding of timothy hay. Possibly with the exception of alfala hay, there is no better roughage for dairy cattle, sheep and beef cattle. Just like the vetch, it has a high lime content which is necessary for bone growth in young stock. Timothy, on the other hand, is poor in lime. As a pasture it has a high value, particularly for young growing stock. Cattle and sheep bloat on clover pasture, particularly if they are not accustomed to it. Pigs running on red clover pasture need only 70 per cent as much grain for gains.

If you really wish to get at the comparative value of the hays I believe that the column headed "total digestible nutritent" represents pretty closely the relative value of these feeds, keeping in mind that the vetch and clover are high in protein, and timothy low in this valuable nutrient.

LIFE PRESERVERS FOR LIVESTOCK

By DR. E. E. WEGNER, W. S. C.

Rabies.

This disease is probably the most dreaded of all the animal diseases. Rabies is common in the northwest and many counties have been quarantined when this disease has been particularly prevalent. Many persons have been bitten by animals that were supposed to be rabid and many animals have been lost because of this trouble. Then the anxicty that attends the period after a rabid animal has paid a visit to some one's place is not to be considered lightly. One never knows just how many nor which animals have been the unfortunate ones.

What to do and how? is the everlasting question that we are asked to answer. The dog and all his species is the most dangerous spreader because the saliva contains the poison in greatest amount and only the biting animals can spread it conveniently. Other animals may bite when they are diseased, but they are not likely to do so, since they are confined in corrals and pastures that can noo roam all over the country like the dog. The wild animals are very dangerous spreaders, since they are not controlled by man. If all animals could be controlled the spread of rabies would be easily prevented. This disease can not spread except by direct contract, as it is not carried from one animal to others by intermediate carriers.

One of the factors that make this disease uncertain is the indefinite period that may elapse between the time an animal is bitten and the time that it will show symptoms. If a rabid animal bites a dog today we can not say how long it will be before it is safe to allow this bitten dog his freedom. The disease may appear in three weeks or it may not appear for several months, and the same is true of other animals. If a coyote or dog gets into a herd of cattle and bites some of them we do not know just how long it must be before we are safe in assuming that they are not going to contract this disease. Late developments, however, have given us a method of proceedure that I think is the sensible one to follow under such circumstances.

Don't Kill the Dog.

Dogs sometimes bite people and are killed under suspicion that they are rabid. This is unfair to the dog and very poor policy on the part of the individual that is bitten. If you are bitten by a dog that you think may be rabid don't kill the dog. When you do you destroy the best source of evidence that can be used to find out whether the animal was really rabid or not. Tie the dog up or put him in a cage or confine him any way so that he can not do any more damage, but keep him alive and one can tell with absolute certainty whether he was rabid or not. If he was he will levelop symptoms that can be recognized within a few days and if he was not his continued good health will dispel all doubt as to his having the disease. Dogs are frequently killed and their heads sent to the college laboratory for examination. This consumes several days and when the characteristic bodies are found we do not hesitate to say that the animal was rabid, but when the bodies can not be found we hesitate to say that the animal was not rabid, since there is always a chance that these very small bodies might be there and escape the observation of the man with the microscope.

The brain of the dog or other animal is used to make the examination and this part should be carefully preserved if one expects the laboratory man to make a satisfactory diagnosis. Frequently dogs are killed by shooting them through the head or hitting them with a hammer or ax and in either case the brain may be damaged so much that an examination is quite impossible. Sometimes, too, heads are sent in that are so decomposed that the brain is almost a liquid mass and here again the laboratory man has no chance to give the information that is desired.

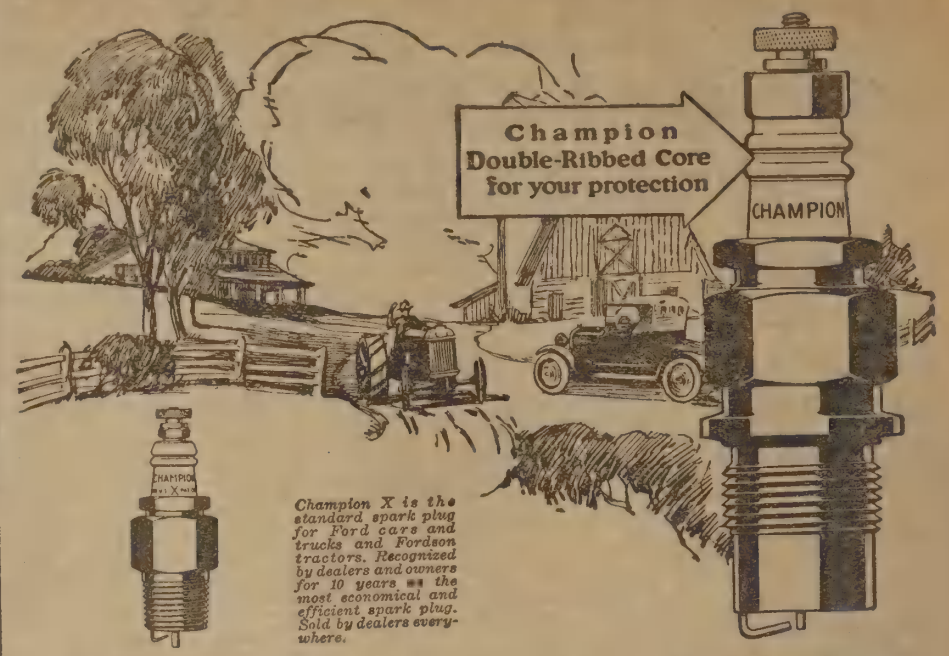
In case of wild animals that are suspected it is usually impossible to captture them and keep them to find out whether they were diseased or not and they have to be shot and killed. And in those cases

(Continued on page fifteen.)

We Buy and Sell
Grade and Pure Bred Dairy Cattle.
We can save you money whether you wish to buy or sell. One or a carload.
Graham Livestock Co.
E2605 Broadway, Spokane, Wash.
NEAR CARSTENS' PACKING PLANT.

BLACK LEG 100% PROTECTION FOR LIFE from *one* vaccination with Cutter's Liquid or Solid Blackleg Aggressin. Absolutely safe. Cutter's Solid Aggressin Injectors work just like Blackleg Pill Injectors. If Cutter's Aggressin is unobtainable locally, write
The Cutter Laboratory
"The Laboratory that Knows How"
Berkeley (U.S. License) California
N.B.—Old Style Powder and Pill Vaccines still made for those who prefer them.

Special Bargains in Tractors and Threshers
Two-plow tractors $350.00
Three-plow tractors ... 700.00
Separators $750 to $1250
Special bargains on some used outfits
WRITE AT ONCE.
Feenaughty Machinery Co.
REALTY BLDG.,
SPOKANE, WASH.



Champion X is the standard spark plug for Ford cars and trucks and Fordson tractors. Recognized by dealers and owners for 10 years as the most economical and efficient spark plug. Sold by dealers everywhere.

Champion Guarantee A Pledge of Better Service

The guarantee which appears on the carton containing each Champion Spark Plug is a definite pledge of the better service that is rendered by Champions.

Only because Champion is a better spark plug is such a guarantee possible.

Champion is better because of its wonderful new core—identified by the Double-Rib. This core has proved its superiority in literally millions of gasoline engines, including motor cars, trucks, tractors and stationary.

This core stands extreme changes in temperature without yielding. It is practically immune to breakage. It never loses its insulating properties.

A full set of new Champions will save you money, both in first cost and in gasoline and oil consumption. Because more than 65 per cent of all spark plugs made are Champions, the price of the Blue Box Line is 75 cents and 60 cents for Champion X

Champion Spark Plug Company, Toledo, Ohio
Champion Spark Plug Company of Canada, Limited, Windsor, Ontario

CHAMPION
Dependable for Every Engine

Saves Farmers' Wheat

Don't fail to investigate the merits of the Calkins improved machine before treating your seed with copper carbonate.
This machine has been thoroughly tested and is endorsed by STATE COLLEGES and many individual users.
EASY TO OPERATE
EFFICIENT AND DURABLE
Workmanship and material fully guaranteed.
The saving of seed on one crop more than pays the price of $67.50.
Order early to insure delivery.
FREE descriptive literature on request.
CALKINS MACHINE CO. Dept. T, W301 Boone Ave., Spokane, Wash.

Protect Human Health

by studying animal diseases that are transmissible to man. Thousands of veterinarians are employed in this capacity by cities, counties, states and the U. S. government. Many salaried positions as well as remunerative field in private practice. Write to E. E. WEGNER, Dean, College of Veterinary Medicine, State College of Wash., Pullman, Wash.

FREE CATALOG
Sash, Doors Millwork
Hundreds of beautiful designs direct from the manufacturer at money-saving prices. Send for your copy today.
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PLUMBING

Ask for new catalog of plumbing, heating and electrical supplies. Lowest prices; satisfaction guaranteed. We have sold plumbing for 19 years, and "EVERYONE KNOWS"
STARK-DAVIS CO.
188 Fourth St., Portland, Ore.
See us about Alamo Lighting Plants.

SEEDS AND NURSERY STOCK—Yes, they are offered on this week's "Want Ad" page.

POULTRY AND RABBITS

Oyster Shell

Important for Egg Production

By HUBERT E. COSBY,

A high grade crushed oyster shell product will show a chemical analysis of about 92 per cent carbonate of lime or calcium carbonate.

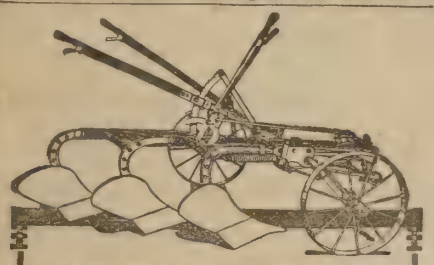
A cow will rob her skeleton of calcium in order to make milk, but the hen seems unwilling to do this. It is quite generally believed that soft-shelled eggs are caused by an insufficient amount of oyster shell. Results of several experiments at the University of Wisconsin, conducted by Professor J. G. Halpin, show, however, that the hen will not lay if not supplied with sufficient calcium; neither will she rob her body in order to supply the shortage of calcium. The hen will cut down her production until she accumulates a supply of shell material.

Professor Halpin reports that better production was secured by feeding the ordinary high grade oyster shell rather than by feeding pulverized oyster shell in the mash. He did not have as good results from feeding calcium carbonate precipitate or dry calcium phosphate in powdered form in the mash as with the ordinary oyster shell.

The oyster shell hopper or hoppers should be placed within easy reach of hens or growing pullets. The fowls soon eat the pieces of oyster shell they like best and very frequently the top of the shell supply is covered with fine powdered shell dust. This is not relished by the hens; they refuse to eat it and production slumps. Keep a supply of the kind of shell the hens like on top. Sift the dust out of the shell if it is too fine. Scatter a few handfuls, occasionally, with the grain in the litter.

Some poultrymen do not feed a sufficient amount of oyster shell because they object to its cost. Others buy an inferior, button-factory by-product, because it is cheaper. Many attempts are made to cheat the hen, but so far none has succeeded. She is a manufacturing establishment that simply quits when not supplied with the raw materials needed to manufacture the finished product.

In 1914 a careful study was made of the results from five egg-laying contests in Connecticut, Missouri and Pennsylvania. Over 3000 birds were considered for a period of one year, and the average consumption of oyster shell per hen was three pounds. The average cost per hen, therefore, is very low, and inasmuch as the hen can not yield profitably without a supply of calcium, this phase of poultry management can not be neglected, with profit.



Where Soil is Stubborn

—where ordinary plows will not stand the strains — that's the place for the extra-strong

John Deere Steel Gang

Built for the Pacific Northwest, and in wide use for many years.

Unusually simple and compact, and practically all steel—nothing to get out of order. Beams guaranteed not to bend or break. Heavy steel braces at front, middle and rear give it lasting rigidity.

Turns corners without tipping. Full-width cut can be easily maintained on hillsides and around curves. Unusual clearance—no stubble too heavy for this plow.

Genuine John Deere steel or chilled bottoms. Quick-detachable shares. Indestructible steel eveners.

See it at your John Deere dealer's. John Deere branch houses at Portland, Oregon; Seattle and Spokane, Wash., and Boise, Idaho.

WRITE TODAY for free folder. Address John Deere, Moline, Ill., and ask for Folder C.G.-647

JOHN DEERE

THE TRADE MARK OF QUALITY MADE FAMOUS BY GOOD IMPLEMENTS

Read the "Want Ad" page this week for good offers of all kinds.

Poultry Problems

Will you tell me what ails my roosters. I am enclosing a sample of feathers from their necks. Do you think it is a disease?
Orient, Wash. MRS. M. W. H.

This, from the feathers sent, appears to be a case of depluming mites. Dissolve sodium fluoride in warm water at the rates of one ounce to each gallon of water. Select a warm day and dip all fowls, being careful not to keep the head under very long. Be careful also not to leave the solution standing around for stock to drink. It is poison.

Will stock salt eaten by young turkeys or old ones cause them to get sick and die? They have a yellow diarrhea and refuse to eat and some of them linger longer than others. What are the symptoms of blackhead? What is the cure? MRS. M. C.

Yes, stock salt will kill either turkeys or chickens. The first symptoms of blackhead are a listless attitude, a pale head and a tendency to mope around. This is followed by a slight diarrhea. When the birds are cut open the liver is found to be covered with yellowish-green spots.

My chicks have thick sour milk and plenty of grit and bran which they can get at all times and dry mash of corn meal and oatmeal and range for their green feed. Their water and milk vessels are kept clean. Their droppings do not drop, but adhere in hardened hive-shaped masses. They quit eating and cry incessantly and finally die. Please tell me what to do? MRS. O. B. R.
Burbank, Wash.

There is something wrong with the feed, or the way of feeding it. It is necessary to scald milk vessels as well as keeping them clean. One half of the feed, or more, should be chick starter or cracked grains fed in deep litter. You will find some suggstion on chick mashes in this section of The Washington Farmer.

Intestinal Worms in Turkeys

By R. T. PARKHURST, Head Poultry Department, University of Idaho.

What is the trouble with and a remedy for my little turkeys? I have noticed a few seem to have bowel trouble. Their droppings, which are a dark gray color streaked with white, collect on their rumps and they are unable to have a passage. When the droppings are removed the poults bleed, then they become weak and stand with wings extended. The next passages are watery and the poults have passages very frequently. This condition exists until the poults die. I am feeding boiled eggs mixed with grit, also rolled wheat, charcoal and a little sweet milk. The turkeys are running in an alfalfa field and have plenty of fresh water. MRS. J. T.
Carey, Idaho.

The indications are that the poults are infested with intestinal worms. To make sure, I suggest that one of your sickest birds be killed and the intestines opened the entire length to see if the worms can be found.

To control intestinal worms I suggest that turpentine at the rate of one-fourth pint to seven quarts of water per 250 poults be given. The birds should be starved for 12 hours before this mixture is given. The same treatment should be given two days later, again in 10 days and again in 14 days. For individual treatment give one to two teaspoonfuls per bird with equal amounts of olive oil.

Says Bees Pay

"Every farmer in this community, or in any district where there is logged-off land in the near vicinity, should have a few stands of bees," said Fred L. Jenner of Oso. "They pay well for the trouble of caring for them, and there should be no trouble from foul brood, provided Italian queens are introduced. This practice strengthens the colonies and makes them able to ward off disease of this kind. There are other means of keeping out a disease, but in my opinion it is much easier to go at it from a prevention basis, and keep it out by means of strong colonies. I have 12 stands this year, but am planning on increasing the number as rapidly as possible, since I believe they are one of the most paying practices that a man can take up on the farm."

MONEY FOR EXTENSION WORK.

The extension services of the 48 states last year expended about $18,820,000 in their educational work. Of this about $7,000,000 was federal money appropriated under the Smith-Lever act.

What will your children eat during the hot vacation days?

Too much meat in summer overheats the blood; too much starchy food often interferes with digestion.

Children must have plenty of energy-producing food, but it must be wisely chosen.

Grape-Nuts is a safe and satisfying summer food. It supplies the energizing nutriment of wheat and barley, together with the natural mineral elements which many foods lack.

Grape-Nuts with milk or cream is *a complete food*, crisp and delicious, easily digested and quickly assimilated.

Grape-Nuts FOR HEALTH

"There's a Reason"

Your grocer has interesting details of our offer of over $7500.00 for Grape-Nuts Recipes. Ask him about it TODAY; or write to Recipe Dept., Postum Cereal Co., Inc., Battle Creek, Mich.

PERFECTION PLASTER WALLBOARD

For Walls and Ceilings

The Plaster in "Perfection" Wallboard is made from the finest Alaska gypsum between two layers of waterproof paper. For walls and ceilings it is the ideal material—waterproof, fireproof, and won't warp or buckle. You nail it and saw it just like lumber and it can be painted, calcimined or papered.

Ask for Booklet and Sample from your nearest dealer or lumber yard, or write direct to

Western Wallboard Co.
4527 Ninth Ave. South, Seattle, Wash.

The department editors of this paper are anxious to be of service to you. Do not fail to write to us if they can be of help to you.

ORCHARD AND GARDEN

Small Fruits

Important Crop on Simdars Farm

While the farm owned by Otto Simdars of Sequim, Clallam county, is a general farm and is located three miles from town, it has a four-acre patch of loganberries which promise to convert the owner into a producer of small fruits in the course of a few years. The plants are the same age as are most of the other patches in this neighborhood, that is, they are coming into their second year of bearing, and are in splendid condition, with a good stand of fruit set on.

The first planting was made from 2000 plants secured from Oregon three years ago and the rest of the field has been set from tips that were saved in the original patch. All rows are seven feet apart and the plants set 10 feet in the row. Mr. Simdars said that he now wishes that he had set the rows eight or nine feet apart, so as to be able to get a manure spreader between them. As they are now he must spread all manure on the patch with a small one-horse sled.

"I use a disk, a spring-tooth narrow and a grape hoe for cultivating the patch," said Mr. Simdars, "and find that very little hand work is necessary to keep the weeds down. The land is very fertile, but I find that the application of barnyard manure makes a big difference in the growth of the plants. They have a better color and I know the berries set on better when manure is applied than where no fertilizer is used.

"I have trained the canes with both the double wire and the three wire systems, but I believe that the double wires are best, since there is more room for the berries, and they are just as easy, if not easier, to train. I prefer to put the cane on the wires in the fall if the work can be attended to, but I could not get all of the patch finished and had to do the rest of the work in March and April.

"I find that it takes stronger wires for the top wires in this part of the state, where the snows are heavier, so that they will not fall down under the strain. I am going to put up No. 11 wires for the top ones after this. I am using three sets of wires, since it is better to keep the new canes coming up toward the sun and out of the rows, where they might be injured by the team when cultivating.

In addition to berries Mr. Simdars had 12 acres of field peas, which he intends to harvest for seed. The straw will be used for feed and returned to the soil in the form of manure. There is a demand for both pea straw and other straw in this section, but such a practice is not good for the land and when there is a small patch of berries there is plenty of need for all the manure that can be secured from a farm of this size.

Long Method of Pruning

The long system of pruning is showing unusual results at the C. P. Wickersham orchard near Tietonview, in Yakima county. This system has been in use for the last five years, and Mr. Wickersham declares that the trees have more bearing surface, more leaf surface, and the trees make a large growth, quicker than under the usual method of cutting back each year.

"Practically no objectionable features have been found with the new system," said Mr. Wickersham. "The advantages are so obvious, in my opinion, that I would prune in no other way. The idea is to treat each limb as a separate tree and to permit it to develop with only judicious thinning out and to promote fruit bearing its whole length."

This has been attained in his orchard, and his trees are well shaped and present a large bearing surface. This method permits of the trees opening up under the weight of fruit to let light in.

As an experiment, designed to show what would happen if a tree be permitted to develop its top in its own way, Mr. Wickersham has two Delicious trees which have never been pruned with the exception that some very low limbs were removed this spring. The trees have as good shape as the trees which have been pruned regularly and bear equally well; in fact, one of these trees outbears any tree in the immediate vicinity, but the fruit is of very inferior quality.

Mr. Wickersham has some blocks of Delicious trees, handled according to the long method of pruning, that are very heavy producers. This year they are carrying a heavy crop and will require considerable thinning. Winesaps are loaded this year despite the fact that they bore heavily last year and that this year should be their off year.

Mr. Wickersham puts on two cover sprays only and gets very clean fruit. Efficient spraying figures in such results and the fact that it is a new fruit district also figures in getting such clean fruit. Last year, which was recognized as a bad year for worms, he had only 1-6 of 1 per cent of worms. He pays the thinners 2 1-2 cents for every worm they find in the course of thinning.

Cabbage Root Maggot

By O. M. MORRIS,

Head Department of Horticulture, State College of Washington.

Can you suggest a way to rid cabbage plants of worms? A. J. K.
Chehalis, Wash.

This cabbage root maggot is one of the hardest pests to control. Various materials have been used with some little success by spraying or dusting them on the ground around the plant. After the worms once enter the soil or the roots of the plant, however, there is no method of killing them without killing the plant.

In transplanting young plants from the hotbed to the open field small paper cones can be fastened around each plant and in that way protect the plants. These cones can be made from some paper like thin tar building paper. Simply cut circles about nine inches across out of the paper, then cut to the center and cut out a small piece of paper in the center. Place this piece of circular paper around the plant and draw the outer edge until it laps some two or three inches. Fasten with a pin or a toothpick. This cone should stand so that it closes around the plant some three inches above the ground and touches in the entire circle formed. It seems that the fly, which is the parent of the maggot, will not lay the eggs on the plant, but lays them on the soil close to the base of the plant. The eggs hatch and the worm makes its way into the plant roots.

Two Acres Loganberries

M. E. Land of Port Angeles has two acres of Logans which will bear their first crop next year. The vines are growing in good shape and they will be trained up this summer. Part of the plants were from old hills that had been separated and set out. They made a fine growth the first year, but Mr. Land feels that the plants grown from the tips are more convenient and make as rapid growths if they are given the proper care.

WAR INFLUENCED BEE KEEPING.

Owing to the demand for sweets during the war the keeping of bees greatly increased during that period.

SPLENDID RESULTS

Nampa, Idaho,
May 21, 1923.

The Pacific Northwest Farm Trio,
Spokane, Wash.

We have had splendid results with ads in your papers.
—Adv. IDAHOME POULTRY FARM.

Farmers' Want Ads

MONUMENTS F

COMPLETE STOCK. WRITE FOR DESIGNS and prices. Inland Monument Co., N1001 Monroe, Spokane.

HELP WANTED—Female 1

A HOUSEKEEPER, BY WIDOWER; A GOOD home and reasonable wages to a good woman. Address Box 116, Prineville, Ore.

(Continued on the following page.)

GREAT NORTHERN PAYS TRIBUTE TO LOYAL EMPLOYEES

Justice to the rank and file of earnest and loyal workers in railroad service calls for the correction of an impression created in some quarters by radical leaders that the employees are seeking to destroy the railroads by inefficient and disloyal service. It is true that a comparatively small number of union leaders are seeking to cause a breakdown of the railroads under private operation with a view to bringing about government ownership. We believe that there remains today among the great majority of railroad workers the same fine sense of loyalty and honor towards the companies that has always characterized their service. That this is particularly true of the Great Northern is evidenced by the following resolutions unanimously adopted at a meeting of the Great Northern Veterans' Association on June 22, 1923:

WHEREAS, from various sources it has been learned that the financial affairs of the railroads in the northwest are insufficient to sustain a satisfactory financial condition; that much of the difficulty is due to high operating costs on account, among other things, of the present high prices of fuel and other supplies, and the rapid increase of late years in taxation, and

WHEREAS, it is most important to the employee to know that

His wages will be fair,

That he will be promptly and properly paid, when due, for services rendered,

That he is secure in his employment,

That his conditions of employment are good,
all of which depend upon the financial stability of the railroad, and

WHEREAS, in some quarters there is propaganda which tends toward the government ownership of railroads to secure which the railroad employees are exhorted to assist in bringing about that result by hampering the management through failure to give a full day's work for a full day's pay, and

WHEREAS, we believe it would be dishonorable and also destructive to the interests of the employee for him to adopt a policy of not giving a full and efficient day's work for a full day's pay,

THEREFORE, BE IT RESOLVED, that we condemn all propaganda designed to bring about any such policy as being dishonorable and destructive and that we trust and believe the Great Northern employees will not permit themselves to be led into such an unworthy and futile course.

FURTHER RESOLVED, that for ourselves we believe it is right and also clearly in our interest to support the management in its efforts to provide adequate and prompt service to the public and we pledge ourselves to do our full part in promoting cordial understanding and cooperative spirit in all matters of mutual interest between the company and its employees.

The spirit of enthusiastic loyalty shown by these Veterans of 25 years or more of service with the Great Northern is the spirit that prevails among its 30,000 employees.

LOUIS W. HILL,
Chairman of the Board

Talk No. 5

FARMERS' WANT ADS

This is the farmers' "want," "sale" and "exchange" department for small advertisements of farmers, including live stock and poultry.

Advertising rates for ads running 1 to 3 times, 10c per word per insertion, with a special rate to Farmer subscribers, as follows: Ads running 4 to 12 times, 9c per word per insertion; ads running 13 times or more, 8c per word per insertion.

All commercial and land advertising, 10 cents per word per insertion. Open also to nonsubscribers.

In using these columns advertisers must observe (1) No advertisement will be inserted for less than $1.00. (2) Every word, number and initial, including name and address, must be paid for. (3) New advertisements, changes of copy or cancellations must reach general office, Spokane, Wash., 10 days in advance of publication date. (4) Cash must accompany order.

Above rates include insertion in The Washington Farmer, The Idaho Farmer and The Oregon Farmer, which constitute the Pacific Northwest Farm Trio, 46 Review building, Spokane, Wash.

(Continued from preceding page.)

HELP WANTED—Male 3

REAL OPPORTUNITY FOR MEN WHO CAN make good as demonstrating salesmen. Large, long established manufacturer, is increasing its sales organization to sell an attractive nationally advertised home specialty direct to consumers. No previous experience necessary. Thorough training given. Drawing account allowed while learning. If you are dependable and energetic and want a profitable position with an assured future, apply in person or write at once to Wm. Geckler, 417 Crary building, Seattle, Wash.

MEN WANTED—TURN YOUR SPARE TIME into cash or devote your whole time to a highly paid, congenial business; good money year around; cash weekly. Middle-aged men find this attractive. Many of our men receiving $4000 to $5000 yearly under our plan. Experience not required. Washington Nursery Company, Toppenish, Wash.

WANTED — SALESMAN WHO CAN SELL high-grade, dependable nursery stock; several counties in Oregon, Wash., Idaho now open for assignment. Our selling contract will interest you. Address Albany Nurseries, Inc., Albany, Ore.

SALESMEN TO SELL OUR COMPLETE LINE of "trees that please." For particulars write Capital City Nursery Company, Salem, Oregon.

HELP WANTED GENERAL 5

MEN AND WOMEN, AGE 17 TO 30, AT ONCE to train for positions with Western Union Telegraph Co. and various railroads. Pacific Telegraph Institute, Spokane, Wash.

SCHOOLS AND COLLEGES 26

EARN $110 TO $250 MONTHLY, EXPENSES paid, as railway traffic inspector; position guaranteed after 3 months' spare time study or money refunded; excellent opportunities. Write for free booklet G-157, Stand. Business Training Inst., Buffalo, N. Y.

FRESH FOOD PRODUCTS 51-3

FISH—4 LBS. SMOKED SALMON, $1; 4 LBS. Alaska salmon bellies, $1; 4 lbs. black cod, $1; 3 lbs. best codfish, $1; delivered by mail. Coffin Fish Co., Seattle, Wash.

DRIED LOGANBERRIES; THIS YEAR'S crop; 2 lbs., 75c; 5 lbs., $1.85; 10 lbs., $3.60; 25 lbs., $8.75, postpaid. B. E. Cameron, Newberg, Ore., R1.

BEES AND HONEY 53

FAMOUS KITTITAS VALLEY ALFALFA HONey, extracted; postpaid 2d and 3d zones; 10 lb. pail, $1.85; 3 10s, $5; 3 5s, $2.75; 60-lb., $8. Kittitas Valley Apiaries, Ellensburg, Wash.

EXTRACTED HONEY — ONE 60-LB. CAN, $6.50; two 60-lb. cans, $12.75, collect; three No. 10 pails, prepaid, third zone, $5. Wells D. Rose, Sunnyside, Wash.

QUEEN BEES—BUY THE BEST. UNSURpassed Italian queens, 1, $1; 6, $5.75; 12, $11; 50, $45; 100, $85. Circular free. J. D. Harrah, Freewater, Ore.

HAPPY HOME HONEY—ALFALFA AND clover; 60-lb. can, $6.50; two cans, $12.75; case six 10-lb. pails, $7.75. H. N. Paul, Mabton, Wash.

NEW CROP EXTRACTED HONEY; FINEST ever; one 60-lb. can, $6.50; two, $12. Geo. O. Gould, Buhl, Idaho.

EXTRACTED HONEY—TWO CANS, SIXTY pounds each, $11; one, $6. J. M. Ruyts, Buhl, Idaho.

VALLEY BLOSSOM HONEY; QUALITY GUARanteed; 1 60-lb. can, $7.50; 2, $14.40. Ernest Sires, Route 7, Yakima, Wash.

MISCELLANEOUS—FOR SALE 80

SASH AND DOORS—O. B. WILLIAMS CO., 1943 First ave. So., Seattle. Chicken house sash, 20" wide by 25" high, 80c; a dozen different sizes in stock for immediate shipment. Skylights for chicken houses, 36"x40"; price, glazed, $2. This is the size recommended by the Western Washington experiment station. We carry them in stock for immediate shipment. Sash and doors for all purposes at lowest prices. All orders receive prompt attention. Our large illustrated catalog No. 35, showing full line of building material and built-in fixtures for the home, free on request. O. B. Williams Co. Established 1899.

PIPE—GET PARTICULARS ON OUR SPEcial flue pipe, 1¼, 1½ and 2 inch. Big saving on it. We also have all sizes second-hand and new standard pipe at low prices. We also save you on roofing, belting, pumps, engines, cables, etc. Alaska Junk Co., S120 Adams, Spokane, Wash.

LEAF TOBACCO—FIVE POUNDS CHEWING, $1.75; ten, $3; twenty, $5.25; five pounds smoking, $1.25; ten, $2; twenty, $3.50. Pipe and recipe free. Send no money, pay when received. United Tobacco Growers, Mayfield, Ky.

WALL BOARD—WRITE FOR SAMPLE OF Washington plaster wall board; won't warp, won't burn. Manufactured by Washington Building Products company, 6851 E. Marginal Way, Seattle, Wash.

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HOMESPUN TOBACCO—CHEWING, 5 LBS., $1.25; 10 lbs., $2.50; smoking, 5 lbs., $1.25; 10 lbs., $2. Farmers' Union, Mayfield, Ky.

TOBACCO — FINE, YELLOW MAMMOTH chewing, 10 lbs., $3; smoking, 10 lbs., $2; 20 lbs., $3.50. Farmers' Club, Mayfield, Ky.

FILMS DEVELOPED FREE BY KODO, THE Picture King, S15 Stevens, Spokane, Wash.

GRAIN BINS AND TANKS 90

METAL GRAIN BINS SAVE YOU MONEY. Write for circular T and prices. Spokane Culvert & Tank Co., Spokane, Wash.

MACHINERY—For Sale 93

TWO LATE TYPE, SNAPPY RUSSELL STEAM engines; two Rumely oil pulls, several separators, several small used gas engines. Fallquist Bros., W20 Riverside ave., Spokane, Wash.

THRESHERS, STEAM ENGINES, TRACTORS, trucks; all kinds of machinery. Exchange Machinery Co., W20 Riverside, Spokane.

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EMERSON STANDARD MOWER REPAIRS. Spokane Farm Machinery Co., Spokane, Wash.

TWELVE HORSEPOWER STOVER GASOLINE engine, $150. Albion L. Gile, Chinook, Wash.

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WE HAVE A FEW EXCELLENT USED CARS at prices that will surprise you; stop in or write. Inland Empire Chevrolet Sales Corp., 916 2d ave., Spokane. Open evenings. Open Sunday.

COLE 8; FINE CONDITION; BARGAIN. L. K. Deller, 911 Paulsen bldg., Spokane.

AUTO ACCESSORIES AND PARTS 119

FRONT AXLE BOLTS AND BUSHINGS, spring bolts and bushings. Wire and disc wheels. Sales and service. Pacific Gear & Auto Parts Co., 1022 First ave., Spokane.

STOVE REPAIRING 128

WRITE MYER RUBENS, SPOKANE, ABOUT stove repairs, welding broken parts, nickel plating.

PATENTS 150

PATENTS, TRADEMARKS, COPYRIGHTS. Write to B. P. Fishburne, registered patent lawyer, 398 McGill bldg., Washington, D. C.

FUR-BEARING ANIMALS 170

SILVER AND CROSS FOXES FOR SALE. William Rambo, 407 Sprague, Spokane.

PETS—Dogs, Birds, Etc. 171

FOXHOUND PUPS, FROM GOOD STOCK, $5 and $6 each. Harry Hull, Oakland, Ore.

RABBITS and HARES 173

LOOK! YES! YOUNG PEDIGREED HIMALAYans. Some fine pedigreed New Zealand Reds, few utility reds. Prices reasonable. Write Helen Sears, 5817 Oakes, South Tacoma, Wash.

POULTRY 174

WHITE LEGHORN PULLETS — MARCH, April and May hatches. From thoroughbred, mature hens, mated with cockerels of 225 to 265 egg record, Hollywood, Tancred or Gilbert strains; 8 weeks old, $1.20 each; 12 weeks old, $1.40 each; shipped with a guarantee of being satisfactory or any undesirable ones may be returned within three days and refund will be promptly made. Send 25 per cent with order; balance C. O. D. Mention this special offer when ordering. Queen Hatchery, 1430 First ave., Seattle, Wash.

CERTIFIED WHITE LEGHORN QUALITY chicks for summer and fall months, from selected free range, high egg producing breeding flocks, inspected and accredited by the Sonoma county farm bureau. Send for catalog and attractive prices. Safe delivery and full count guaranteed. Must Hatch Incubator Co., Inc., 445 Seventh st., Petaluma, Calif.

250,000 ACCREDITED BABY CHICKS FOR sale during May and June. Send in your order early. "A" grade, $6 for fifty; $11.50 per hundred; $110 per thousand. "AA" grade, $8.50 per fifty; $16 per hundred; $155 per thousand, f. o. b. Petaluma. Member of the Sonoma county farm bureau accredited hatchery list. White Hatchery, Petaluma, Calif.

SUMMER SALE OF "HENACRES" LEGhorns—2000 hens, 5000 pullets, 200 cocks, offered at special low prices. Direct from either our own breeding plant or commercial egg farm. "Henacres" quality at bargain prices. Write for sale price list. "Henacres," Box A, Prosser, Wash.

WHITE LEGHORN BABY CHIX FROM flocks mated to males having sire's dam record of 240 to 297 eggs per year. Full particulars and interesting literature on request. We are accredited by Sonoma county farm bureau. The Pioneer Hatchery, 422 Sixth street, Petaluma, Cal.

DANIEL'S WHITE ROCKS AND S. C. WHITE Leghorns; trapnested continuously; 8-week pullets and matured breeding stock at reduced prices. Free list. Ideal Poultry Yards, Hoquiam, Wash.

WHITE LEGHORN COCKERELS, WORLD record ancestors; pedigree with each bird; sired by son of Lady Wonderful. Special price on five or more. Prof. Frank Shepherd, Corvallis, Ore.

DOLLARS FOR YOUR EGGS—WE PAY THE top market prices for your eggs and poultry. Daily cash remittances. McClintock-Trunkey Co., produce department, Spokane.

ANCONA AND R. I. RED PULLETS, 3 months old, all from prize stock; 70c each, while they last. Peerless Poultry Farm, Sherwood, Ore.

JERSEY BLACK GIANTS, PEDIGREED MATings; 15 eggs, $3.50; 8-week-old chicks, $3 each. E. M. Chambers, Bovill, Idaho.

O. A. C. BARRED ROCK COCKERELS, APRIL-May hatched, $1.50, $2. Mrs. Faulconer, Skamania, Wash.

LIVE STOCK 177

WE GUARANTEE TO PAY THE HIGHEST market price for your poultry and live stock. Veal market growing stronger. Owing to the constant changes in the market we are unable to quote prices in this paper from week to week. We will furnish tags and prices when you are ready to ship. Write us what you have to sell. Prompt returns. John Lewis & Co., Spokane, Wn.

WE PAY TOP PRICES FOR YOUR LIVE OR dressed veal, hogs, and poultry. Your check by return mail. Shipping tags on request. M. & J. Packing Co., Spokane.

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FOR SALE—NO. 1 GRADE HOLSTEIN COWS and choice two-year-old heifers, fresh in fall; price right, car lots. Robert Tarry, Route 1, Mt. Vernon, Wash.

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FOR SALE—REGISTERED O. I. C. WEANling pigs. S. G. Anderson, Route 2, Box 205, Puyallup, Wash.

LIVE STOCK (Continued) 177

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REGISTERED SHROPSHIRE RAMS AND ewes. Write McK. Edwards, Valley, Wash.

FOR SALE—REG. HOLSTEIN BULLS; HERD fed, accredited. Whitla Ranch, Mica, Idaho.

TWO GUERNSEY BULLS, CHEAP. G. M. Brown, Grandview, Wash.

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SEND FOR FREE HARNESS AND SADDLE catalog today; cut out the middleman, buy direct from the manufacturer. Lowest prices in the west; satisfaction guaranteed. Established 1881. Write Pierce Harness Co., Dept. T, Spokane, Wash.

HOTELS 306

FAIRMONT HOTEL—RATES $1 DAY AND UP. 319 Riverside, Spokane. Free bus.

FAIR PREMIUM LISTS 370

GRAYS HARBOR COUNTY FAIR—BIG FARM and livestock show, at Elma, Wash. August 29 to Sept. 2; premium list free. Write C. H. Palmer, secretary, Elma, Wash.

JOB PRINTING 372

WEDDING ANNOUNCEMENTS AND INVItations, catalogs, booklets, high school annuals, letter heads, envelopes, cards, butter wrappers, etc. Union Printing Co., 412 First ave., Spokane, Wash.

200 SHEETS PRINTED WRITING PAPER, 100 envelopes, Hammermill bond. Write for samples. Parker Printing Company, 405 Pacific block, Seattle, Washington.

CLEANING, DYEING, Etc. 420

"VAPO" CLEANS YOUR RUGS WITHOUT REmoving. Makes them like new and is guaranteed not to injure them. Easy to apply. Send $4 for lifetime brush and one package of cleaner, enough for 3 rugs. Vapo Products Co., E1500½ Riverside ave., Spokane, Wash.

FRENCH DRY CLEANING BY PARCEL post. Ladies' and gents' suits, furs, hats, etc., prompt service. Address City Dye Works (Dept. A), E422 Sprague ave., Spokane, Wash.

CRESCENT CLEANERS, INC. — BETTER cleaning, dependable service. S303 Walnut, Spokane.

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ANY KIND OF HIDE TANNED WITH HAIR on, or for leather. Fur and taxidermy work done to order. M. R. Mohr Co., 321 Sprague, Spokane, Wash.

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MATERNITY HOSPITAL; STRICTLY PRIvate; doctor in attendance; prices reasonable. Mrs. Elizabeth Peel, matron. W1324 Broadway, Spokane.

BUILDING MATERIAL 588

TO PATCH A HOLE OR BUILD A HOME use Perfection Plaster Wallboard. Easily handled with hammer and saw; fireproof, waterproof. Western Wallboard Co., Seattle, Wash.

SEEDS 620

FARM SEEDS—ALFALFA, CLOVER, SWEET clover and corn are our specialties. It is to your interest to get our samples and prices before buying. Also garden and flower seeds. Send for catalog. Let us know your requirements in grass and field seeds. Darrow Bros. Seed & Supply Co., Twin Falls, Idaho.

HUNGARIAN VETCH SEED, 10C POUND. Write for prices on common vetch. Red and alsike clover seed. We have the best. Corvallis Feed & Seed Co., Corvallis, Ore.

TIMBERLANDS FOR SALE 645

¼ SECTION TIMBERLAND, IN LAUREL, Wash. Inquire C. H. Abelson, Idaho Falls, Idaho, R7.

FARM LANDS FOR SALE 651

STOCK FARM FOR SALE—ON ACCOUNT OF the death of the owners, the undersigned administrator will sell at private sale, 260 acres land, surrounded by national forest reserve, with ample accessible open range and water; about 120 acres in cultivation; spring water; rich, black soil, no crop failures; good crop of hay now growing on this land; ample barns and outbuildings; two small houses; located 13 miles from Republic, Wash.; farm implements, machinery and tools, cattle and work horses can be purchased with the land. This is an ideal stock layout. In order to settle the estate this property will be sold at a bargain. For further information address G. J. Tompkins, Admr., Republic, Wash.

POTATO, POULTRY, BERRIES, ALL cleared and in meadow. A few feet from paved highway; located a half mile from railroad station, good store and sawmill; excellent neighbors, fine schools, close to several good towns. Priced at only $100 an acre. Sold in 5, 10 or 20 acre parcels. Small payment down, balance in 10 years at 6 per cent. This is the best land at the price that we know of. Write or call for full information. Carter, MacDonald & Miller, 208 Columbia st., Seattle, Wash.

HIGHEST TYPE FARM LAND, WHERE SETtlers get steady and permanent employment and live at home. Level bench and river valley land; all good soil; an already well developed farm district; school, markets, roads, etc. Around Onalaska, Washington, and near Pacific highway (15 miles southeast Chehalis); 20 acres or more, $15 to $50; long, easy terms. A clean cut and fair proposition. Go to Onalaska or write Graham Land Company, American Bank bldg., Seattle.

BIG OPENING SALE OF YAKIMA VALLEY farm land, under an assessed state and government approved irrigation project; best, deep soil; close to town and good roads. Price $25 per acre and up. Very easy terms. Western Lands, Inc., owners, 918 Green bldg., Seattle.

FARM LANDS FOR SALE (Continued) 651

CUTOVER LANDS, EASY TO CLEAR; $15 TO $20 per acre; 25 miles north of Spokane; on hard surfaced highway; Great Northern and Milwaukee railways; excellent opportunity for dairying and stock raising with Spokane markets and creamery near at hand. Will help the man who will live upon this land and agree to clear a part each year by giving lumber to help start his buildings, and a purebred Jersey bull to groups of farmers. Interest and payments low. Write Milan Farms Development company, Dept. T, Old National Bank bldg., Spokane, Wash.

160 ACRES, NEAR RAILROAD AND STATE highway; about 500,000 feet saw timber, mostly yellow pine; 3000 to 4000 railroad ties (ties are 60c); about 50 acres can be irrigated when cleared; fine alfalfa land; plenty outside range on forest reserve; 4-room house, woodshed and cellar; small barn; about 50 acres cleared; trout stream runs through place. $1800; will take trade up to $600, car, city property or cattle. Address owner, Box 3, Orient, Wash.

ALFALFA LAND — IN SUNNY SOUTHERN Alberta, in the famous Lethbridge northern irrigation district; at low prices and on easy terms. Will also grow big crops of wheat, oats, barley, corn, vegetables, small fruits, etc. Ample moisture means sure returns. Near town, markets, railways, good schools. Write for full information to the Irrigation Council, 12 Provincial bldg., Lethbridge, Alberta.

LOGGED-OFF LAND IN STEVENS COUNTY, Washington, at greatly reduced prices. Most of land sells at from $5 to $20 per acre. Thickly settled community. Good schools. Hard surfaced and paved road to Spokane. Best county in state for dairy and stock raising. In most places water can be found at shallow depths. Write for folder. Phoenix Lumber Co., Dept. T, Spokane, Wash.

15 ACRES, WELL IMPROVED; FULLY equipped; Puget Sound grape, berry and poultry ranch; seven acres cleared, remainder easily cleared. Thickly settled neighborhood; good school; excellent market. Net income, 1922, over $1500. Price $6500; $2500 will handle. K 8, Washington Farmer, Spokane.

WASHINGTON LANDS — SEND FOR FREE booklet descriptive of a section free from cyclones, floods and temperature extremes; fruit, berry and poultry culture, markets fine; opportunities travel, hunting, fishing and home life ample. Our lands priced right, with terms to suit. Norpia, C, Olympia, Wash.

LONE STAR RANCH—A REMARKABLE fruit farm; ideally located; on Lincoln highway, Placer county, California; 28 acres, of which 21 in fruit; fenced; irrigated; equipped with modern buildings, with all conveniences. Full particulars on request. Frank J. Rumpf, Box 490, Stockton, Calif.

BY OWNER—155 ACRES, BUILDINGS, LAND, stock and tools; excellent water; plenty wood; very productive soil; 10 miles from Spokane; fine home; near school and macadam road. $9000, ½ cash, bal. 6 per cent. Particulars, address L. E. Seeley, Nine Mile Falls, Wash.

10 ACRES, 5 CULTIVATED; FAMILY ORchard; 2 wells, spring; 5-room house, other buildings; ¾ mile from highway; 1½ miles to town; 16 to Vancouver; $600 cash will handle. Write owner, 789 Rhode Island ave., Chehalis, Wash.

BIG LUMBER COMPANY LAND SALE—IN Skagit county; 40-acre tracts, $1400; $200 cash, balance easy. Lots work for the settler. Splendid district, roads, schools, towns. Information free. H. C. Peters, 726 3d ave., Seattle.

82 ACRES; 30 IMPROVED; 3 ORCHARD, stock, crop, good buildings; well, silo; 5 miles from Washougal. $6000, or part trade for small place; terms. M. Shorey, Rte. 2, Washougal, Wash.

FOR SALE—AN IDEAL STOCK AND HAY ranch; 1½ miles from town; good school; good buildings; 65 acres under irrigation; would lease. Box 43, Hooper, Wash.

SELL YOUR PROPERTY QUICKLY FOR cash; no matter where located. Particulars free. Real Estate Salesman company, 501 Brownell, Lincoln, Neb.

FOR SALE—80 ACRES, HIGHLY IMPROVED land; near El Antro, Calif.; first water right; can grow crops all year. Address Box 353, Caldwell, Idaho.

200 BEARING TREES, ON 20 ACRES FRUIT land; Council district; 280 acres timber and pasture; all for $2100; terms. Box 15, Indian Valley, Idaho.

CHICKEN RANCH—FOUR ACRES GOOD land; bungalow, barn, chicken house; water; just outside city limits; terms. Box 407, Harrington, Wash.

60 ACRES COAST DAIRY FARM; 35 BOTTOM, cleared; large house, barn, silo; ½-mile of Siletz. Price $8000. W. Cobb, owner, Newberg, Ore.

75 ACRES; GOOD HOUSE AND BARN; PLENty lowland pasture; fine place for cows. Wm. Bennett, Springston, Idaho.

BARGAINS IN DRY AND IRRIGATED farms. Oregon Mortgage Co., Paulsen bldg., Spokane.

400 ACRES GOOD FARM AND STOCK LAND; near sawmill. Owner, E1623 Rich ave., Spokane.

FARM LANDS—Wanted 654

NO COMMISSION — SELL YOUR FARM through Washington Farm Bureau Exchange, represented in 45 states. Lists of farms for sale by owner mailed free. 312½ Lindelle, Spokane.

I HAVE INQUIRIES FOR FARMS IN NORTHwest. Describe fully and state price. R. A. McNown, 310 Wilkinson bldg., Omaha, Neb.

IRRIGATED LANDS—For Sale 663

CORBIN ADDITION TO GREENACRES—IN the beautiful Spokane valley; 30 minutes from Spokane; paved road; 40 inches of water for irrigation; gravity flow. Ask for booklet with all information.

Return coupon—The Fred B. Grinnell company, Spokane, Wash. I am interested in the Spokane valley. Please send booklet and all information to

Name .....

Address .....

FOR SALE OR EXCHANGE 702

FOR SALE OR TRADE—40 ACRES, ALL creek bottom land; 8 miles to town; 8 acres under plow and balance pasture; orchard; 3-room house, barn, chicken house; spring water piped to house. Price $2500; government loan, $1300. J. T. Smith, Box 31, Chehalis, Wash.

FOR SALE OR TRADE—160 ACRES; 25 UNder plow, balance pasture; 7 houses; 2-story store building, store and postoffice; railroad and sawmill on place; income from buildings $45 per month. Price $7500. T. F. Verner, Chehalis, Wash.

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FOR SALE OR TRADE—TOWN PROPERTY for acreage. Laura Baird, Council, Idaho.

Cattle Ranch To College

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CHAPTER III.

A Narrow Escape.

The boy rushed forward and asked what had happened.

The small, rough living room in the sheriff's shack was soon crowded with men who pressed forward eager to hear the story.

When Mr. Worth was rested somewhat and thoroughly warmed through, he began:

"After leaving home, I traveled for two days and nothing happened. There were plenty of Indian signs about, marks of moccasined feet and prints of unshod horses' hoofs."

"Where were you bound?" asked some one.

"Up the river near Fort Stevenson. Got a coal mine up there, you know," the narrator answered. "Well, I kept a pretty sharp lookout for hostiles—and all the Indians are hostile around Fort Stevenson—but up to the time I'm going to tell you about I didn't see any. I followed the old trails made by the buffalo and deer across the prairie, and did my best to cover up my own tracks—wore moccasins till the cacti cut 'em too much, then shifted to boots. Of course boots made a much clearer print and would give me away sure if they were seen."

"Why?" whispered Tenderfoot Green to Casino.

"Because, you chump," retorted Casino, "the Indians never wear boots, so they know right away when they see marks of heels and sole that a white man has been that way. See?"

Worth continued, without noticing this whispered colloquy: "I was getting nearer and nearer the river every minute, and I knew that when I got there my chances of getting throughall right would be better, for the brush and banks would afford the cover that the prairie lacked."

His hearers nodded their heads understandingly, and even Tenderfoot Green seemed to take in the situation.

"The wind was getting pretty keen, and I knew my trail would be as plain as a column of smoke in a clear sky, so I hustled for the river at a good pace. In spite of my hurry, though, I managed to keep a sharp lookout for Indians. As I topped every rise I took a good survey of everything in view, and it was well I did, for about dusk I reached the crest of a low hill, and on glancing over saw an Indian village. It lay directly in my path, not far from the river. It was still too light to attempt to go round it, so I lay down behind some sage brush and watched what was going on. The village, which contained about 50 tepees, was placed within easy distance of the river and was well supplied with cottonwood."

"Used the cottonwood for fuel, I suppose?" broke in Green.

"Yes, and the green bark to feed the horses on in heavy, snowy weather," volunteered Mackenzie.

"Excuse me, Mr. Worth," apologized Tenderfoot, "I didn't mean to interrupt."

"That's all right," said Worth. "A lot of squaws were busy doing men's work, as is the way of the poor things, scraping hides that were staked on the ground, mending buffalo skin tepees, pounding berries, carrying wood and water. Some were busy with easier jobs, such as making deerskin clothes and ornamenting moccasins with beads. I could see only a few bucks; the others were probably off on a hunt. There was danger in that, for if they found my trail on their way back to camp they would of course follow it, and then—well, I should be lucky to come out of it alive."

The listening men began to show signs of impatience. All this was an old story to them; they wanted to hear the end of the tale, and how he came to be in such a plight.

"Well, to make a long story short," said Worth, beginning to realize that he was telling much that was obvious to most of his hearers, "while I lay there, planning, and idly watching the Indian camp, the hunting party was actually returning. Suddenly I felt the weight of a man on my back. I struggled and fought, and finally threw him off. Jumping to my feet, I faced two savages who had come in advance of the main party and had stolen on me unawares. Both now rushed at me, but I dodged one and tripped the other. Before I could finish the man I had thrown, the first was at me again. Loaded as I was by my pack, I was soon fagged. My gun had been taken by the redskin when he fell on me. Why he didn't use it on me I can not understand—perhaps I didn't give him time. Now both of them jumped for me, and try as I might I could not dodge or disable them. I had already begun to fear that the game was up, when I saw a whole bunch of Indians, the rest of the hunting party, coming along the trail.

"There wasn't any use fighting a mob like that, so I stopped struggling, let my captors hold me, and waited for whatever might come.

"The redskins crowded around me, and I thought that my time had come.

"'Stev'son, you come in,' says one brave. 'Hoss, pony, you got 'em?' calls out another big scowling savage. I shook my head.

"Then I caught sight of a face I knew—old Chief Looking Glass. (I warmed him up with coffee once when he was near frozen to death. Indians will do most anything for a cup of coffee.) He pushed forward through the crowd and shook hands with me. I could see he was trying to get his men to separate and leave us, but it wasn't any sort of use; they pressed around, and it was very evident that they wanted my pack. Looking Glass finally started alone toward the camp, calling to his braves to come along, but his plan didn't work at all; for the minute he got out of sight over the brow of the hill the thieving gang began to strip me. There was no use resisting; they were too many for me. Before I knew where I was I was stark naked except for a few rags. Even my boots were yanked off. We were almost in the village by this time, for I had been pulled and pushed over the crest and down the slope of the hill. My tormentors then left me and began to divide my outfit, so I crawled off, shivering and sore, anxious to get out of sight as soon as possible."

"Wasn't it cold?" said Tenderfoot Green.

"Rather," said Mr. Worth, a grim smile showing on his weather-beaten face. "A man does not go tramping across the bare prairie in weather like this dressed in a few rags, barefooted, and feel as if he was in a hot spring. It was fully as cold as it is now, and this is a pretty sharp day." He shivered at the mere remembrance, while his listeners gave a general laugh at the simplicity of the question.

"Where's all the people?" he cried excitedly. "Let me take that pony a minute,, sonny."

"Where did you get your blanket and moccasins?" asked Green, anxious to divert the crowd's attention.

He pointed at the articles that Worth seemed to be guarding with unnecessary care.

"These here blanket and moccasins saved my life," continued the latter. "As I was pushing along I heard a woman's voice calling. I turned and saw a squaw running after me with a blanket and a pair of moccasins in her hands. 'Looking Glass blanket and moccasins,' she said, as she handed them to me. Then she turned timidly and ran back to camp.

"It was almost dark now, and growing colder every minute. I put on the moccasins, wrapped the blanket around me, though it smelled strong of Indian, and set out at a dog trot in the direction of a wagon trail. If I could reach that I might be lucky enough to strike a white man's camp or a freighter's outfit, and then I should be all right.

I traveled all that night, keeping in the right direction by a sort of instinct that my knowledge of the lay of the land gave me. It was a pretty tough journey, though, I can tell you. I had to fight hard to keep off the sleepy feeling that comes before freezing, and for hour after hour I dragged myself along, numb and aching with the cold, but hoping against all reason and probability that I might run across some of the boys before it was too late. Toward daybreak I must have got kinder lonely, for I lost track of things, and only came to myself in the freighters' camp that I had run into half asleep."

He paused here, and John saw that his eyes were half closed and his head nodding. The ordeal had told on even his sturdy health.

In a thick, sleepy voice he added: "Ask Jim White; he knows the rest—he brought me in."

Jim White could add little to the story. Worth came into his camp, he explained, more dead than alive and "clean out of his head." He and his partner had cared for him and brought him to town as fast as the teams could go.

John's father was taken over to his own shack, where his wife greeted him like one come back from the dead. Under her good nursing he recovered from his terrific experience in a marvellously short time and became again his own sturdy self. The frontiersman must of necessity be possessed of an iron constitution, for he must be able to endure hardships of all kinds—intense heat and piercing cold, hunger and thirst, fatigue and pain, that would either kill an ordinary man outright or cripple him for life.

It was with inward dread that the little family watched its head start off again, after a few weeks' stay in town. Outwardly, however, cheerfulness, almost indifference, was manifested. This time he went with a party which was going in the same direction; the danger was, consequently, not so great. Then, too, the cold weather kept the Indians pretty close to their own camps, and as the locations of these were generally known, they could be easily avoided.

The boys' hearts were gladdened by the news that, perhaps, the home shack would be abandoned in the spring, when their father returned. If so, the whole family would "hit the trail" to the north and west.

Up to this time the Worth boys had been town dwellers, though in these days Bismarck could hardly be dignified even by the name of village. John and Ben, in common with the few other boys, had enjoyed the comparatively tame pleasures afforded by the town and the surrounding prairie. All large game had been driven west, and only prairie dogs, gophers, coyotes, and occasionally wolves remained; these and the birds the boys used to shoot at day after day with their ever-ready revolvers. The sport in the river was not all that could be wished for, either, for the water was muddy and the bottom was full of quicksands. And if summer lacked diversions, winter was a still more uninteresting season, in that the pleasures were fewer and the discomforts greater.

It was, therefore, with great glee that John and Ben looked forward to this pilgrimage. A hilly country was to be visited, where game of all sorts abounded, where clear streams were plenty, and where new sports of all kinds were in prospect. Marvellous tales of trapping beaver, and hunting antelope, bear, and even buffalo, were brought in by hunters, so the boys were wild to enjoy these new pleasures.

The government was trying to confine the Indians to the reservations that had been set apart for them, but the redskins had been accustomed to roam over the country at will, to follow the game wherever it went, to make war upon each other whenever they felt like it or needed horses; so they resented any attempt to interfere with their entire freedom, and turned fiercely on their white foes wherever they found them, singly or in camps and settlements. The government, in order to better protect its citizens, erected at intervals outposts garrisoned by troops.

There being no railroads across the continent at this time, goods of all kinds had to be carried in wagons from the nearest railroad station to the fort or point of distribution. The supply of fuel, too, was a matter of great importance. It was in the main a treeless country and wood was scarce. The early prospectors and pioneers had noticed the outcroppings of coal from the deep-cut river banks, but little advantage was taken of this store of fuel till the forts were established and the little steamboats began to ply up and down the Missouri loaded deep with skins and buffalo hides.

Mr. Worth was one of the first to see the value of these coal veins, and he was a leader in developing the mineral resources of the section. He opened and worked mines as near the different outposts as possible and at convenient points for the supply of coal to the river boats.

The eastern railroads were stretching their long steel arms westward, and they also needed to be supplied with food for their furnaces.

Mr. Worth had contracted with these coal consumers to open mines which, when in good running order, were to be turned over to them to work. In order to do this it was necessary to travel from place to place, starting the work at intervals along the proposed line so as to be ready when the "steel trail" actually reached them. It was this contract that made it necessary for them to give up the home shack at Bismarck and to journey into hostile country. Mr. Worth could not return to the settlement to his family; the family must, therefore, come to him in the wilds.

Much of the long winter was spent by the boys in talking over the good times they were going to have when they reached the new country. At times a trapper would come in to get a stock of supplies, and John and Ben listened eagerly to every word he said about his experiences. These tales were old stories to most of the men of the little town, who paid no attention to such commonplace matters, but Charley Green, like the boys, was seeking information, and he drank in every word as eagerly as they.

Much of Green's ignorance had disappeared, though "Tenderfoot" was still his nickname, and by that he would be called as long as he lived there. He had changed outwardly as well. The eastern pallor had given place to a good, healthy, bronzed tint, his eye was clear and his hand steady; he had lost weight, but had gained in endurance. His gay, expensive outfit of clothes had been succeeded by the more sober and serviceable apparel of the plains: wide, heavy felt hat, flannel shirt, rough trousers with protecting leather overalls or chaps, and high boots. He had learned enough about western ways to avoid making many blunders, and took a joke at his expense good naturedly when he did occasionally betray himself.

It was not considered polite in Bismarck to inquire anything about a man's past—that was his own business. It was not necessary for a man to give his pedigree and family name in order to be received into the society of his fellows. It was not his past that concerned them, but his present. "Lariat Bill" was quite as good for all practical purposes as his real name, perhaps better, for it was descriptive and identified him at once. In accordance with this unwritten law, no one asked what Charley Green's idea was in leaving the civilization and culture of Boston for the wild, free, albeit rough, life of the plains; but rumor had it that he came there with the intention of going into ranching. If so, he was wise beyond his generation, for, unlike most of his fellows, he looked before he leaped.

Tenderfoot and the two boys had struck up quite a friendship. It was quite natural, therefore, knowing as he did the Worths' plans, for him to say one day, toward the end of the winter: "Do you suppose, John, that your dad would take me along on his mining expition?"

"I dunno," said John, "you'll have to ask the governor when he comes back. I guess he would."

"You see," continued Tenderfoot, "I'm about as tired of this place as you are, and I want to see a little of the country. I guess I could earn my salt as a mule-wrangler, anyway."

So it was decided that the young easterner was to go with the Worths if the head of the house consented.

The dreary winter was beginning to give way to the soft south winds. The snow was fast disappearing and buffalo grass was showing brightly green here and there. The boys had an unusually bad attack of spring fever, for the long-looked-for time of the pilgrimage was drawing near.

Their father might be expected any day, and then—their delight and anticipation could not be put into words.

Mr. Worth at length came in, loaded down with his pack, his arms and his heavy winter furs.

Keen and bitter disappointment was in store for the impatient boys. They were told that it would not be safe to move away from the town, for the whole country was full of hostile, well-armed, well-fed Sioux.

The Black Hills of southwestern Dakota had been found to contain gold in paying quantities. This region was considered almost sacred by the Indians and jealously guarded. It was now aggressively penetrated by the gold miners, and this naturally created much bad feeling between them and the original owners. In order to allay this feeling the government made a treaty with the Indians by which it was agreed that the encroaching miners should be driven out. The disregarding of this treaty or its ineffective enforcement roused the Sioux to open warfare.

The tribes were collecting under the leadership of Sitting Bull and Rain-in-the-Face. Several small skirmishes had been fought and numbers of men on both sides had been killed. Small outfits, too, had been wiped out completely by the savage red foe.

It would have been suicidal, therefore, for the Worth family to venture within the enemy's country, as had been previously planned.

Indeed, while there was probably little danger of an attack at this time on Bismarck, the center of hostilities being many hundred miles to the westward, great precautions were taken even there every night to guard against surprise, and the people,

(Continued on page thirteen.)

FAMILY CIRCLE

ALICE W. BARLAND
EDITORIAL CONTRIBUTOR

"We live in deeds, not words.
"In feelings, not in figures on a dial.
"We should count time by heart throbs. He most lives who thinks most, feels the noblest acts the best.
"Life's but a means unto an end; that end beginning, mean, and end to all things—God."

Family Circle Girls

Dear Mrs. Barland: May I join your wonderful corner? I enjoy the Circle letters and join sides with the non-tobacco crusade. In addition to all the points against tobacco which have been raised there is the expense of using it. Surely money could be invested to better advantage. A friend said he spent about $2 a week on cigarettes. Think what that means! I'll wager that a good many of the mothers of the smoking boys could use that money to lighten many of their burdens.

Up to the time I began to read THE FARMER I thought I was the only girl who didn't "cut up" after the manner that has been discussed and because of that I am left pretty much to my "lonely."

As I am chief cook and housekeeper, to say nothing about trying to be a home maker for my father and three brothers, I am very busy and seldom get lonesome. I read a great deal and that keeps one from being lonely.

I wonder if that Oregon bachelor would tell me why my bread always cracks, that is, the crust? And how do you keep the crust from getting hard? I always rub the crust with butter, but it gets hard just the same.

Tell "The Cook" that if he never loved anything except his live stock that he had better stick to live stock, as it will take a mighty good-natured girl to live with such a man. I am well acquainted with that class of men and even their children do not come before the stock. Because they have never loved anything else they seem unable to break away. Don't imagine that I don't believe in caring for stock. I do, and I love horses and ride quite a bit. But no live stock fiend for me.

Mrs. Barland, who orders a meal in a cafe, the man or the girl? M. D.
Idaho.

When a man takes a woman to a restaurant he should consult her as to what she would like, then give the order.

Don't have the oven so hot when you put in the bread and when it seems to be too hot put a paper over the bread.
A. W. B.

Dear Mrs. Barland: I have been a reader of the Circle and am so grateful that you have given us a department, also the boys and men, in this happy corner.

I am 16 and have not gone out yet with any particular boy, but we go out in a group, boys and girls, and we have clean, happy times.

I surely agree with "Awake." She says, "If women would demand of men as correct deportment as they do in the women they marry we would have a different world." Believe me, there would be many more bachelors living by themselves, in shacks, too.

Several boys writing to this department have said that if all the girls are like those whom they know, no married life for them. Say, boys, this world is wide and there are lots of nice girls, just the kind you are looking for, not the paint and lipstick variety, either. I, too, have thought good boys were scarce, but have found real "pals" among them. JUANITA.
Oregon.

Dear Mrs. Barland: Will you welcome three farmer's girls from the west to your Family Circle? We have been reading it for years and have always meant to write, but there is always plenty of work to do on a farm.

We are all for a good time, but we don't believe in the jazz music or some of the latest prevailing styles. We stand by M. P. and the things she stands for. We usually go to church and once in a while we go to a dance, but the old-fashioned dances are the kind for us.

It is bad enough for young men to smoke, but we three agree that in the eyes of the world, at least, it is worse for a woman or a girl, so smoking girls are no friends of ours.

We like to crochet, read, sew and do about all the things that go with farm life. Our ages are from 15 to 20 years.
"THREE GIRLS FROM THE WEST."

Dear Mrs. Barland: I am 14 and in the eighth grade and hope to go to high school. I skipped the third grade. I went on with the rest in the fourth all right. I don't think it the best thing to do to skip grades, but, since I had the chance, I did it.

I live three miles out of town on a 17-acre farm. We have three cows, a horse, three dogs, a cat and a car. I can drive the car, too, but am not old enough to drive it. I have two brothers older and two sisters younger than myself.

I don't believe in dancing, although I am not old enough to go to dances. I am invited to most of the parties we have around here, but I don't get to go to all of them. I enjoy myself very much when I go, as we have games and good, clean fun. I am very fond of good music. I love all outdoor sports, but I help my mother in the house all I can. I help my father, too, in the outdoor work, mostly in the garden. I have a garden of my own and I wouldn't exchange my life in the country with that of any city girl.

I used to walk three miles to school, but now we have a school truck and I have only half a mile to walk.

I think it the most disgraceful thing for a girl to smoke and drink. Boys shouldn't do it, either. This is something I shall never do. When girls or boys will hang around pool halls and smoke and drink they will do other things that are bad.
A HAPPY MEMBER OF THE CIRCLE.

To Can Corn

Will you please give me a recipe for canning corn off the cobs without the compound? MRS. A. H.
Pullman, Wash.

The following recipe is from Farmers' bulletin No. 1211, U. S. department of agriculture:

Much depends upon the careful selection of tender, juicy corn before it reaches the starchy stage. Corn that has reached the dosed stage before being canned will have a cheesy appearance after canning. When it has passed the milky stag or is stale it is very hard to can successfully. Corn should not be allowed to stand after being taken from the stalk. Blanch on the cob one to five minutes, according to the sizes of the kernels, that is, dip in boiling water for this length of time. Dip into cold water for an instant, remove and cut the corn from the cob without scraping, i. e., Maryland style, using a thin, sharp-bladed knife. Best results are obtained when one person cuts the corn and another fills the containers. If one person works alone he should cut sufficient corn to fill one jar. Add the boiling water, cook in a sauce pan. Fill the jar and put it into hot water bath or boiler with rack or steam canner at once. A good proportion to use is half as much by weight of water as of corn. Put the corn in a kettle, add boiling water to cover and one teaspoon salt and two teaspoons sugar to each quart of corn. Allow all to come to the boiling point and pour immediately into hot jars, being sure that the water covers the corn well. Fill jars to within one inch of top, tin cans to within three-eighths inch. Process under 10 pounds' pressure for 90 minutes, or 15 pounds steam pressure 60 to 90 minutes if you use a pressure cooker. If you use a water bath or boiler method for pint jars only process intermittently for three periods of one and one-half hours each, or continuously three to six hours. The water should be over the tops of the jars in the boiler method.

Remove the jars from the canner or boiler and finish sealing at once. Tin cans should be plunged immediately into cold water and cooled as quickly as possible. When cool, store in dark, dry, cool place.

Home Recipes

Canned Greens — Wash carefully and blanch in live steam in a cheese cloth bag or a wire basket for 15 minutes. Cold dip them, cut into proper size and pack into jars, adding a teaspoon of salt to each quart and fill the jars with boiling water. Process for two hours, remove from boiler or steam canner, adjust rubbers, tighten caps and keep in cool place.

Beet greens, mustard greens or any edible may be canned in this way.
MRS. J. B. WILD, Idaho.

To Can Peas—Use young, tender, fresh peas and blanch (scald) till they begin to wrinkle, about 5 minutes, cold dip them and pack into jars to within ½ inch of the top and fill with boiling water; use 1-4 teaspoon of salt and 2-3 teaspoon of sugar to each pint jar. Tighten the caps and process in boiling water for three hours after the water begins to boil. Remove from the water, put on new rubbers and tighten the caps air tight. Keep in a dark, cool place.

Rose Jar or Pot Pourri—Gather rose leaves in the morning and spread on a cloth till the dew is dried off them. Put a layer of petals into an earthen jar and sprinkle with a little salt, continue to do this till you have gathered as many as you wish, stirring occasionally. Let them cure for a week or so then add spices or perfumes or oils, as many as you wish. One can use orris root, tonka bean, cardamon seeds, cloves, cinnamon, ground nutmeg, lavender flowers, oil of rose geranium and rosemary, essence of tuberose, cologne, any combination your fancy prompts.

After you have added all you wish, seal up the jar and allow to cure for a couple of weeks, then place in fancy jars and distribute about the rooms. When you desire the fragrance open the jars and allow perfume to fill the room.
MRS. CHAS. MILNE, Oregon.

Gem Cakes—One quart of whole wheat flour, 1 egg, ½ cup sugar, 1 pinch salt, 1 cup sour milk, 1 level teaspoon of soda dissolved in the milk; stir together and bake in gem pans in a moderate oven. Chocolate may be added if desired. L. H.

Just Folks

While in Chicago a few weeks ago a successful teacher in the public schools of that city said that it was his experience that school boys and school girls readily respond to the better things of life. Self-interest in gaining a livelihood and in making money has not yet fastened itself upon their young hearts. This teacher is convinced that the most important factor in civic reform is the plastic mind of the boy and girl.

DISCOVERS NEW WAY TO KEEP KITCHENS COOL ALL SUMMER.

An amazing discovery is claimed to have been made by Mrs. B. B. Oliver of St. Louis. This discovery is a new kind of heat that dispenses entirely with coal and wood. It burns 95 per cent air and 5 per cent kerosene. The device is installed in one minute in any cook stove, heater or range. This new invention is already sweeping over the country like wild fire. It eliminates hours of work, perspiration and drudgery for the housewife in sweltering summer kitchens. Just turn a valve and you have plenty of heat for cooking or baking. Another turn and the heat is off.

It fits any stove without change of parts—simply sets in the firebox. It is absolutely safe and generates its own gas from kerosene. Mr. Oliver will send an attractive booklet to any one interested who writes for it. Just address him at 2121-G Pine St., St. Louis. He is making a special low introductory offer including a thirty-day free trial plan. He is looking for good live local distributors. He will tell you how you can earn $500 a month easily. Request his sales plan.—Adv.

PROTECT THE BOTTLE FED BABY by using DENNOS. The needed food elements are supplied in an easily digested form. Endorsed by physicians. Sample free.

5

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Easy to raise. Larger profits than any other live stock raising. Stands strictest investigation. Recommended by Government. 4 different plans. One will suit you. Complete description free. Send today.

C. T. Dryz, Box 1017, Eagle River, Wis.

Please mention THE WASHINGTON FARMER when writing advertisers.

"Granny wishes she'd had such CORN FLAKES when she was little"

Never was such a delicious cereal as Kellogg's Corn Flakes to eat a lot of for breakfast or lunch or as late-evening snacks! Always wonderful in flavor, always crispy and crunchy, Kellogg's are simply the last word in a delightful, wholesome, satisfying food!

Do you realize that through the enormous demand for Kellogg's Corn Flakes, that Kellogg's are one of America's largest buyers of farmer's corn?

Each day more than a million packages of Kellogg's are made and sold. This means more raw corn for one day's use than a 450-acre corn farm can produce in one season!

Kellogg's Corn Flakes are delicious with your favorite stewed fruit, or with bananas or other fresh fruit.

Kellogg's Corn Flakes are sold only in the RED and GREEN package that bears the signature of W. K. Kellogg, originator of Corn Flakes. None are genuine without it.

Kellogg's CORN FLAKES

Also makers of Kellogg's KRUMBLES and Kellogg's BRAN

High Points in News of the Week

An official statement of worldwide importance was made last week by Prime Minister Baldwin of Great Britain concerning the relationship of the allies and Germany. After having, in an official way, given France some months ago to understand that Great Britain disapproved the occupation by the French of the Ruhr district on the ground that it jeopardized the economic system of Germany, Great Britain assumed what has been termed a passive attitude. The statement by the British prime minister now reopens the situation with a promise of early action on the part of that country. He frankly, though in peaceful language, repeats that Great Britain considers the occupation of the Ruhr injudicious on the part of France and fraught with grave danger to the peace of the world. He denies, however, that England's purpose toward Germany is different from that of France, in that both nations simply desire that Germany shall make reparations payment to the allies to the limit of her capacity to pay. The two countries differ only in the methods of securing these payments, said the premier. He said that peace could not be finally obtained and that industrial recovery of Europe and the world will not be enduring until a solution has been found to the following three problems: Payment of reparations, settlement of inter-allied debts and security of a pacified Europe. He designated four propositions on which he said he believed there was general agreement; that the period of conflict should as soon as possible be terminated; that the indefinite occupation by one country of the territory of another in time of peace is a phenomenon rare and regrettable in itself, to which an honorable end should as soon as possible be found; that the debtor should not merely be called upon to pay his debt, but should be placed in a position where he can do so; and that his capacity, when it is in doubt, should be determined, and that united effort should be made to accomplish these ends.

Premier Baldwin notified France and Belgium that his country contemplated making a separate answer to the recent German note offering new conditions of entering upon new negotiations. One of Germany's propositions is that a disinterested commission shall make full investigation of her ability to pay and that upon the basis of this commission's finding the allies shall agree to final terms of payment.

Leaders in France have received Premier Baldwin's statement with no effort to conceal their displeasure. France clings to her original position that the only way to get reasonable reparations out of Germany is to compel her through economic pressure to pay. She continues to feel that her future safety against German aggression depends upon maintaining herself in a position of equality or superiority to Germany from every angle, economic and military.

On the other hand, German statesmen express whole-hearted approval of the address of the British premier.

* * *

A court decision of much significance was handed down in the Chicago district court last week making permanent the temporary injunction granted by the same court during the railroad strike a year ago. The temporary injunction prohibited approximately 400,000 railroad employees and their officers from doing anything to injure the railroads or prevent their successful operation in the handling of American commerce. It prohibited the use of funds of the organized employees in any way to further the strike. It prevented union officers from issuing instructions or statements to members of a union regarding the manner in which they should conduct themselves during the strike. It prohibited parades or meetings of any kind having anything to do with the strike, and also prohibited the transmission of letters, telegrams or even statements by word of mouth that would in any way tend to interfere with the normal operation of the railroads. It also prohibited picketing of railroad property in all its forms and interference with persons employed by the railroads.

The permanent injunction makes permament all these rulings.

There is still a possibility that the case will be taken to the United States supreme court, but United States Attorney General Daugherty, who secured both the temporary and the permanent injunction, hails the latest decision as one which for all time outlaws railroad strikes. "No extensive strike tying up interstate commerce will ever take place again," he predicted.

* * *

After several months of negotiations beteween the allies and Turkey at Lausanne, Switzerland, agreement is reported to have been reached which is expected to bring about the signing of a peace treaty within a very short time.

Vote on Oleo Bill

Secretary of State J. Grant Hinkle has announced that the petitions circulated for a referendum on the anti-oleomargarine bill passed by the legislature have been found to carry sufficient signatures of qualified voters to hold the measure up and place it on the ballot for the 1924 election.

This is the measure that will, if approved by the people in November, 1924, prohibit the manufacture and sale of milk or butter substitutes from vegetable oils and milk or a milk product. The measure does not prohibit the manufacture or sale of a substitute unless milk or a milk product is used as one of the ingredients. It is therefore known among the dairymen and their friends as a measure prohibiting the adulteration of bona fide dairy products by the mixing into them of a vegetable oil, notably cocoanut oil from the tropics.

Rule Aliens Out

The federal government will be guided largely by state laws in the matter of land ownership and leasing by aliens, according to announcement by Secretary Hubert Work of the department of the interior. This sets aside a former ruling by Secretary Work which permitted the leasing of Indian lands to corporations in which the majority of the stock was owned by aliens. This former ruling seemed to permit the Japanese to maintain their foothold, especially in the Yakima valley, by forming corporations and leasing Yakima Indian lands. The new ruling, however, conforms to the state law which prohibits the leasing of lands to the Japanese or other aliens.

UNITE YOUR EFFORTS.

Pull together or you pull apart.

Slogan Contest Prizes Awarded

As announced in last week's issue of The Washington Farmer, no slogan received a majority of the votes sent in by mail by readers of this paper. Therefore, the matter was submitted to the board of judges, who selected "Balanced Farming" as the slogan best suited to take the place of "Diversified Farming."

This slogan, "Balanced Farming," was submitted by three readers of The Washington Farmer, Fred Forbes of Felton, Cal., Fred H. Troemel of Outlook, Wash., and Mabel Dryden Gavin of Mallott, Wash. The slogan submitted by Mr. Forbes was received by The Washington Farmer April 12 and that by Mr. Troemel the same day, but in a later mail delivery. The third was received May 20. Therefore the prize goes to Mr. Forbes. In accordance with the original conditions of the contest, Mr. Forbes will receive not only the $10 prize, but $5 in addition because his slogan was received before April 14. Mr. Forbes was formerly of Grandview, Wash., continuing to take The Washington Farmer after moving to California.

In inviting the readers of The Washington Farmer to vote on the slogan which they thought best, THE FARMER offered a first prize of $5 and two prizes of $1 each for the first three votes received for the slogan receiving the largest number of votes. "Safe Farming" received the largest number of votes. The first vote received for this slogan was from Miss Frieda Miller of Snohomish, who therefore receives the $5 early-voting prize. A. D. Mueller of Satsop and Arvid Persson of Arlington receive the second and third prizes of $1 each.

There is still another prize to be awarded, namely, $5 for the best explanation of a slogan sent in by the person who sent the slogan. There are so many of these explanations that the judges have not yet awarded this prize. Announcement of the decision of this part of the contest will be made in an early issue of The Washington Farmer.

Beware of Swindling

(Continued from page two.)

earned savings of those who buy the stocks. Even where the company is operating with a good prospect of an oil well or a mine, the high cost of selling stocks makes them a bad purchase from the beginning. Stock salesmen have to be paid a commission of 25 per cent or higher. The market for these stocks is drummed up by the promoters, and the farmer or other purchaser would find, if he tried to sell his stock the next day after he bought it, that he could not get his money back, and, in most instances, could not sell his pretty paper certificate for 50 cents on the dollar.

CORN HARVESTER cuts and piles on harvester or windrows. Man and horse cuts and shocks equal Corn Binder. Sold in every state. Only $25 with fodder tying attachment. Testimonials and catalog FREE showing picture of Harvester. PROCESS MFG. CO., Salina, [illegible]

We Believe in Clean Business

The Washington Farmer is a believer in clean business in every phase of every occupation. That is why we are out to expose the unfair, dishonest farm paper agent who, with too great frequency, makes his appearance in the farming towns and communities of the state. We have for some time been trying to put our readers on their guard, so that they need not fall for some of the tricks that the dishonest agent practices. We are not warning Washington Farmer readers against the legitimate agent of any reputable farm magazine, but only against the fellow whose purpose is to get money without giving fair value in return.

It is almost a daily occurrence that we hear of some farmer or farm housewife giving a solicitor money for a farm paper that never begins to come. From their description of the way the deal was made we know that they were merely victimized by what reputable publishers and solicitors call "sheet writers." This class of agents usually gives premiums, like pencils, wallets, goggles, maps and so on, "just to advertise the paper," and they frequently say that they are giving this all away free, including the paper, upon which the victim is merely asked to "pay the postage," which they usually figure up to a lot more than the actual subscription price of the paper.

We want all of our readers to be on their guard. You can tell the field men of The Washington Farmer whenever one appears. He never offers you any premium; he sells you only The Washington Farmer. If an agent shows a map or a pencil or a purse or anything like that and says that he is giving it with The Washington Farmer he is a crook, for our field men never offer premiums. He always quotes prospective subscribers the same subscription price—$1 for five full years of 52 weekly issues each, or 260 copies of this paper. And then here is a final test: If he is our representative he can show you a large button on which is a good picture of himself with the words, "Representing The Washington Farmer" in gold letters.

The Washington Farmer is for everybody who is out after good, clean, worthwhile business. It is everlastingly against the fellow who is out to bilk the public, to get something for nothing and to get it by misrepresentation.

Farm Business and Markets Outlook

(Continued from page five.)

corn, $48; rolled oats, $45.

HAY—Buying prices, f. o. b. Portland: Alfalfa, $16 ton; cheat, new, $13@14; valley timothy, old, $26; new, $18; eastern Oregon timothy, old, $27; clover, $13.

General Produce.

PORTLAND, July 14.—Butter—Cubes, extras, 39@40c lb.; prints, parchment wrapped, box lots, 42c; carton, 43c. Butterfat, 31c delivered Portland, 38@39c station buying price.

Eggs—Buying price; White hennery standards, 25c@26c doz.; mixed color standards, 24c. Selling price, Front street: Selects, 29c; candled ranch, 27c. Association selling prices, cash at store; Selects, 28c; firsts, 26c; pullets, 26c.

Cheese—Prices to jobbers, f. o. b. Tillamook: Triplets, 27c; longhorns and loaf, 28c per pound.

Poultry—Hens, 14@23c; broilers, 18@23c; ducks, 15c@22c; geese, nominal; turkeys, nominal.

Pork—Fancy, 12c per pound.

Veal—Fancy, 14c@14½c per pound.

Fruits—Apples, $1.50@3 box; cherries, 5@15c lb.; cantaloupes, standards, $4.25@4.50 crate; apricots, $1.15@2 per crate; raspberries, $1.65@2 per crate; watermelons, 2½@3½c lb; plums, $1@2 box; peaches 85c@$1.75 per box; loganberries, 85c@$1.10 crate; pears, $4.75@5 per box; black caps, $2@2.25 crate; currants, $2@2.25 crate; ice cream melons, 3c lb; casabas, 4@4½c lb.

Onions—Red, $3@3.25; yellow, $3.25@3.75.

Potatoes—New Oregon, 2@3c lb; California, 2½@3c.

Vegetables—Cabbage, 2@2c lb.; lettuce, $1.50@2.25 a crate; garlic, 17@20c lb; tomatoes, $1.75@3 a box; celery, $1@1.50 dozen; peas, 7@8c lb.; carrots, $2.75 a sack; peppers, green, 25@35c lb.; cucumbers, $1.40@1.75 box; beans, 9@12½c lb.; corn, 80@85c dozen; bunched beets, 35c@50c doz.; bunched carrots, 35@50c doz.; radishes, 30@40c doz.; green onions, 35@40c doz.; beets, $2.50@3 sack; rutabagas, $2.50 sack; turnips, $3.50 sack.

SPOKANE, July 14.—Poultry, live weight—Hens, 4 lbs. and over, 18c; light hens, under 4 lbs., 15c; springs, 15c; old roosters, 8c; ducks, 15c; geese, fancy, 15c.

Fresh ranch eggs—$5@6 case, according to quality.

Butterfat—42c lb.

Thousands of Farmers Thresh With Wood Bros. Individuals

THE INDIVIDUAL THRESHER

The years of satisfactory service given by the army of Wood Brothers INDIVIDUALS now in use by farmers all over the county stand testimony to their superiority as the lightest running, cleanest separating, most durable threshers on the market.

Because of its overwhelming merits the Wood Brothers 21x36 Steel INDIVIDUAL has been adopted universally as Standard Fordson Equipment and is guaranteed to operate on Fordson power. Our 21x36 Steel INDIVIDUAL is of the same high grade, heavy construction as our 26x46 and 30x50.

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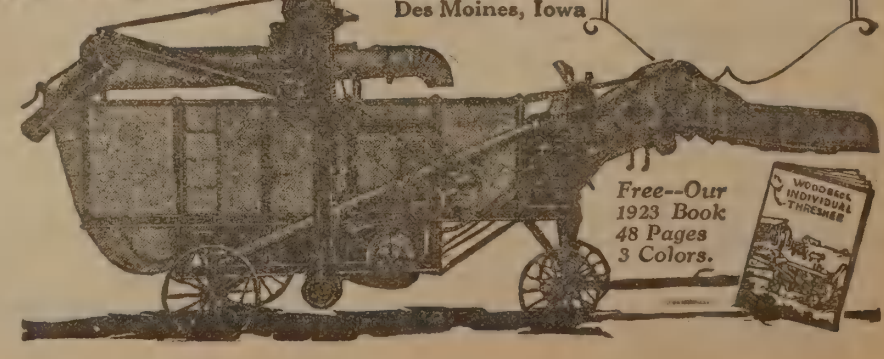

Cattle Ranch to College

(Continued from page ten.)

especially the children, never went far afield.

The spring passed and another summer's scorching heat began. Occasionally accounts came in of battles fought and victories won, sometimes by one side, sometimes by the other. It was a time of uncertainty; business enterprise was at a standstill, and, since there was little to do in the frontier town, diversion of any kind was hailed with delight. So the Fourth of July celebration that was to be held at Black Jack's dance hall was looked forward to with great expectations by old and young.

Independence day at length arrived, and was greeted at the first showing of light in the east by a volley of revolver shots. The celebration was kept up with enthusiasm all day. Tenderfoot made a patriotic speech that took the crowd by storm—he was no tenderfoot in that line, for his college debating society experience served him in good stead.

At sundown the guests began to arrive at Black Jack's, and before an hour had passed the ball was in full swing. It could hardly be called a fashionable assemblage: the men, of whom there were three or four to every woman, were dressed much as usual, spurs, and all, except that in compliance with the request placarded prominently, their "guns" were laid aside.

A single fiddler served for an orchestra, and also acted as master of ceremonies, calling out the figures of the dances.

The violin was squeaking merrily and the feet of the dancers thumped the rough boards vigorously, while the lamp lights silhoutted the uncouth figures as they passed between them and the open window.

John and Ben, who were watching from the outer darkness, were suddenly startled by hearing the long, deep whistle of the little steamboat.

"What's that?" exclaimed Ben. "Sounds like the Will o' the Wisp, but she hasn't been along the river for a long time."

"Let's go and see," said John. "Must be something doing to bring her down at this time."

The two boys mounted their horses, which stood already saddled, and galloped down to the landing. In a few minutes the boat steamed up out of the darkness, slowed down and made fast to a cottonwood stump.

Hardly had it come to a stop when a man made a running leap to the platform and dashed toward the boys, who were the only persons at the place.

"Where's all the people?" he cried excitedly. "Let me take that horse a minute, sonny."

"Up at Black Jack's," said John, sliding of Baldy's back without delay, for it was evident that the newcomer brought important news.

The stranger mounted and set off at a hard gallop for Main street. Reaching the brightly lighted place, he jumped off and stumbled through the doorway into the center of the room.

The fiddler stopped in the middle of a bar, the dancers, who were in the full swing of "all hands around," stood still in wonder, and every eye was fixed upon the intruder. He looked like the bearer of bad news.

His clothes showed that he had traveled far and fast, and his manner evidenced anything but peace of mind. For an instant all was still. Then Black Jack broke the silence: "Speak out, man! What's up?"

"I've been traveling two days and nights to bring the news," he panted. "Custer——" he paused for breath.

"Well, hurry up, will you!" exclaimed Mackenzie, shaking his arm.

"Custer and his men have been wiped out by the Indians on the Little Big Horn!"

(To be continued.)

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Jones—Smithson is a walking dictionary; he knows no end of long words.

Brown—Yes, but you can shut a dictionary up.—Youth's World.

The Long, Long Trail.

A man with a funny story had visited a dozen newspaper offices, at all of which his joke had been declined. He plodded wearily homeward.

"There is such a thing as carrying a joke too far," he said.—Youth's World.

Getting Even.

Father (spanking Tommy)—Tommy, this hurts me more than it does you.

Tommy (silently)—I thought that board in my trousers wouldn't do you any good!—Answers.

A Bush-Leaguer.

"Majolica pitcher brings $655 in sale," read Mrs. Fan.

"Huh!" sneered Mr. Fan. "He can't be much of a player."—Boston Transcript.

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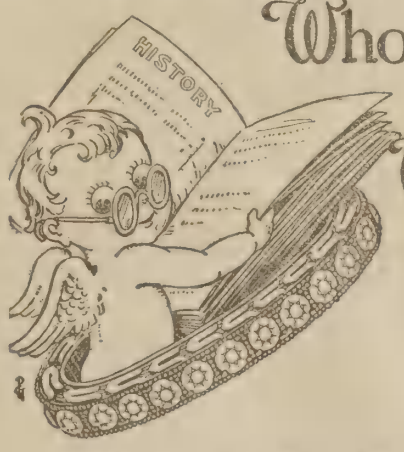

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Read this little message from Lincoln county, Wash.: "Tap! tap! tap! May I come in? My name is Elaine Warwick. My birthday is March 8 and I am 6 years old. May I join the Corner?" (To be sure you may, Elaine. We are glad to welcome the new cousin.)

Elma Sawyer, 11 years old, has a pony named Nellie. She also has 12 little chicks which are all her own. Her mother gave them to her. She lives in eastern Washington and has one brother, Ellis, who is 9 years old. There are six pigs on the farm. Elma's birthday is June 9.

Birthday Greetings

THURSDAY, July 19—Laura Esko, 11 years old.

FRIDAY, July 20—Ruby Becker, 10 years old; Helen Trupp, 8.

SATURDAY, July 21—Gladys Lucile Barcelow, 11 years old; Myrtle Carpenter, 11; Arthur Cartwright, 11; Armas Lampi, 10.

SUNDAY, July 22—Carl Gilbert, 11 years old; Wilbur Stiles, 10; Thelma Woodland, 11.

MONDAY, July 23—Nina Bear, 10 years old; Elizabeth Coby, 11; Gladys Page, 11.

TUESDAY, July 24—Alma Laurene Stensaa, 10 years old.

WEDNESDAY, July 25—Naomi Gould, 11 years old; Frances Haxton, 11; Loretta Santo, 9; Delbert L. Rucker, 7.

LETTERS WELCOMED BY AUNT NELLIE.

Among recent letters received by Aunt Nellie are those from cousins whose names follow. A few of these will be published each week in the regular edition of THE FARMER and others will appear from time to time in The Junior Farmer:

Gladys and Stella Huffman, Nellie E. Hall, Fay Morrison, Frances Himes, Adeline Thompson, Helen Pendell, Olive Dingerson, Josephine Bobner, Cornelia Strahm, Marjorie Fye, Edith Aylward, Dorothea Durdin, Leeta Ball, Leona Ball, Edna Amend, Jean L. Morris, Katharene Davis, Alice Hill, Jennie Van Skiver, Irene McNeil, Eldora Lenhart, Gladys Main, Vera Dice, Audry C. Wells, Amalia Schoal, Mary Plummer, Elizabeth Anderson, Rose Edna McAuley, Ida May McAuley, Gladys Kelley, Marie Youngsman, Arla Kirchner.

BEDTIME STORIES

By THORNTON W. BURGESS.

JENNY WREN HAS AN IDEA.

Jenny Wren had been gossiping with Drummer the woodpecker. You know, Jenny is one of the greatest gossips in the old orchard. Of course the thing they gossiped about mostly was the unpleasant

"Something ought to be done about it," sputtered Jenny Wren.

state of affairs in the old orchard since Bully the English sparrow had come out from the city to make his home there.

"Something ought to be done about it," sputtered Jenny Wren. "Did you ever see such quarrelsome, unpleasant people?"

Drummer slowly shook his head. "No," said he, "I never did. While I don't wish them any harm I do wish that they could be made to leave the old orchard. I suppose you heard how Bully was whipped yesterday by Scrapper the kingbird?"

"Heard about it!" exclaimed Jenny. "Why, I saw it, and I never was so tickled in all my life. It served him just right. I wonder if we can't get Scrapper to drive Bully out of the old orchard altogether."

Drummer thought this over for a few minutes. Then he shook his head. "I don't believe it will be of the least bit of ask him," said he. "Scrapper is always ready to fight when he sees any real danger poking around his home as Bully did yesterday. You might ask him, but I dont' believe it will be of the least bit of use."

"Nothing gained in this world without trying," replied Jenny. "I'll go ask him right away."

In almost no time at all she was back. "It was just as you said it would be," said she. "He says that this is a free country, and that Bully has just as much right here as we have. As long as Bully doesn't bother him he has no quarrel with him. We've got to think of some other way of getting rid of him."

"Of course," said Drummer, after they had thought and thought, "we don't want any real harm to come to Bully or Mrs. Bully, but if something could happen to their home perhaps they would go away. Now, if Sammy Jay should take it into his head that their eggs would make him a good breakfast they might, they just might, get discouraged and move away."

"Nothing doing," replied Jenny, promptly. "That hole where their nest is is too deep for Sammy to reach the eggs, as you ought to very well know, for you made it. But the idea is a good one. Now, I wonder if Chatterer the red squirrel wouldn't be interested if he knew that there are eggs there? I believe I'll just put a flea in his ear, as the saying is. There he is now over on the old stone wall. I believe I'll just fly over and pass the time of day with him."

Move a Mountain

(Continued from page three.)

ished their first helping. An army officer who happened to be present at the noon meal remarked that the crowd was fed quicker than ever he had seen a company fed in the army.

But to mention what the men accomplished! The entire field was fenced except for the hill side and the gates. The one-third mile race track was graded and made ready for the finishing touches with a coating of cinders. A new channel was made to divert the course of the small stream and it now skirts the edge of the grounds at the base of the hill. They graded and leveled the ground for the exhibit building, pruned and thinned the shrubs that were already on the grounds. The water mains for the buildings and grandstand were put in and a scenic road 16 feet wide was built along the edge of the hill.

It was a real day's job, and, in fact, it was not all finished the first day, but fully half of the men volunteered to return the following day and complete as much of the work as possible. From estimates made, the work that was completed in the two days could not have been done for $5000 if it had all been done by contract.

But there is plenty of work to be done yet. The people are planning on another day in which they will add a few of the finishing touches and straighten up the grounds before the time to get ready for the fair. Just now a new building is being erected at a cost of $3000 and it will be one of the two main exhibit buildings. The live stock buildings are to be set up before fair time if possible, but many of the permanent plans will have to wait until more of the finances can be attended to.

The part of the grounds immediately in front of the gate will be kept as a park and thrown open to the public at all times except during fair week. The grandstand, which will be erected as soon as possible, will be fitted with dressing rooms and shower baths underneath, while the track and center grounds will be rented to the normal and high schools for athletic events. Later on the side hill will be pressed into service for bleachers.

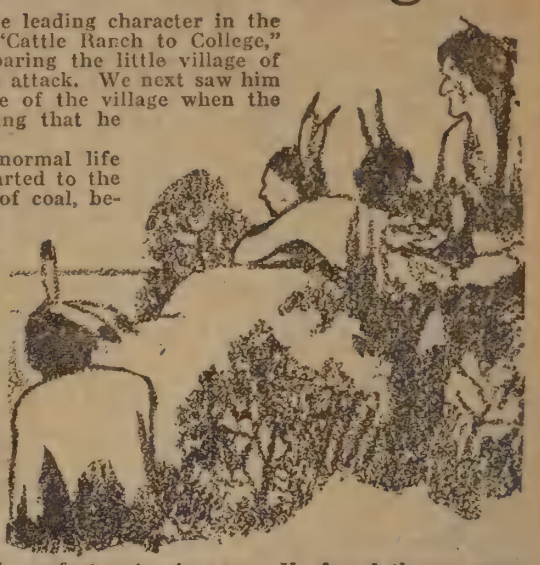
Valued at $67,000.

The entire grounds will carry a valuation of $67,000. There are many improvements that can be made from year to year, but the people in Kittitas county are not afraid of small obstacles of this kind when there is that splendid community spirit that can move mountains and move them with a smile.

When asked where the idea originated, Mr. Davis replied that he remembered the way the boys all worked on "Campus Day" at the state college and accomplished results by all working under an organized system of straw bosses and superintendents. I thought it could just as well be carried out among the people here and it has worked out better than any of us dreamed it would.

During the chautauqua at Ellensburg, which was held only a few weeks after the field day, Tom Skeyhill, the noted lecturer, mentioned the splendid work accomplished at the fairgrounds and said that he had heard of people moving mountains and changing the course of rivers, but that it remained for him to visit Ellensburg to learn that the stories were not all fairy tales. He said he would tell the people of the middle west and other parts of the country what the people of Kittitas county have done and what can be done by other counties if they go at it in the right spirit.

Cattle Ranch to College



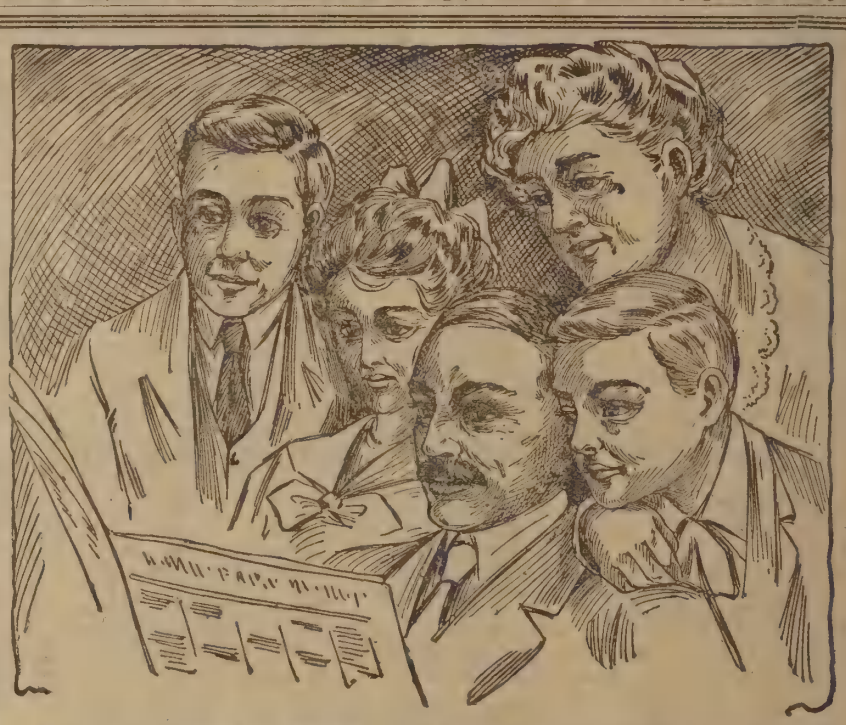
When we first met John Worth, the leading character in the serial story we are now publishing, "Cattle Ranch to College," he was taking an active part in preparing the little village of Bismark, N. D., to withstand an Indian attack. We next saw him playing the part of a man in defense of the village when the red men had appeared, notwithstanding that he was only 12 years old.

With the Indians driven off and normal life restored in Bismark, John's father started to the northwest in search of outcroppings of coal, being a miner as well as a freighter. Mindful of the dangers that beset a traveler in the native haunts of hostile warriors, Mrs. Worth bravely assumed responsibility for the welfare of herself and John, his brother Ben, age 10, and the baby. Mr. Worth expected to be gone several weeks prospecting.

One day Charley Green, the "tenderfoot" of the village, came to the Worth home as a messenger from Sheriff Jim McKenzie, who had sent him for some spare clothing for a man who has wandered into the village in a state of near-nakedness and exhaustion. Mrs. Worth gave them the clothes and John returned with Green to the sheriff's house to see the unfortunate stranger. He found there a man protected by only an Indian blanket, his feet bruised from a long journey with only the protection of a single pair of moccasins, long worn through. He turned his face toward the boys who had brought the clothing, when John shouted in amagement:

"Why, it's my father!"

How Mr. Worth came to be in the plight in which his boy had just discovered him is told in chapter 3 of "Cattle Ranch to College," which is found on page 10 of this paper.



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Farm Folk Visit College

(Continued from page three.)

under in such a way as to rot it as rapidly as possible.

They are also told that when the straw has been thoroughly rotted in the soil, the soil will be in about the condition it was before the straw was applied. This is due to the fact that straw adds but little nitrogen to the land and the carbon its adds "oxidizes," that is, unites with oxygen; that is, so far as the rancher is concerned, dries up and blows away.

So, all the while, the farmers have been right when they said that spreading straw over their wheat land did no good. Put on a clover sod, however, it does a great deal of good. And this is one of the things the farm crop specialists and investigators at the state college were able to prove to the farm excursionists last week.

Tillage Truths Told

An extensive system of tillage plots, the work of which is in charge of E. G. Schafer, was on the automobile route over the farm. In one, early plowed and well tilled land was compared with late plowed and badly tilled land. Noticeably, the early plowed and well tilled was the best. It was evident that early plowing and good subsequent tillage keeps the moisture near the surface and offers a chance for the maximum development of plant food.

Another part of the field is devoted to the use of manurial fertilizers. It is evident that manure is much more effective when applied to fall wheat land in the fall than when applied to spring wheat land in the spring. It seems to make little difference whether manure is applied to the fall wheat land before plowing, or as a top dressing afterward.

Other experimental plots give evidence that there is little difference in the effect on crop yield of different depths of plowing: Four inches, six inches, eight inches. All give practically the same yields.

And, lending emphasis to what has already been said, there were plots giving abundant proof that the systems of crop rotation having a legume tucked in somewhere between grain crops, are decidedly to the good in point of crop production.

The Legume a Mainstay.

It is made pretty clear that land having 18 inches of rainfall, or more, every year, should produce a crop every year. The search, therefore, is for something that with maximum advantage to the crops will take the place of summerfallow. Corn, sunflowers, potatoes and peas have been tried. Nothing works so well as the legume. Indeed, the results of years of work tend to show that in the proper introduction into cereal growing of the inter-crop of legume one may look for the mainstay of grain farming.

Many farmers who are thinking seriously of making use of the inter-crop of legumes want to know if there is a nurse crop that can be used with the legumes. That is, first-year clover, or first-year alfalfa does not produce much of a hay crop. If something can be grown with the alfalfa or clover, and be harvested, leaving the alfalfa or clover to come on big and strong for the next year, the farmer will not be out the use of his land while the legume is getting ready to produce a full crop.

Peas Play a Part.

The answer given by one of the experimental plots is peas. Peas planted as a nurse crop with the legume will grow along with the legume, develop ahead of it, and make a hay or a grain crop, leaving the red clover or alfalfa on the ground.

Grain crops used as nurse crops for red clover, alfalfa, or sweet clover, fail, in that they crowd the legumes out of existence. Wheat, for example, has a root system that goes deep into the ground. By the time a wheat crop has matured, there is practically no moisture left in the ground. The same is pretty nearly true for the other grains.

Peas, however, like alfalfa or red clover, are a legume. They do not take so much of the soil moisture as to crowd out the alfalfa or clover.

In using peas for this purpose the farmer should use the same precautions that are always necessary where nurse crops are grown. Whenever it is evident that the peas are injuring the main crop, they should be cut. In a wet year like this the peas might come on to maturity and be harvested for grain. In dry years, it might be necessary to cut the crop earlier, for hay. But in either event, the farmer gets from his field in the year that his alfalfa or clover is getting started, a full crop.

Legumes were an outstanding feature of the field day observations reported above, but there were others of much importance. For instance, the new smut-proof wheat, the potato diseases, and so on and on. But thes ethings will have to be discussed later as separate articles as space permits. We feel that Mr. Ashlock has easily hit the high spot of the day's significance—the importance of building up the wheat growers' soil by the use of legume crops.—Editor.

Rabies

(Continued from page six.)

only should the heads be sent in for examination. They should be shot through the body and the head cut off, packed in ice and sent to the laboratory by express. The laboratory man may be able to tell whether they were diseased or not; at least, he has the best chance that can be given him. (Copyright by E. E. Wegner.)

This is the first of two articles on "Rabies" by Dr. Wegner.

The Cover Page This Week

On the cover page this week is the picture of one of the world's great dairy cows. Her accomplishments as a producer are especially noteworthy because she does not belong to what is known as a strictly dairy breed. She is a milking Shorthorn, a dual purpose animal. Her breed is a producer not only of butter and cream, but of beef as well.

This remarkable cow, Melba 15th of Darbalara, is owned in Australia. She has a record of 29,423 pounds of milk in a year, with a butterfat content of 1316 ponuds. The milking Shorthorn organization claims that this is the world's record butterfat production for all breeds, notwithstanding the fact that for two Holstein cows in Canada a little higher production is claimed. The Shorthorn organization explains the claim for world championship of all breeds on the basis of different methods of computing the butterfat from the quantity of milk and its test. Regardless of the methods of testing and computing for butterfat production, and regardless of breed favoritisms, Melba 15th of Darbalara is a marvelous animal.

HERCULES MODEL DIES.

J. D. McGuire of Tenino, Thurstor county, reports the loss of Hercules Model, his herd sire, from an acute attack of pneumonia. He had been in the herd less than two years, but he leaves his first son, a junior calf, which combines the bloods of Gainford Marquis, Cumberland and Choice Goods, the latter being his grand sire. The calf will be kept as herd sire.

NORTHWESTERN MEN AS JUDGES.

John L. Smith of Spokane and George S. Bulkley of Seattle are the only northwestern men among the judges officially indorsed by the Holstein-Friesian Association of America.

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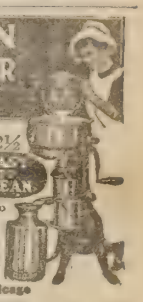

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July 26, 1923. Washington's Only Farm Magazine EVERY THURSDAY

THE WASHINGTON FARMER

ESTABLISHED 1894 SPOKANE. SEATTLE.

Dairying and Lamb Feeding

Better Stand High Cost of Transportation

To the Editor of the Washington Farmer: I am now back home after my trip to the Pacific coast, and have been thinking a great deal about the situation out there as I found it. I was particularly interested in the proposed development of the great irrigation project for the Big Bend country. With population increasing as it is, and the area of good crop land increasing at a smaller rate, there is no question that in the not distant future there will be a use for all the farm products that can be produced as the result of the development of this project.

W. J. Spillman.

Just at present, however, farmers are suffering from low prices because we are producing more of most products than the public will take at a price that is remunerative to farmers. It may be fortunate, therefore, that it will be some years before the new project can be completed.

Everywhere I went the problems that were in farmers' minds, in addition to the matter of low prices, were our present high freight rates and the difficulty of securing competent labor at wages farmers could afford to pay. Taxation was everywhere a dominant question, and these are problems that must be dealt with in the near future. Their solution will require the best efforts of the best minds in the country.

The apple men were, of course, more or less discouraged by last year's disastrous results and by the prospect of continued high cost of transportation; but these men have had their ups and downs in the past and the feeling amongst them seems to be general that the present difficulty is temporary. They are expecting a return of prosperity and here is hoping they will get it. Just at present, however, I would not advise any material extension of apple acreage in the Pacific northwest. Eastern apple growers can make wages at prices very little greater than present freight rates from the Pacific coast.

While eastern apples do not make so good an appearance on the market as do the western apples, eastern growers are learning from the west, and I am inclined to think that western apple men will feel competition from eastern growers more in the future than they have in the past.

I was very much interested in the situation which I found prevailing in the great wheat growing regions of Oregon, Washington and Idaho. I got the impression from the conditions I saw that in the older wheat growing sections the land has lost so much of its vegetable matter that it is washing more badly than it used to. I noticed, also, that the fall sown wheat had not germinated very well on the upper slopes and hill tops, not nearly so well as it had on the lower part of the slopes. This, I understood, was due to a more or less marked deficiency of moisture last fall, but I was also told that for some years past the yield per acre has not been up to standard. It seems to me that there is a very big problem there in building up the supply of vegetable matter in the soil. The men at the experiment station are working on this problem and I hope they will soon be able to point out its solution. There is no question about the fertility of Palouse soils and their adaptability to wheat. So far as I can see now, that should always be a great wheat country, but some means must be found of insuring good yields in ordinary years.

There was a good deal of talk in the Palouse country of the development of live stock enterprises, particularly dairying and winter feeding of lambs. These seem to be logical developments there, and if the farmers proceed cautiously and feel their way carefully, I think that ultimately dairying and lamb feeding might become important enterprises in that region. They have the advantage that their products are high enough priced to stand our present high cost of transportation.

The dairy industry may develop in two rather distinctly different forms. It may be a large farm proposition with a large herd cared for by hired labor. It takes unusual ability on the part of the manager to make this kind of a dairy farm profitable, but it has been done and can be done again.

The great bulk of the dairy industry is a family farm proposition, where the farmer and his family grow their crops and tend to 10 to 15 cows, sometimes more and sometimes less, according to the available supply of labor in the farm family. The Palouse country is a region of large farms and is not so well adapted to dairying on the small herd scale, and the present difficulty of obtaining efficient farm labor at the wages farmers can afford to pay makes it difficult to develop the larger dairy farm. It is these situations that suggest to me that farmers should proceed cautiously in developing the dairy industry; but it is a good business and its products are high enough priced to ship any distance. I hope therefore that the dairy business will gradually develop in the Palouse.

I enjoyed very much meeting many old friends on my western trip. They treated me so nicely that I shall certainly come to see them again at the first opportunity.

W. J. SPILLMAN, Consulting Specialist.
U. S. Department of Agriculture, Washington, D. C.

More Fruit Cars

On the eve of the Wenatchee Southern railway hearing the Great Northern railway made an announcement of far-reaching importance to the effect that a new private refrigerator car line has been organized, known as the Western Fruit Growers' Express, which will control 20,000 refrigerator cars, a large proportion of which should be available for apple shipment from north central Washington when needed.

Included in the pool, according to advices received here, are the Pennsylvania system, the Southern railway, the Burlington and the Great Northern. The new company is supposed to succeed or to be an enlargement of the Fruit Growers' express controlled by the Pennsylvania and the Southern railway and owning on January 1, 1923, about 11,500 cars. Added to these are a little over 8000 owned by the Great Northern and Burlington combined, of which the Great Northern had 5500.

W. P. Kenney, vice president in charge of operations for the Great Northern, announced the formation of the new refrigerator car company. While here some time ago he stated confidentially that plans for the company included the construction of several thousand new refrigerator cars each year.

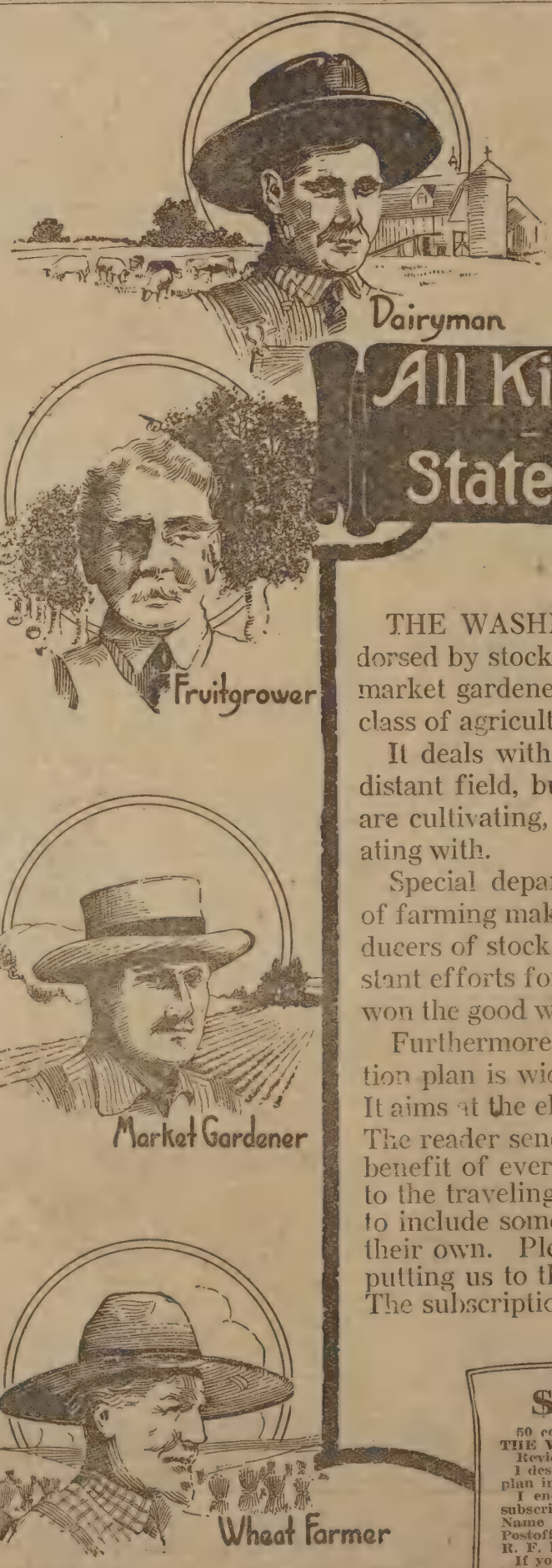
Railways have been reluctant to build new refrigerator cars for the reason that they usually need them only on their own lines for a few months of each year, and when not in actual use by the owners they are subject to the control of the interstate commerce commission and the American Railway association. Frequently they are dispatched to far-distant points and then when again needed it is difficult or impossible to get them back.

When owned by a private company refrigerators are outside the control of the I. C. C. or the A. R. A. and can be used much more advantageously by the owners. This is proven by the experience of the Pacific Fruit Express, which owns about one-third of the refrigerators in the United States. The Western Fruit Growers' Express will be the second largest owner of refrigerators in the country.

Growers and shippers in the Wenatchee district have long urged upon the Great Northern the advantages of putting its cars under private control, and officials of that road have been working on the project for some time. If the plan as proposed is carried out by the addition of several thousand new cars each year the new company should be able to regulate the supply needed to move the apple crop out of this district much more efficiently than has been possible in the past.

MAKE PROBLEMS KNOWN.

Farmers may well sit in with business men of the towns and cities for mutual consideration of problems, but they must not rely upon the towns and cities to solve these problems.



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The County Is Small; the Spirit Is Big

Wahkiakum County Is Made Up Largely of Producing Forests and Fertile, Dairy-Farming Valleys

By HORACE ADDIS

That railroad communication is not a necessity for happiness, progress or prosperity is proven by the results attained by the citizens of the little Skamokawa valley, in Wahkiakum county, although they have long wanted rail and wagon roads. This valley is not only entirely without a railroad, but it has never had a road "to the outside world," its only communication with all that is included in this mysterious phrase, as well as even with other parts of the county, until recently, being by boat. The little town of Skamokawa lies on the banks of the Columbia river, while about 70 families people the three prongs of the Skamokawa river, which unite just above the town. The Columbia, that great unpaved but dustless highway, gives a fairly certain, though slightly irregular mail service, possibility of boat connection between the different valleys that make up the county and a way to make a start into the great world outside.

Wahkiakum County.

This is intended to be a story of the Skamokawa valley, but right here I would like to give a little idea of the county in general. Cathlamet, the county seat, is the largest town. It is situated at the mouth of the Elocomon. This valley is credited with 53 farm homes; the Skamokawa with 72; Rossburg, 65; Gray's River, 42; Deep River, 60, and Eden, 17. Each of these has its river, most of them waterways for small boats when the tide is high, and separated by mountains over which there is scarcely more than a trail. Besides these communities, Puget island, in the Columbia river, opposite Cathlamet, has 88 homes. While all these represent land owned by the resident, many of them are much more fishermen than farmers, and this is true of a few of these in each of the localities named. Most of Puget island—about 3000 acres—was dyked in 1916. This was directly the result of the efforts of George A. Nelson, who was then county agriculturist. Since then the amount of farm products on this wonderfully productive area has increased prodigiously and the valuation has jumped from about $35,000 to $155,000. It may surprise some progressive farmers to know that this half isolated county was the first in the state, the first west of the Rocky mountains, in fact, to have a county agriculturist. Mr. Nelson began his duties there in 1912 and it has had an agent ever since. The county is justly proud of this distinction. A celebration of the fact will be held this year. Fred S. Martin, the present county agent, will be in charge, and probably 10 counties will participate and the extension department of the state college will, of course, father the event. More details will be given, soon, in a separate statement.

Lumber Is Leader.

Every one of the little valleys mentioned is extremely fertile and most of them are capable of having the area of cultivated farms greatly enlarged as the land is cleared, though much of it will be upland. Immense quantities of lumber are being cut annually. Some idea of the importance of the lumber industry of the county is glimpsed when it is known that about 120,000,000 feet of logs were cut during 1922. These averaged about $20 per 1000, bringing the snug total of $2,400,000. This represents eight logging camps. Four shingle mills take a small part of the output, working it over into shingles at about $2.75 per 1000, which adds a little more to the above estimate of the amount of timber money to be credited to Wahkiakum's annual total.

Timber is, therefore, at the present time, much the greatest industry of the county. Much of the timber area is fit only for reforestation, but much of the country is good agricultural land, and, in the final analysis, Wahkiakum county must depend on agriculture for permanent development and prosperity. This is being slowly accomplished, but now more rapidly than ever before.

The road question, which has always been acute, shows much hope of improvement. There is a good macadam road between Skamokawa and Cathlamet, but the hoped-for road on toward Kelso seems several years away yet, although it seems sure to come, and be built at least in part by the state. Grays river will reach the outside world first, but out by way of the ocean beach highway, to South Bend. Some of the people still in the county are pioneers, who have hoped and prayed for and believed a railroad would be built down the north bank of the Columbia. With the advent and general use of the auto, they now see their hopes about to be realized, but in a slightly different manner—in auto roads instead of a railroad. Optimism has helped these pioneers and their children to struggle on in the belief of better conditions coming. They are optimistic yet, and if the Washington legislature understood what the waiting of all these years has meant to the fine citizenry of Wahkiakum county, it is doubtful if funds would be withheld, while more favored sections are being served.

Tides Determine Fair Time.

Skamokawa valley, then, is only a part of this progressive, but somewhat isolated, county. But no part has shown a more progressive spirit. The county fair is held at Skamokawa. When I was last there, at a meeting of the Jersey breeders, the manager, Mr. Weist, was figuring with them on the best time for holding the fair. Tides, which vary in height at different times of the year, and affect the Columbia river as far up as Portland, had to be considered. Grays River community, which does all its boating (and this means all its traveling) on the tide, had to be considered, as it is a good exhibitor, especially of Jersey cattle. Other communities ship on the tide, also.

The best idea of the importance of the dairy industry of the valley can perhaps be had by receipts and disbursements at the Skamokawa Valley creamery, located in Skamokawa. Of the 72 families listed as farmers, at least 65 are dairymen. The others have a few chickens and garden. Of these 54 are stockholders in the creamery and over 60 market their cream here. The creamery is a corporation, operating cooperatively. It has been in operation continually for 24 years, its capital stock being $3000. For the year 1922 butter fat purchased totaled 191,429 pounds, for which $84,916.23 was paid. Stockholders' dividends are added to the prices received, but these are included in the figures above. About the same amount of cream was received in 1921, and the amounts for the first half of 1923 are 94,914 pounds of fat, for which $43,294 was paid. Much of the butter from this creamery is marketed in the logging camps in the county, but the larger portion goes to Seattle, and its brand has an established reputation in Portland, where it is decidedly popular.

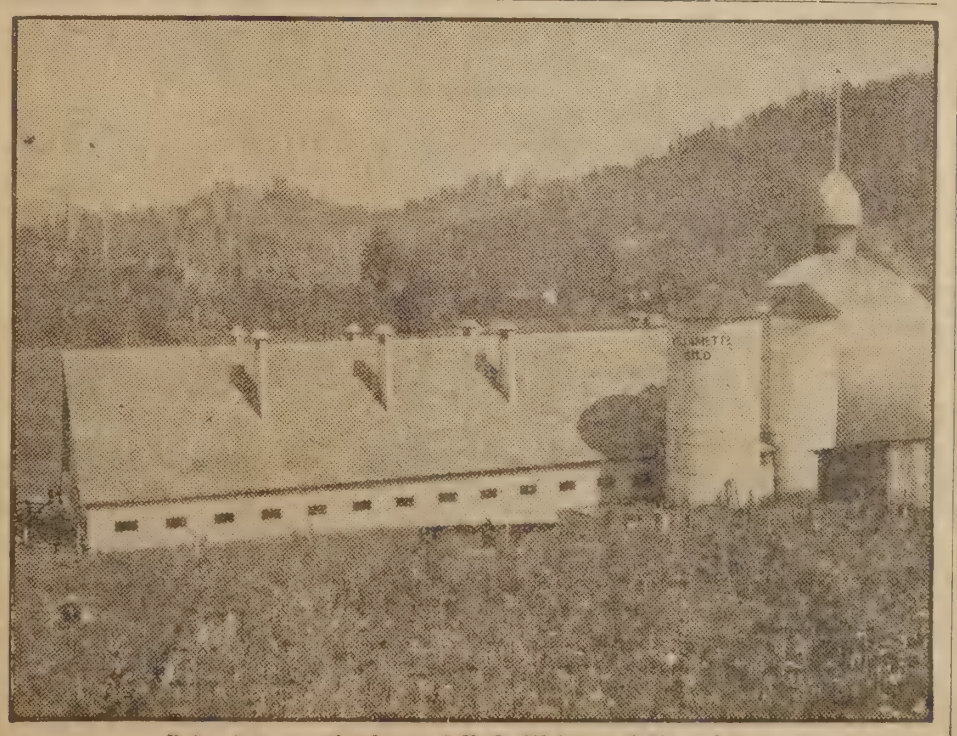
Jersey Breed Leads.

In the Skamokawa valley the Jersey breed is supreme. Most of the herds are grades, but there are a few purebred herds of popular blood lines and others with a few purebred females. One farmer has a few registered Holsteins and a Holstein grade herd; one has a Guernsey herd sire, and there is one grade Jersey bull in the valley. All other herds have registered Jersey sires at the head. Can any other dairy region in the entire Northwest show as near 100 per cent purebred sires?

This valley has one Jersey bull association, and no word except luck will quite account for the wonderfully good lot of blood concentrated in the four bulls included in the association. First must be mentioned Iota's St. Mawes. He is a son of the ex-world record cow, Lad's Iota, 1048 pounds of fat, highest record daughter of the gold medal bull, Rinda Lad, and his sire is St. Mawes Lad. As the sire is a world record bull in that he sired the only gold medal senior yearling and is the only bull to win a gold medal with daughters with first calf, and his sire and grandsire on both sides are gold medal bulls, as well as his dam and both granddams, and his offspring are now commanding high prices, the fact that they secured him (before all these records were made, of course) for $350 makes the word "luck," as well as good judgment, appropriate. Two other bulls, St. Mawes Rosaire Olga Lad's Skamok and St. Mawes Rosaire Olga Lad's Roxana, are by Poppy's St. Mawes Rosaire Lad. This is one of the four full brothers, sons of the great gold and silver medal bull, Rosaire's Olga Lad, and Poppy's St. Mawes, highest record daughter of the great gold and silver medal bull, St. Mawes. This quartette hold a world record far above any other four full brothers as sires of production, with two world record daughters, 13 silver medal daughters, many high register of merit daughters and Poppy's St. Mawes Rosaire Lad himself became a silver medal bull with the first three daughters in milk, one of them a senior yearling. Besides this, they have sired two gold and five silver medal bulls and 16 or more proven sons. St. Mawes Lad, referred to above, is one of the gold medal bulls, and his sire, Poppy's St. Mawes, is a gold medal bull. Poppy's St. Mawes Rosaire Lad died when he had but nine daughters, but part of them have already given him an enviable record and they will do more. He has the breeding to make the members of the association feel they were lucky in securing two of his sons before he died. The fourth of the association bulls is Tootsie's Major, a son of Melia Ann's King and out of Tootsie Wild Rose, with a record of 685 pounds of fat, with two milkings a day and ordinary herd care. He is a grandson of Golden Glow's Chief, the bull that sired "the wonder cow," Vive La France. Her six consecutive years' official tests resulted in over 600 pounds more butter fat than any other cow of any breed in six even non-consecutive official tests. This makes him close kin, also, to the world record cow, Darling Jolly Lassie. It would be hard to find four more desirable bulls in that many purebred herds, let alone being used in a bull association, mainly on grades.

The Largest Dairy Farm.

H. L. Weister, proprietor of Sunrise Dairy farm, has the largest herd of purebred Jerseys in the valley. He has 32 cows in milk and a total of about 60 head. The present herd sire, Spozza's St. Mawes Poppy, is by Gertie's Poppy's St. Mawes. His daughters, all young, are making excellent records. The dam is Spozza's Foxhall of F. O., an exceptionally good cow. He is extra large, of good type, with straight back, deep middle and strong heart. Prior to this bull Mr. Weister had a son of Rosaire's Olga Lad from Ed Cary of Oregon. Only two daughters had been born when he died. One of them has an official record of 562 pounds of fat as a senior yearling, with only two milkings a day. Before that, Mr. Weister had Skamokawa Chief, by Oregon Marigold and out of Brown Mary's Minuette. This bull now has 18 daughters in the Register of Merit, and more on test. One of them, Pocahontas of Sunrise, is a gold medal cow, with a record of 712.22 pounds of butter fat in her year. She exceeded 50 pounds every month of her test but one and now has a daughter on test that is assured of a silver medal, if no accident happens in calving. Spozza's St. Mawes has three daughters on test. Two seem sure of a silver medal. Mr. Weister has 11 yearling daughters of the bull and has no doubt of making him a silver medal bull in the near future. He has sold quite a few bulls in the valley, and some of them have displaced grades.



Dairy barn on the farm of H. L. Weister of Skamokawa.

Probably the next largest purebred herd is that of Thompson & Weist, proprietors of "Breezy Point Jersey Farm." Less than three years ago they purchased from F. H. Jones of Perrydale, Ore., 12 cows and heifers. Most of them are daughters of St. Mawes Golden Poppy, sire of the world record junior 3-year-old, Poppy's Dortha, 994 pounds of fat, and the others carrying his blood. He is one of the great four full brothers referred to above. Unfortunately garget developed in the herd. It has but recently been entirely eradicated, and no big records have yet been made. But at the next freshening the cows will be put on test. The herd sire is a son of the gold and silver medal bull Silver Chimes of S. B., and a few heifers will soon be ready to test.

E. M. Whitten has a few purebreds, besides a good grade herd. Fawn of Amity, that will be 18 years old next October, was milking about 40 pounds when I was at the farm. She has a cow testing association record of 210.9 pounds of fat in five months, when the association was disbanded. One of her great granddaughters sold in the Portland sale last winter for $510. Mr. Whitten has two daughters of Cowslip's Ashley. One has a calf by St. Mawes Rosaire Lad's Roxana and he has one purebred calf by Iota's St. Mawes and one by St. Mawes Rosaire Olga Lad's Skamok. He is just getting started, but he is starting right.

G. E. Sonner has 11 purebred females. He is keeping one of the community bulls, Iota's St. Mawes, and some of these are his daughters. They are excellent dairy prospects, with good dairy type. The bull is not large, but he is a handsome, typy animal and is breeding type as well as the anticipated production.

William Dawson is now keeping St. Mawes Rosaire Olga Lad's Roxana. Mr. Dawson has no purebreds, but does have a good herd of grades. The bull is of good size, extra long of body and hips, has a good head and looks much like his sire.

Theodore Anderson has St. Mawes Rosaire Olga Lad's Skamok in charge. This bull is large, also, and has long body and hips, a good back and is full of pep. Mr. Martin, who was responsible for the bringing in of the fourth bull, Tootsie's Major, has one of the best grade herds in the valley. He had two bulls from Henry Stewart of Albany, Ore., before Major was secured from the Stewart herd, and found both of them to be sires that increased the production of their daughters over that of the dams. He has one grade cow that produced 597 pounds of fat in a year.

Tootsie's Major is now in the hands of Peter Johnson. He, too, is a large bull, is of good type, though different from any of the others. Mr. Johnson has an excellent herd of grades, that have made good records in the cow testing association.

J. A. Martin, county commissioner, has three purebred cows, all of popular breeding, and he has three calves, each by a different one of the community bulls. He has a good start and will build up a herd.

Skamokawa valley, with its wonderful soil and climate for pasture grasses and hay, and its mild climate, should have more purebred females, as well as its fine lot of herd sires.

Club Work Progresses.

Skamokawa valley has a dairy club of 12 boys and five girls. Mrs. Hazel Sonner is club leader and has inspired much enthusiasm into the young people. Five of the members have purebred calves and it looks as if the increase of the number of purebred dairy cattle in the valley will come mainly through calf club activities. Last year eight of the club exhibited at the county fair. Late in June the club gave a dance, which netted about $30. The money will be used to buy cooperatively a clipping machine. An effort will be made, also, to have blankets and halters all alike. Twelve of the club were present at the meeting of the Skamokawa Valley Jersey Cattle club, July 1, and two of their number, Noyes Whitten and Raymond Rasor, were the only ones present who selected the right cow in the judging contest, the object being to choose the highest producer.

This dairy club is not the only one in the county. Fred S. Martin, county agriculturist, has over 150 boys and girls in club work. The projects include dairying, gardening and sewing. As only 450 boys and girls are eligible in the entire county, this is a fine showing. Mr. Martin returned from Pullman June 25, where he had attended the second annual club encampment. Three representatives of the Wahkiakum clubs went with him. They were Gladys Boylon, winner in the sewing club last year; Lelia Houchen, winner in the Cathlamet sewing club, and Howard Martin of the Skamokawa dairy club. So in club work Wahkiakum is well to the front, as well as with its dairy herds.

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More Live Stock in Prospect

Not only does the wheat crop bulk large in the Palouse country, but there is also promise of an immense crop of all kinds of forage.

This will prove conducive to the development of the live stock industry.

Quick Market Needed

With regard to the new market for split cherries in the Wenatchee valley, J. G. DeBord of the Cashmere cannery says damaged cherries generate an acid that in time eats the cans, and that makes it necessary to sell the fruit at once.

The Cow's Time

Do not use up all the cow's time in eating grass. A part of her time must be spent in chewing her cud and digesting her feed. This is the reason given by Donald C. Saunders, the cow tester in the Snohomish county association, for giving the cow some grain with her pasture to complete the ration and insure maximum production.

Feeding Wheat to Live Stock

Some eastern Washington farmers, among them J. C. Lyons of Walla Walla county and A. F. Alexander of Franklin county, say that with prices down, more money can be made through feeding wheat to live stock than by selling on the market.

The farmer who is alert often finds more than one way of marketing his crop.

Bigger and Better Apples

George Beidler of Manson reports that Lake Chelan apples are larger than for years at this time of the year and that worms are few. He adds that those who are raising fruit on unirrigated land have a good crop this year.

It may not be entirely the season that has brought this good news, for it is related that almost all the growers in that section put on an extra cover spray at the time of the first spray. This means that they are paying more careful attention to their orchards.

Clover and Rye Grass Pasture

The pasture has an important part to play in reducing the cost of live stock production.

A. E. Moore of Falls City, King county, gets a large butterfat average from his cows—62.3 pounds for one month from 15 cows.

Mr. Moore raises all of his own hay from a mixture of clover and rye grass. This mixture makes an excellent early pasture, and also a very good quality of hay. As a general rule he raises corn silage, but this year he expects to have enough clover to fill the hay barn and will put the rest into the silo. Oats and peas have been grown with good results for silage, and he has known them to produce 15, and even as high as 20 tons of silage to the acre.

This farm is along the banks of the Snoqualmie river and each spring the fields are flooded and a layer of silt is deposited. This aids keeping up the fertility, but it also scatters a quantity of weeds. Mr. Moore, however, has been able to keep them down and to keep his fields clean by thorough cultivation during the growing season.

More Berries in Lewis County

The growth of the Lewis county berry industry is indicated by the announcement that 15 full carloads of fresh strawberries have been shipped this season.

The Lewis County Berry Growers, the local branch of the North Pacific Cooperative Berry Growers' association, shipped its first carload of frozen berries July 8, the shipment going to Pittsburgh, Pa. The fruit shipped included 120 barrels of strawberries.

The growers are presenting a petition to the Lewis county board of commissioners for the appointment of a county horticulturist.

Boys and Girls' Club Work

Boys and girls' club work has become one of the big features of the Spokane Interstate fair, which will be held September 3-8 this year.

O. E. Heaton has been appointed general superintendent of the department by Thomas S. Griffith, fair association president. Mr. Heaton will be assisted by Thomas A. Bonser, while Mrs. Harriette Lycette has been particularly assigned to the girls' canning contest work, where the total prizes amount to $118.

W. P. Romans, of the Spokane Chamber of Commerce; F. V. Yeager, retiring county school superintendent, and Mrs. A. V. Overman are also taking an active part in making this year's feature of the boys and girls' club work the biggest yet.

Farmer Who Sticks

Dean Edward C. Johnson of the Washington State college told the Pullman Kiwanis club recently that "the crop prospects make us much better off than last year, despite the discouraging price outlook."

The dean added that in his opinion wheat will always remain the big cash crop of the Palouse country, because of the adaptability of the district to that cereal. But other crops will come.

Diversification is advancing much more rapidly than most farmers realize. There are 160,000 more acres of alfalfa and clover crops in the wheat lands of Washington this year than last, and "the farmer who sticks to it two, three or five years longer has a promise of reward in the future," said the dean.

Quick Need of Fighting Pests

There is a marked awakening among Washington farmers to the quick need of fighting the pests which begin to appear in their fields and orchards. Business men as well as the farmers are interested. Being more used to writing letters, the secretary of a commercial club sometimes is drafted into service. This was the case recently when the wire worm promised serious inroads into the Yakima valley. The Yakima Commercial club sent an urgent appeal to the United States department of agriculture and has received a reply from J. E. Graf, entomologist, that the federal department of agriculture finds financial difficulty in sending into the Yakima region investigators to study the wire worm menace just now, yet he hopes a station will be in operation there by next spring.

In the meantime, Dean E. C. Johnson of the Washington State college reports that Assistant State Entomologist A. Spuler will spend considerable time investigating the wire worm this summer and that Professor A. L. Melander will conduct further experiments at the college laboratory in an effort to combat wire worms.

Putting a bait in the ground and experimenting with various materials and fumigating the worms is one of the lines of approach to the problem of control which has been started. Apples, potatoes and flour dough have been used. The wire worms come to the dough more readily than to other kinds of bait, it is reported. The worms move slowly through the ground, hence the bait is left for a week before again examined. The baits are placed four feet apart and as many as 50 worms have been found about one portion of bait and this at the end of two days.

The dry land wire worm goes into the pupa stage in July and August and remains in the ground until the next spring, when the mature beetles appear. It is assumed that the same is true of the irrigated land wire worm, though the information relative to its life history is not complete in all details.

The wire worms attack all crops. Their inroads into the sugar beet fields have been particularly bad. Of the grain crops, oats are the most immune and barley is not worked so much by the worms as is wheat.

Washington State Gleanings

HOLSTEIN BREEDERS TO ORGANIZE.

A meeting of the Holstein breeders of Stevens county has been set for July 26 at Addy, arrangements of the meeting are in charge of Rolla Fisher, Addy; E. Storey, Valley, and T. C. Bell of Colville. W. E. Meyer, field man for the Holstein Breeders' association, will be present to discuss the work, and plans are being made to organize a Holstein-Friesian Breeders' club in the county.

WILL BUILD DIKE.

Al Leichhardt was elected chairman of the board of commissioners of diking district No. 13, at their organization meeting at Kelso; C. A. Bradt was elected secretary. Fred C. Cramer was appointed engineer of the district recently. It comprises 200 acres west of the railway tracks and south of Kelso and a dike will be built along the bank of the Cowlitz river at once.

PHEASANT CHICKS HATCHED.

The Yakima county game farm has already hatched 1500 Chinese pheasants this year and recently received a shipment of 300 more eggs. Pheasant hens at the farm are laying from two to three dozen eggs daily now and it is estimated the season's hatch will be around 2300 birds. In addition to this the state will send 200 young birds to Yakima from the state hatchery.

CHERRY HARVEST MAKES RECORD.

Completion of the harvesting of the largest cherry crop in its history is reported in Sunnyside. Close to 200,000 pounds of Bings and Lambert's have been shipped to eastern markets, while the Royal Anns have been brought to Yakima to the cannery. The trees have averaged between $40 and $60 each.

FIRST CARLOAD OF APPLES.

The first carload of apples from the 1923 crop was shipped out of Kennewick July 2, according to reports from the O.-W. offices in the city. This was a carload of Yellow Transparents consigned by the grower, I. S. Gleason, to a firm in Denver. The fruit is of good size and excellent quality this year. The shipment is about a week earlier than that of last year, but the first shipment in 1921 was on July 5.

BUYS BULL FROM W. S. C.

Amel Boldman of Pasco has added to his herd the young Holstein bull, Chinook Piebe David, which gives unusual promise because of the excellent record made by his mother recently in tests at Washington State college. In a two weeks' test she averaged more than five pounds of butter a day after having completed a year's test, which was thought to have been the best she would ever make.

POTATO ACREAGE REDUCED

L. M. Holt, supervising engineer of the Wapato project, in gathering material for his annual crop report, found that the potato acreage this year is but little more than half of what it was last year. Last year the project had 9500 acres in potatoes but this year the total is only 5500 acres. On the other hand about 6500 additional acres, much of which is new land, are in alfalfa this year. The yield of grain will be exceptionally heavy and all crops are looking well at this time.

TRAFFIC ASSOCIATION ELECTS.

L. J. Hays of the Hays Fruit company was elected president of the Yakima Valley Traffic and Credit association at the annual meeting held July 2 at the Commercial club rooms. J. Walter Hebert was named vice president, C. M. Moltzinger treasurer, and W. J. Urquhart manager. The report of Manager Urquehart shows that the association handled last year 9862 cars of fruit from July 1, 1922, to June 30, 1923, which was 68.7 per cent of the 14,350 cars shipped from the valley.

C. W. McCABE SELLS FARM.

C. W. McCabe, Lone Pine, in Whitman county, has sold 240 acres and his equipment for $28,000 to S. R. Warwick of the same neighborhood. This is the largest farm deal reported in this district in months. The farm is highly improved. The deal included all live stock.

Mr. Warwick, who owned more than 700 acres near by, gets immediate possession and will harvest the crop this fall, but will not move from his present home.

Mr. McCabe, who has farmed here since 1908, will retire. He and his family will take a trip to the Coast.

PLAN EGG STORAGE PLANT.

A modern fireproof building, to better handle the growing business of the Washington Cooperative Egg and Poultry association's Winlock branch will be erected just as soon as the egg storage season closes in August. Preparatory to this 75 feet of land was purchased from Fred Veness. The new building will be modeled after the one used at Bellingham station. A three-story building, 50x100 feet in size, and a two-story structure, 25x100 feet, are being considered, with full basement construction for cold storage and a poultry killing room.

Farmer Pays Heavy Price for Labor Shortage

As nearly as it can be done from recollection, without the taking of notes, this article will reproduce a debate on the immigration question overheard recently on a railway train. It wasn't a prearranged debate at all. A wheat grower of the Inland Empire was one of the disputants; the other was a leader of organized labor from west of the Cascade mountains. The discussion brought out very clearly two conflicting points of view.

The wheat grower was complaining of the high wages in harvest time. "How can we afford to pay them," he asked, "with the wheat price around 80 or 90 cents, and wages as high as or higher than they were in war time? I am for reasonable restriction of immigration," he added. "If I had my way there would not be any Asiatic immigration at all. But I have been looking into this matter, and I tell you it is the farmers that are paying for the corner in labor that has grown out of our present severe restriction law.

Strong for Restriction

"The labor unions are strong for restriction of immigration. That is to their interest, and I can't say that I blame them. But I am telling you how it works out. There is a shortage of labor in this country everywhere, and the farmer is paying a heavy price for it. In the first place, he must pay high wages on the farm. But that is the least of the cost. He pays for high wages when he buys anything—freight rates, clothing, boots and shoes, machinery, farm implements, automobiles; for the paint that is put upon his buildings, for all the metals that are used on his farm. They are paying high wages in the factories that produce these articles, and the farmer must pay a large part of those high wages.

"But when he comes to sell the produce of his farm, he finds that prices are made in many cases by the surpluses that we must sell abroad. We must sell our surplus wheat, corn, meat, dairy products, to the people of Europe and Asia, who work for low wages and buy only in a limited way and, when they buy at all, only at moderate prices."

Then the labor leader broke in. "We must not make the mistake," he said, "of looking at this big question only from the material point of view. We have been too easy-going in the matter of immigration. We have admitted too freely millions of ignorant men and women who do not know anything about our institutions and are easily led astray by radical, communistic agitators. The American Federation of Labor has constantly to fight these radical elements in our unions. The issue comes up at nearly every annual convention of the A. F. of L., just as it did over at Bellingham the other day.

Foreign Born Population

"As a result of this easy-going policy of immigration the American people have become a conglomerate nation. I haven't the exact figures at hand, but I wish you would look up the statistics of the last census on our negro population, our foreign-born population and the vast number of people now living in the United States who were born of foreign parentage. I think if you'll do that the figures will set you to thinking."

On returning to the office the reporter of THE FARMER looked up the statistics. Here they are: In 1920 there was a negro population in the United States of 10,463,000; an Indian population of 244,000; a Chinese population of 61,639, and a Japanese population of 110,000. The total is close to 11,000,000 of the black, red and yellow races.

The census returns of 1920 further show that there was a foreign-born population in the United States of 13,920,000. Taking the foreign-born population and those born in the United States of foreign parents, one or both, the total is found to be 36,398,000. Add to that the negro and Indian populations and there is a total of 47,000,000 out of the 1920 population of 105,000,000.

But the wheat grower would not give in. "My point," he said, "is that the farmer is compelled to pay the big price for restricted immigration. This country should not be afraid of immigrants of the right type, the kind we were getting when I was a young man—from England, Scotland, Ireland or other northern countries of Europe. Nor am I unduly prejudiced against the people who live in southern Europe. They have their good qualities, and in a way they are a valuable addition when they come to the United States. But I admit that we have made the mistake of admitting them too freely, in such numbers that we can not do our full duty by them of Americanization and education. I want these people to come in as fast as we can Americanize them and assimilate them, and even their friends should not ask for more than that."

Looking up the immigration restriction law of May, 1921, which is operative until June 30, 1924, THE FARMER finds that it limits the number of aliens admissible to 3 per cent of the number of the particular nationality in each case resident in the United States as shown by the 1910 census.

Earlier Census Basis

It is being urged in many quarters that if the quotas were based upon the 1900 census, or the 1890 census, the effect would be to admit a larger immigration from the British isles and the northern countries of Europe and to reduce the immigration from southern Europe, for the reason that back in 1900 or 1890 there were not large numbers of immigrants in this country from southern Europe. These have been coming in larger streams since the beginning of the 20th century.

It is a big and important question, and THE FARMER is frank to say that it can see both points of view, that of the farmer and that of the labor leader. Since listening to the discussion and thinking the matter over we have been wondering if this restriction of immigration may not be the main cause of the unjust spread of prices between what the farmer sells and what he purchases. If there is a labor corner in this country, as some assert, it would work out that way, for there is no corresponding corner in the products of agriculture.

FARM BUSINESS AND MARKETS OUTLOOK

EUGENE MEYER JR., managing director of the war finance corporation, says there is too much talk about dangerously large wheat stocks. Mr. Meyer, who recently returned from Europe, says the stocks there are reduced to a minimum, and that "probably the stocks in excess of the pre-war normal carried in the producing countries are no greater than the deficiencies in the stocks carried in the consuming countries."

My Meyer gives the public some interesting reminders. "Two years ago, when cotton was selling for 8 cents a pound," he said, "we were told in the war finance corporation that there was a stock of 10,000,000 bales and that it would take years to eliminate its disastrous influence. Ninety days later cotton doubled in price and the stocks began to disappear, until now the cry is that they are dangerously inadequate.

"Eighteen months ago the stocks of sugar in Cuba were reported to be so large that some people, otherwise considered responsible, started a movement to force a restriction of sugar production in Cuba. Those stocks disappeared with equal rapidity.

"Two years ago corn was selling at 18 cents a bushel in Nebraska and Iowa and there was much talk about burning it for fuel, although there was little burned. Today corn is selling at 83 cents a bushel in the Chicago market, equal to 65 cents at the interior points of Nebraska and Iowa, and all talk about the calamity of three bumper corn crops of over 3,000,000 bushels has disappeared."

These are timely reminders, for even well-informed people forget that surplusses of agricultural products have usually been quickly cleaned up in this country.

So much for the immediate present.

General World Conditions.

But general world conditions and the return of the wheat-growing capacity of countries of the old world warrant a belief that it will be better for the American farmers to grow less wheat than they have been growing. At the five states wheat conference at Wichita, Kan., last week the secretary of the Kansas state board of agriculture gave one of the most sensible talks on this problem that have come to the attention of THE FARMER. He declared that "in the solution of our agricultural problems lawmakers have done what they could, but the remedy is not to be found in legislative enactments alone." The rest, he declared, lay up to the farmers themselves, and the solution would be found in diversification of farm products. Kansas farmers, he said, have been producing too much wheat and not enough eggs, poultry and dairy products—a friendly indictment that applies with even greater force to many of the farmers of the Pacific northwest.

More Diversification.

It seems reasonably clear, as the Kansas man said, that "the farmer's greatest problem is to help himself, and this can best be done through diversification. It is the farmer's independent method."

It will be said, with reason, that large areas in Washington, Idaho, Oregon and Montana are adapted by natural conditions to the growing of wheat, and that grain growing can not extensively be given up for other crops. But it is not necessary that wheat growing be abandoned altogether, or even be very considerably curtailed. Little reductions here in the Pacific northwest, and a greater reduction in Kansas and other states where diversification can be adopted more easily, would soon wipe out the surplus and give the United States a wheat production that would balance with wheat consumption.

We should not be surprised, as Mr. Meyer suggests, if the record of quick recovery from low prices for cotton, corn and sugar should be repeated with wheat within the next two years.

Corn and Oats.

Corn prices at Chicago are only 12 to 15 cents lower than wheat and are the highest of the season. The committee of economists appointed by Secretary Wallace to consider the agricultural outlook has pointed out the probability of a corn shortage in 1924.

Harvest of the new oats crop is under way in the middle west and primary receipts are increasing. Prices remain close to the low point of the season. In view of the probable continued scarcity of corn, oats prices should average substantially higher during the next 12 months

Cash Grain Markets.

The range of cash grain prices for the week ended July 18 was as follows:

CHICAGO—Wheat—No. 2 red, 99c@$1.03; No. 3, 98 1-2c @$1.00 1-2. Corn—No. 2 mixed, 8b@86 1-2c; No. 2 yellow, 86 1-4@90c; No. 2 white, 85 1-2@88 3-4c. Oats—No. 2 white, 40 1-4@44 1-2c; No. 3, 38 1-2@42c; No. 4, 37 3-4 @40c. Rye—64@66c. Barley—60@69c.

Cattle Market Holding Well.

Cattle markets were well supplied last week, measured by the recent rate of arrivals, but dressed beef trade in eastern cities was brisk, with choice steer carcasses the highest since December. Prices of practically all fat steers, cows and heifers were well sustained at the principal markets. Veal calves were unevenly 50 cents to $1 lower, with the trend downward under increasing receipts at the close of the week.

Feeder demand broadened last week, but most buyers want quality, which is hard to find in present arrivals. Both supply and demand will probably expand sharply in the next 30 days, with but little change in values.

Hog values rallied quickly after the deluge in the second week in July and the $8 quotation was reinstated at Chicago. Volume of receipts considered, the market is doing well, indicating that present prices discount most of the high production.

Lambs and Wool.

A sharp increase in receipts in the last 10 days has taken the wire edge off the lamb market. Receipts from the range expanded and shipments from the southeast took another spurt.

Wool markets are quiet, with buyers and sellers playing a waiting game. The downward trend seems to have been halted.

Seed, Mill Feed and Hay.

Recent bargain prices for red clover seed attracted buyers and values moved up slightly last week. Crop prospects are a little less favorable for both timothy and red clover, according to late reports.

Mill feed markets are easy and prices are declining.

Receipts of hay at both eastern and central western markets are light and barely sufficient to supply the demand. Prices are holding firm.

Eggs, Butter and Cheese.

Dealers are still taking additional supplies of fresh eggs for storing purposes, although warehouses throughout the country are already well filled. Demand for eggs is improving and if they continue to disappear into consuming channels at the same rate as during the first weeks of July storage stocks may not be so burdensome as they now appear.

Light receipts of top scores of butter insufficient to meet the demand for storage succeeded in maintaining prices on a firm basis last week.

Prices on all styles of cheese were well maintained last week. Trading was fairly active, although few large lots were moved.

Business Conditions.

Business conditions retain the two-faced character which they have had in recent weeks. A relatively high rate of activity in manufacture and in current distribution is maintained, but there is a great degree of caution

(Continued on page twelve.)

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LIVESTOCK AND DAIRY

Vaccine

Feeder and Stocker Cattle

Dr. J. R. Mohler, chief of the bureau of animal industry, United States department of agriculture, upon his return to Washington, D. C., from a conference held at Chicago, Ill., on June 21 to discuss hemorrhagic septicemia control work, announced that arrangements had been completed for the vaccination of feeder and stocker cattle at public stockyards against this disease, also known as stockyards pneumonia or shipping fever. This is one form of blood poisoning.

Hemorrhagic septicemia, although it occasionally manifests itself in cattle that have not been away from the home place, is most prevalent in animals that have been shipped long distances, especially those that have been unloaded en route at feed, water and rest stations or at public stockyards. Despite the belief to the contrary, outbreaks of hemorrhagic septicemia have been traced to all of the larger public stockyards. While losses have been gradually on the increase for several years past, this disease has become more prevalent and virulent during the last fall and winter than ever before. The vaccination method of treating cattle to prevent their contracting this disease is still in an experimental stage, but it has been used enough to prove that losses from the disease may be greatly reduced and purchasers of cattle at the large central markets are urged by the bureau to have all feeder and stocker cattle they may buy vaccinated before shipment to country points.

Until this work is placed on a stable basis the bureau of animal industry will furnish vaccine produced in its laboratory and also trained veterinarians to administer the treatment at actual cost which, it is estimated, will be approximately 10 per cent per head exclusive of any charge the stockyards company may make for handling the cattle to and from the vaccinating chutes.

LIFE PRESERVERS FOR LIVESTOCK

By DR. E. E. WEGNER, W. S. C.

Rabies (Article 2).

I often think of the case of the person who sent in the head of a dog for examination with a letter stating that the head was from the family dog that had always been kind and agreeable to everyone. This dog got into a fight with another dog and when the small girl sought to pet the dog after the battle the dog bit her. He was apparently hot and angry and snapped the child as any dog might do. The parents were afraid the dog was rabid and had it killed and the head sent in. Examination did not prove that rabies was present and of course did not disprove it, either. The whole situation was left in a state of uncertainty. What a pity that the dog was not confined for a week! If it had been there would have been no uncertainty about it and the physician would have known for sure what to do.

The same principle applies when animals are bitten, because for diagnostic purposes the living animal is much more valuable than the dead one. The wild ones have to be killed and examinations of their heads are often of value, but the domestic ones should be kept to see if symptoms appear.

Nature of Animal Changed.

The symptoms in dogs are those of a derangement of the central nervous system. Those first noticed are an unusual disposition, either very affectionate or otherwise—frequently a complete change. The dogs may also pick up different kinds of small objects and swallow them. That was one way of aiding in the diagnosis of rabies years ago when we had no surer way, and it is given some consideration now. Later the animals pass into the exciting stage, when they are dangerous to the community. They may start out and travel for miles and bite animals and people that may be in their way, particularly those that molest them. They have no fear and will fight anything that opposes them. Even the wild animals lose their natural fear of man and will attack him on his front porch or anywhere they may meet.

In his wanderings the dog may go many miles from home and usually travels in a circle and will return to the place from which he started if the next stage, the paralytic stage, does not come on too soon. When the exciting stage is long and the paralytic stage short the cases have been known as furious rabies, and when the reverse is true and the exciting stage short and quite unobserved with the paralytic stage coming on suddenly, the cases have been called dumb rabies. This has led to some confusion in the minds of many who think there are two forms of rabies, when in fact there is only one. In some one stage is more conspicuous than the other.

In the paralytic stage the animal becomes paralyzed. This frequently begins at the mouth and causes the lower jaw to drop. The animal drools saliva and is unable to swallow. Later the whole body suffers and the animal dies in the stage of paralysis. After the jaw drops the animals can not bite and are not so dangerous for that reason. Other animals manifest symptoms that are similar to those described above, though not exactly the same. The period of excitement is similar but the paralytic is not so pronounced, and their actions are not so spectacular.

The Pasteur Treatment.

For many years it has been possible to save the lives of men that were bitten by rabid dogs by giving them the treatment perfected by Pasteur. This was commenced as soon after the man was bitten as it was possible to begin, and by the time the symptoms would naturally appear the treatment had so increased the man's resistance to the organism that he was capable of combating it. The same treatment is now available for animals and while it has been modified so that a smaller number of injections are necessary, the same principle is involved and the vaccine is prepared in much the same way.

This treatment is recommended in cases where a dog or coyote has run amuck on a farm and bitten a number of animals. When this has occurred the whole herd should be treated if there has been any possibility of their being infected. When single animals have been attacked they may be saved by this treatment if it is applied at once. No time must be lost, however.

In some states where rabies is prevalent, the law compels owners to have their dogs vaccinated against rabies before they can be licensed. This protects not only the dog but all people and animals that might be attacked. If we could keep our dogs free the disease would be much less rapidly spread. The wild animals would carry it, of course, but the danger would be very considerably lessened. (Copyright by E. E. Wegner.)

LARD SUBSTITUTES.

The coming of substitutes for lard has given the bacon type of hog increased prominence.

COSTS LESS IN THE END

Wherever you are, on highway or boulevard, look for the signature of the clinging, long-wearing Goodyear All-Weather Tread

The new Goodyear Cord Tire with the beveled All-Weather Tread costs no more to buy than other good tires.

But, by reason of its special and exclusive features, it usually costs less in the end.

The new and improved rubber compound in its tread, for example, assures longer wear.

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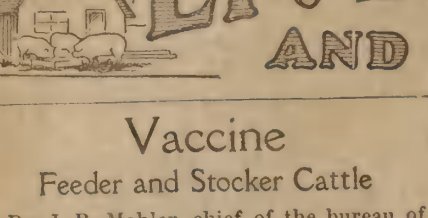

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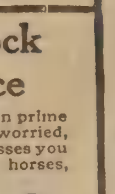

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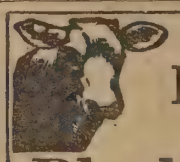

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POULTRY AND RABBITS

Poultry Marketing

By HUBERT E. COSBY,

There has never been a time when interest in marketing was as keen as at the present time. Post-war conditions of agricultural depression are responsible, to a large degree, for this general cooperative marketing interest; not only of eggs, but of several agricultural products. Cooperative marketing can never help the ills of hap-hazard production; it will only aid the growers who are producing scientifically and economically. It will never be possible to divorce the problem of efficient production from the problem of efficient marketing.

The domestic hen of today is a creature of achievement. Whether her environment is favorable or unfavorable for health and profitable production depends entirely upon the kind of environment the owner provides. The fitness of her living quarters are in direct proportion to the owner's interest in his poultry flock and his desire to make the flock a profitable side line enterprise on the farm.

Must Command Respect.

Better poultry environment is usually found on farms where the flock is large enough to command respect and demand regular, daily attention, not where smaller farm flocks are simply "kept." A flock of approximately 400 hens maintained by culling out each year and replacing with early pullets is large enough to command respect and small enough to remain a farm side line enterprise. The owner of such a flock is forced to study better feeding methods, soil conditions, sanitary measures, hatching dates, green feed supply and efficient houses. Knowing that an enterprise of this magnitude means a loss that hurts, if not properly cared for, forces such an owner to an economical production; or knowing that a flock of this size means a nice income, if properly cared for, induces the owner to study his problems and work for an economical production.

The average farm flock of 75 to 100 hens presents a very different problem. Such a flock usually does not command the respect of the farmer and when other farm work is urgent the care of such a flock is usually neglected. The income or loss from the average small farm flock cared for haphazardly and irregularly does not usually compel better environmental conditions.

A Per Hour Return.

Despite the fact that many farmers will remark that they can't figure their time worth anything, economical production of poultry products is based upon the return per labor hour. A person might "putter" around five hours a day giving 100 farm hens the best care and show a splendid financial profit, if labor hours were ignored. Regardless of the profit of the flock, the labor return per hour in such a case would scarcely be a slave's wage. The owner of 400 hens devoting three hours of work daily to their care, would certainly show a better profit, because his return per hour of labor would be worth while.

The bulk of poultry products is produced by the out of balance, haphazardly cared for flocks, and not, as many suppose, by the flocks of well-managed units. Will cooperative marketing help the producers whose birds are infested with worms due to soil contamination; the producer whose birds are infected with roup due to damp, poorly ventilated, dark houses; the producer who feeds only grain and no mash; or the producer who hatches his pullets late and feeds a poor growing ration? Will cooperative marketing solve the problem for the producer that "putters" away his time caring for only a fraction of the hens he should care for in the same time; or the producer who hasn't a big enough surplus to market profitably?

The marketing associations of several states have placed a minimum ownership requirement of 200 hens, and some cases more, before the producer may become a member of said association. A broad viewpoint discloses the fact that this is necessary and time and experience in cooperative marketing of eggs may increase the number of hens as a requirement for membership rather than lowering it. This minimum requirement for membership is in reality only an attempt to classify flocks of economical production, because only economical production can be aided by economical marketing.

Good Eggs and Bad Eggs.

A better perspective of the state-wide marketing problem can be visualized by observing the eggs as they come to market at the grocery stores, commission houses and centralized agencies. Brown eggs; white eggs; large and small eggs; clean, dirty, cracked, good and bad eggs; fresh and stale eggs; eggs gathered every day and others once a week; eggs produced on good, wholesome feeds and others on manure pile rations, all find their way to market in quart buckets, baskets, tubs and cases. To untangle this mess is without question a real problem. A severe grading system is necessary, yet who is it that raises the big howl when a quality grade is talked of? It comes largely from those who think an egg is an egg, regardless of its size, shape, color or what is on the inside of the shell. It does not come from the producer with a large flock of well-fed and well-managed hens; he encourages grading. So long as eggs are bought and sold by the old-fashioned dozen and not by the graded dozen, the bad eggs will set the price for the good. The consuming public today demands a quality egg produced on quality feed. No longer does the buying public fall for "the country egg" unless they know it was produced on clean feed. The scavenger hen and her product still finds a market, but she belongs in China, not here.

The farmer who manages economically a flock, for example, of 400 hens has a marketing problem. He may have five neighbors with 80 hens each that are not interested in poultry or marketing problems. These flocks produce more than is needed for home use and not enough surplus to market economically. Yet in the spring of the year, the only time of the year when eggs are hard to market, these smaller flocks throw on the open market a volume as large as the 400-hen flock and in direct competition with this flock in a cooperative organization. One of the hardest problems of cooperative marketing of eggs is the fact that the member of the association has nonmember volume and nonmember producers to complete against.

Consider the Size of Flock.

Each poultry producer should try to establish a flock of a size in keeping with economy of labor and marketing economically. The flock should be large enough to have surplus great enough to market profitably or the flock should be reduced to a size that will supply the home table only. Too many flocks are just an accumulation. Many are not worked out on the basis of a balanced unit in connection with other farm enterprises.

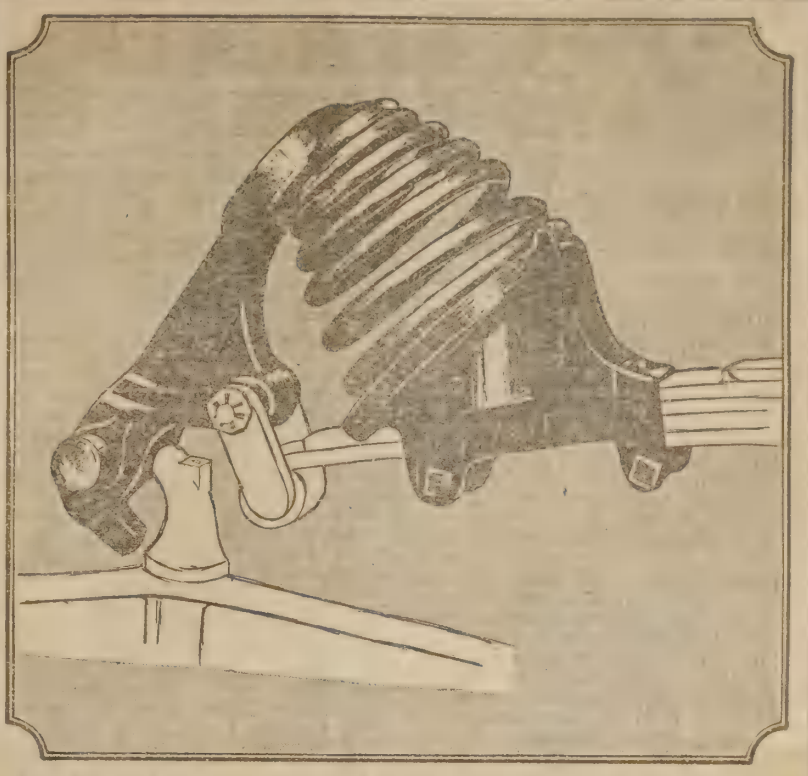
Cooperative marketing is not a straw for drowning poultry keepers to grasp in the hopes of pulling a poorly-managed, out-of-balance flock into prosperity. Cooperative marketing will never make good eggs out of poor ones; it will never get high prices for poor quality eggs. Cooperative marketing will help only the economical producer. Even though the small producer doesn't belong, he is helped by an association, because it holds up the general market by establishing good markets and shipping away the surplus. Balance the flock as to size and care, then cooperative marketing with loyal support of the membership will do the rest. Cooperative marketing will not help the owner of 400 hens or 200 hens with an annual egg yield of 60 eggs per hen. Economical production must come first, then marketing is the next step. Production can not be divorced from the marketing problem.

Chickens Destroy Weevil

What may prove another way of combating the strawberry root weevil was accidentally demonstrated by T. N. Clapsaddle, who has a small farm north of Arlington, Snohomish county. Last year he had two small plantings of strawberries, one of which became infested with weevil before the end of the season. He was short of pen room for the new pullets, and fenced off the entire patch, thinking that they were gone, anyway. It happened that the birds were put onto the patch early in July, as soon as the main crop had been taken off. When the new vines came up this year there was practically no weevil to be found on any of the plants or in the ground.

"I am fully convinced that this plan can be worked out very satisfactorily," said Mr. Clapsaddle, "and I am going to pasture 100 three-month-old pullets on my strawberry bed every year after the crop is off. I believe they will get every weevil and keep the patch entirely free from the pest. I believe that pullets of this age are the best for the purpose, since they are not apt to injure the plants in any way."

It is a well-known fact that chickens will eat the strawberry root weevil. The beetles are known to be above ground only in the month of July. George R. Shoup, poultryman of the western Washington experiment station, advises running chickens on berry patches of any kind in order to give them forage and allow them to pick up any insects that they might find. So far as is known, no definite experiments have been tried along this line, but it seems very probable that Mr. Clapsaddle's result is practical.



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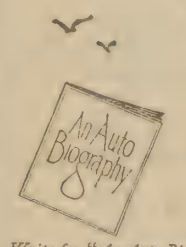

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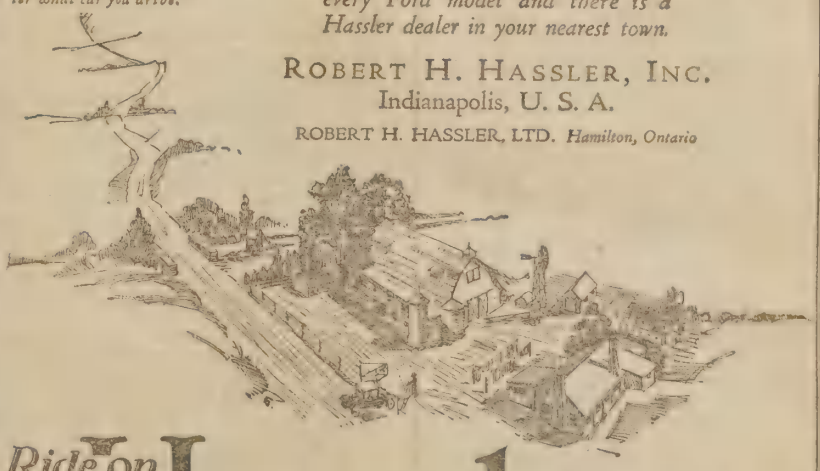

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ORCHARD AND GARDEN

Strawberry Fete

Ellisport Holds First Festival

When the people of Vashon island get together to elect a queen for their strawberry festival they do not limit their selection to "sweet 16" girls, but have shown their respect for the aged this year by the election of Mrs. Melissa A. Jaynes of Burton, who is reputed to be 104 years old. The venerable victor secured nearly as many votes as all five rival candidates combined. "The election gave me a chance to show the young girls of today that they haven't anything on their grandmothers when it comes to running," Mrs. Jaynes said soon after the results were announced.

The occasion was the first annual strawberry festival, which was held at Ellisport June 23. There were 4000 people who attended the coronation of Queen Melissa the first, and a great cheer went up when the crown, fashioned like a gigantic strawberry, was placed on her head. At her feet knelt a boy exactly 100 years younger, Master Douglas Hewett, who is 4 years old. The maids of honor were Miss Consuela Ranquist, Miss Frances Blekkink, Miss Julia Hoffmaster and Miss Alphid Nilsen. Pauline Weise and Ada Blekkink were pages, while Miss A. D. Jaynes and Mrs. C. L. Jackson were princesses of the day, and all were mere children in the eyes of the aged queen.

The address of welcome was delivered by P. Monroe Smock, who read one of his own compositions, "Ode to the Vashon Strawberry." He was followed by Colonel Roland H. Hartley of Everett and Mayor E. J. Brown of Seattle. Then followed a full program of sports with prizes for the winners donated by Vashon-Maury merchants. There was 1000 visitors from Seattle and half that many from Tacoma.

A number of exhibits were arranged about the streets and booths were placed where strawberries and cream were served free to all visitors.

The following committeemen were responsible for the success of the festival: R. W. F. Martin, W. Coy Meredith, C. E. Woods, E. C. Thompson, C. E. Bragg, E. H. Miller, L. E. Wenham, Maurice Dunsford and W. E. Gravin.

Flowers for Profit

As a general rule the flower garden belongs to the housewife and it is her pleasure to propagate plants that suit her likes in order to have a fresh bouquet for the Sunday dinner table as well as for other purposes. With Mrs. F. J. Vandermark of Ferndale, the idea developed as a hobby and she kept on increasing the size of the flower garden until now she finds that she can realize a neat profit from it every summer.

Although there are a number of plants of all kinds growing she has found there to be a better profit in growing peonies than many of the other perennials. They grow well for her and there is not much attention needed to have them do their best. She makes a specialty of having the plants bloom for Memorial day and tells of the yearly demand for peonies of almost any color and most of the sales are made at her door.

"I started my patch with only a small planting of a few plants," said Mrs. Vandermark. "I dug up the hill one year and divided the roots and planted them in a long row through the garden. The next year they came up in fine shape and I have had good luck with the new plantings ever since. I now have eight varieties and they are of three colors, but there seems to be little difference as to the color most desired for the market."

Mrs. Vandermark is a poultry lover as well as a florist and she takes care of 800 laying White Leghorns and does her housework as well. She says that the chickens do not take up much of her time, since she has the two boys do most of the heavy work before and after school hours. During the spring months the hens have layed well and her receipts for eggs have run as high as $11 a day, according to her own statement. About half of this amount will be consumed in feed costs, which leaves a good profit for her work and investment.

Sets Four Acres to Logans

James Page has an 80-acre farm six miles east of Port Angeles and he is getting a four-acre patch of Logans ready for their first year crop next season. The plants are set eight feet each way and cultivation has been done both across and with the rows. The posts are being set up and the wires will be stretched before the canes have grown their full length and they will be trained up this fall. By cross cultivating, Mr. Page has kept the patch very free from weeds and intends to keep them all out even if some hand work is necessary.

Due to the rows being unusually long, an aisle has been made through the center, which allows the fruit to be collected at the center of the patch as well as at the ends. This plan will make it easier on the pickers and it is but little extra work in putting the wires up.

A small patch of strawberries contain three varieties and Mr. Page finds that the Marshalls are best, both for the local trade and for shipping. The other varieties were some that were recommended but they either fall down in quality or by being shy bearers. The Everbearings were tried out last year, but they were not as good as the Marshalls for the market.

Apples for Export

Expect Big Foreign Demand

A good demand for apples for export, especially in the United Kingdom, is predicted by J. McPhee Ferguson of the Fruit Export corporation, who has just returned to Wenatchee from England. Mr. Ferguson is a native of Scotland, but has been living in Portland for many years where the office of the Fruit Export corporation is located. Very dry weather followed heavy frosts at blossom time, in the apple growing districts of England, according to Mr. Ferguson, which means a short crop of English apples.

Apple market prospects are excellent in many other countries as well, according to Mr. Ferguson, and he urges the shippers and marketing agencies of north central Washington to prepare for a heavy export movement this fall and winter. Greatly increased facilities for shipment under refrigeration will be available this year.

Dried Fruit Is Safety Valve

Industry Is Largely Carried On by Growers Themselves

"Dried fruit" is a sun dried product, while "evaporated fruit" is the result of artificial heat. This is the distinction made by a bulletin just issued by the United States department of agriculture on "Evaporation of Fruits." Joseph H. Caldwell, plant pathologist of the department, is the author. Because of climatic conditions, California has developed sun drying on a large scale and is the only state which has done so.

The fruits which are dried in commercial quantities in the United States are prunes, raisins, apricots, apples, peaches, pears, blackberries, logan blackberries and raspberries, with very small quantities of figs and cherries. Among these, prunes rank first in point of average annual production, which approximately 400,000,000 pounds. Of this total, sun-dried prunes, made only in California, make up almost or quite 50 per cent; the remainder are evaporated prunes produced by the states of Oregon, Washington and Idaho, which rank in the order given in the quantities produced. Commercial drying of peaches, apricots, pears and figs is practically wholly confined to California, and the method employed is exclusively sun drying, the average annual production approximating 62,000,000 pounds of peaches, 30,000,000 pounds of apricots, 19,000,000 pounds of figs and 6,900,000 pounds of pears for the five-year period from 1915 to 1919, inclusive. While a portion of the prune crop of the Pacific northwest is sold fresh or evaporated according as market conditions may determine, by far the greater portion is grown specifically for drying, individual growers or groups of growers constructing such drying equipment as their acreage may require, says Mr. Caldwell. With this exception evaporation is at the present time distinctly an industry developed by fruit growers as an adjunct to their chief business of producing fruit for market, and its relation to that business is that of a stabilizer or safety valve.

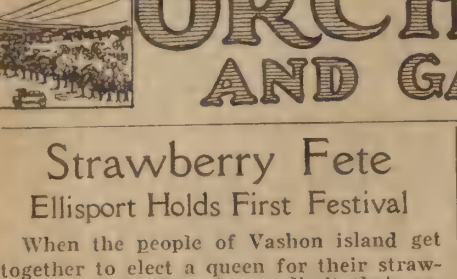
In direct proportion as it has been developed in any given territory it serves to increase orchard returns by converting low-grade and unmarketable portions of the crop into salable products and to maintain fresh fruit prices by absorbing a portion of the marketable grades in years of overproduction.

As a consequence of this safety-valve relation to the fresh fruit industry, the material coming into the evaporators has not been grown with reference to its special fitness for drying purposes, but varies widely from year to year in character and quality as well as in total volume.

For these reasons the drying industry, unlike that of canning, in only a few exceptional cases has been engaged in by large commercial concerns making it their sole business and having definite acreages of material of specified varieties grown under contract for the purpose. The product of such plants constitutes only a very small percentage of the total output.

The drying of fruits as practiced at the present time is therefore peculiarly a farm industry, carried on by fruit growers themselves as a part of the routine of harvesting and disposing of the crop. The plants in which the work is done are mainly small, their size being most frequently determined by the size of the owner's orchard, and there is great diversity in the drying apparatus, the accessory equipment, and the details of the drying methods employed, with a consequent absence of definite standardization of the product. This would be expected in view of the fact that 252,289 farms reported the production of dried fruits in the census of 1919.

The bulletin describes in detail the types of evaporators for fruit growers who have such quantities of surplus fruit as to require the employment of large scale factory methods for its utilization.



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These annoying insects, which are a pest in many farm homes and about the barns, can be exterminated quickly and easily with FLY-TOX.

This new spray, which is absolutely fatal to every kind of insect, flies, moths, mosquitoes, ants, etc., is entirely harmless to plants, animals or persons. It has a pleasant odor and will not stain curtains or wall paper.

Sold by druggists, grocers, hardware stores, department stores.

If your dealer hasn't it yet, send in the coupon below with 75 cents for 1 pint. Mouth sprayer free. Convenient hand sprayer, 50 cents.

Wenatchee Rex Spray Company

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Wenatchee Rex Spray Company, Wenatchee, Wash.

Please send me 1 pint FLY-TOX—75 cents; 1 hand sprayer—50 cents; money for which is enclosed.

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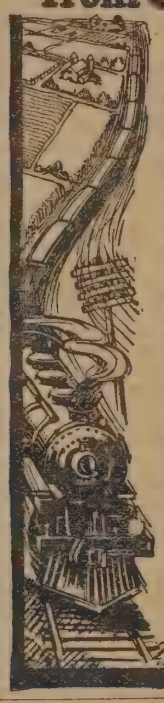
Opportunity Calls from CANADA



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If you wish to look over the country with a view to taking up land get an order from the nearest Canadian Government Agent for special rates on Canadian railroads. Make this your summer outing—Canada welcomes tourists—no passports required—have a great trip and see with your own eyes the opportunities that await you.

For full information, with free booklets and maps, write

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Concrete Cistern

By L. J. SMITH.

I want to make a cistern to hold water for domestic use. I have it already dug out 30 feet by 20 feet and six feet deep. Would you please advise me how thick the walls and floor should be and what would be the best proportion of mixture? Would it be safe to use sand and gravel from the creek unscreened? And please advise as to the roof and how to make it. Mrs. A. P.

Patterson, Idaho.

I would recommend that you use concrete for your cistern, 6 inches thick at the top and 8 inches at the bottom and that you put in a 4-inch concrete floor for the bottom of the cistern. It would have been much more economical if you had made this cistern round, as it would be easier to build and would not require so much concrete for the volume contained.

For the concrete I would use one part of cement to two parts of sand and four parts of screened gravel. I do not know your conditions, but unless there is a good deal of clay in the sand and gravel, you could use it unscreened, provided that you got down below the surface to get the material.

As to the roof, I would use a very flat roof covering the same with one-inch rough boards and putting ordinary felt roofing on top of the boarding. I would also reinforce the concrete every two feet by means of half-inch iron rods running clear around the cistern and being placed in the concrete within an inch of the outside of the concrete wall.

Pugsley Resigns

Charles W. Pugsley, assistant secretary of agriculture, has tendered his resignation, effective October 1, to accept the presidency of the South Dakota State College of Agriculture and Mechanic Arts at at Brookings. Mr. Pugsley will have filled the office of assistant secretary two years at the time his resignation takes effect.

LET THE PAINT DRY.

When painting, do not place the brush on a surface after the paint has begun to set until it has become thoroughly dry, as by so doing the film that protects the lumber will be broken.

FARMERS' WANT ADS

This is the farmers' "want," "sale" and "exchange" department for small advertisements of farmers, including live stock and poultry.

Advertising rates for ads running 1 to 3 times, 10c per word per insertion, with a special rate to Farmer subscribers, as follows: Ads running 4 to 12 times, 9c per word per insertion; ads running 13 times or more, 8c per word per insertion.

All commercial and land advertising, 10 cents per word per insertion. Open also to nonsubscribers.

In using these columns advertisers must observe (1) No advertisement will be inserted for less than $1.00. (2) Every word, number and initial, including name and address, must be paid for. (3) New advertisements, changes of copy or cancellations must reach general office, Spokane, Wash., 10 days in advance of publication date. (4) Cash must accompany order.

Above rates include insertion in The Washington Farmer, The Idaho Farmer and The Oregon Farmer, which constitute the Pacific Northwest Farm Trio, 46 Review building, Spokane, Wash.

MONUMENTS F

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MEN WANTED—TURN YOUR SPARE TIME into cash or devote your whole time to a highly paid, congenial business; good money year around; cash weekly. Middle-aged men find this attractive. Many of our men receiving $4000 to $5000 yearly under our plan. Experience not required. Washington Nursery Company, Toppenish, Wash.

WANTED — SALESMAN WHO CAN SELL high-grade, dependable nursery stock; several counties in Oregon, Wash., Idaho now open for assignment. Our selling contract will interest you. Address Albany Nurseries, Inc., Albany, Ore.

SALESMEN TO SELL OUR COMPLETE LINE of "trees that please." For particulars write Capital City Nursery Company, Salem, Oregon.

SCHOOLS AND COLLEGES 26

EARN $110 TO $250 MONTHLY, EXPENSES paid, as railway traffic inspector; position guaranteed after 3 months' spare time study or money refunded; excellent opportunities. Write for free booklet G-157, Stand. Business Training Inst., Buffalo, N. Y.

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FISH—4 LBS. SMOKED SALMON, $1; 4 LBS. Alaska salmon bellies, $1; 4 lbs. black cod, $1; 3 lbs. best codfish, $1; delivered by mail. Coffin Fish Co., Seattle, Wash.

DRIED LOGANBERRIES; THIS YEAR'S crop; 2 lbs., 75c; 5 lbs., $1.85; 10 lbs., $3.60; 25 lbs., $8.75, postpaid. B. E. Cameron, Newberg, Ore., R1.

BEES AND HONEY 53

ALFALFA-SWEET CLOVER HONEY—2 60-LB. cans, $9.75; one can, $5, f. o. b. Rigby; one 40-lb. can, prepaid to fourth zone, $5.75; quality guaranteed. Heckman & Larsen Honey Co., Rigby, Idaho.

FAMOUS KITTITAS VALLEY ALFALFA HONey, extracted; postpaid 2d and 3d zones: 10 lb. pail, $1.85; 3 10s, $5; 3 5s, $2.75; 60-lb., $8. Kittitas Valley Apiaries, Ellensburg, Wash.

EXTRACTED HONEY — ONE 60-LB. CAN, $6.50; two 60-lb. cans, $12.75, collect; three No. 10 pails, prepaid, third zone, $5. Wells D. Rose, Sunnyside, Wash.

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NEW CROP EXTRACTED HONEY; FINEST ever; one 60-lb. can, $6.50; two, $12. Geo. O. Gould, Buhl, Idaho.

VALLEY BLOSSOM HONEY; QUALITY GUARanteed; 1 60-lb. can, $7.50; 2, $14.40. Ernest Sires, Route 7, Yakima, Wash.

MISCELLANEOUS—FOR SALE 60

SASH AND DOORS—O. B. WILLIAMS CO., 1943 First ave. So., Seattle. Chicken house sash, 20" wide by 25" high, 80c; a dozen different sizes in stock for immediate shipment. Skylights for chicken houses, 36"x40"; price, glazed, $2. This is the size recommended by the Western Washington experiment station. We carry them in stock for immediate shipment. Sash and doors for all purposes at lowest prices. All orders receive prompt attention. Our large illustrated catalog No. 35, showing full line of building material and built-in fixtures for the home, free on request. O. B. Williams Co. Established 1899.

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NATURAL LEAF TOBACCO—CHEWING, 5 lbs., $1.75; 10 lbs., $3; smoking, 5 lbs., $1.25; 10 lbs., $2. Pay when received. Pipe and recipe free. Farmers' Cooperative Tobacco Union, Paducah, Ky.

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TOBACCO — FINE, YELLOW MAMMOTH chewing, 10 lbs., $3; smoking, 10 lbs., $2; 20 lbs., $3.50. Farmers' Club, Mayfield, Ky.

GRAIN BINS AND TANKS 90

METAL GRAIN BINS SAVE YOU MONEY. Write for circular T and prices. Spokane Culvert & Tank Co., Spokane, Wash.

MACHINERY—For Sale 93

FOR SALE—ONE OREGON SPECIAL, 20-FOOT cut, Holt combine; equipped for bulk and sacks; 26-horse hitch; $250 cash, balance two payments. Price $2000. George Myers, Connell, Wash.

TWO LATE TYPE, SNAPPY RUSSELL STEAM engines; two Rumely oil pulls, several separators, several small used gas engines. Fallquist Bros., W20 Riverside ave., Spokane, Wash.

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EMERSON STANDARD MOWER REPAIRS. Spokane Farm Machinery Co., N812 Monroe, Spokane, Wash.

8 HORSEPOWER PORTABLE ENGINE; FINE condition; bargain. L. K. Deller, 911 Paulsen, Spokane.

AUTOMOBILES—FOR SALE 112

SEE CHEVROLET FIRST—NEW AND USED cars at prices that will surprise you; stop in or write Inland Empire Chevrolet Sales Corp., 916 2d ave., Spokane. Open evenings. Open Sunday.

USED FORD TRUCKS AND DELIVERY CARS priced right; terms easy; will take Ford car on first payment. National Motor Company, 1212 First ave., Spokane. Phone Main 460.

COLE 8; FINE CONDITION; BARGAIN. L. K. Deller, 911 Paulsen bldg., Spokane.

AUTO ACCESSORIES AND PARTS 119

INTERNAL GEAR TRUCK PARTS; WIRE and disc wheels; sales and service. Pacific Gear & Auto Parts Co., 1022 First, Spokane.

STOVE REPAIRING 128

WRITE MYER RUBENS, SPOKANE, ABOUT stove repairs, welding broken parts, nickel plating.

FUR-BEARING ANIMALS 170

SILVER AND CROSS FOXES FOR SALE. William Rambo, 407 Sprague, Spokane.

PETS—Dogs, Birds, Etc. 171

FOXHOUND PUPS, FROM GOOD STOCK, $5 and $6 each. Harry Hull, Oakland, Ore.

POULTRY 174

WHITE LEGHORN PULLETS — MARCH, April and May hatches. From thoroughbred, mature hens, mated with cockerels of 225 to 265 egg record, Hollywood, Tancred or Gilbert strains; 8 weeks old, $1.20 each; 12 weeks old, $1.40 each; shipped with a guarantee of being satisfactory or any undesirable ones may be returned within three days and refund will be promptly made. Send 25 per cent with order; balance C. O. D. Mention this special offer when ordering. Queen Hatchery, 1430 First ave., Seattle, Wash.

CERTIFIED WHITE LEGHORN QUALITY chicks for summer and fall months, from selected free range, high egg producing breeding flocks, inspected and accredited by the Sonoma county farm bureau. Send for catalog and attractive prices. Safe delivery and full count guaranteed. Must Hatch Incubator Co., Inc., 445 Seventh st., Petaluma, Calif.

250,000 ACCREDITED BABY CHICKS FOR sale during May and June. Send in your order early. "A" grade, $6 for fifty; $11.50 per hundred; $110 per thousand. "AA" grade, $8.50 per fifty; $16 per hundred; $155 per thousand, f. o. b. Petaluma. Member of the Sonoma county farm bureau accredited hatchery list. White Hatchery, Petaluma, Calif.

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WHITE LEGHORN COCKERELS, WORLD record ancestors; pedigree with each bird; sired by son of Lady Wonderful. Special price on five or more. Prof. Frank Shepherd, Corvallis, Ore.

DOLLARS FOR YOUR EGGS—WE PAY THE top market prices for your eggs and poultry. Daily cash remittances. McClintock-Trunkey Co., produce department, Spokane.

POULTRY (Continued) 174

SUMMER SALE OF "HENACRES" LEGhorns—2000 hens, 5000 pullets, 200 cocks, offered at special low prices. Direct from either our own breeding plant or commercial egg farm. "Henacres" quality at bargain prices. Write for sale price list. "Henacres," Box A, Prosser, Wash.

ANCONA AND R. I. RED PULLETS, 3 months old, all from prize stock; 70c each, while they last. Peerless Poultry Farm, Sherwood, Ore.

JERSEY BLACK GIANTS, PEDIGREED MATings; 15 eggs, $3.50; 8-week-old chicks, $3 each. E. M. Chambers, Bovill, Idaho.

O. A. C. BARRED ROCK COCKERELS, APRIL-May hatched, $1.50, $2. Mrs. Faulconer, Skamania, Wash.

LIVE STOCK 177

WE GUARANTEE TO PAY THE HIGHEST market price for your poultry and live stock. Veal market growing stronger. Owing to the constant changes in the market we are unable to quote prices in this paper from week to week. We will furnish tags and prices when you are ready to ship. Write us what you have to sell. Prompt returns. John Lewis & Co., Spokane, Wn.

TOP PRICES PAID FOR CREAM, EGGS, poultry, pork, veal, also fruits, berries and vegetables in season. Inland Products company, Second at Cedar, Department E, Spokane, Wash.

WE PAY TOP PRICES FOR YOUR LIVE OR dressed veal, hogs, and poultry. Your check by return mail. Shipping tags on request. M. & J. Packing Co., Spokane.

FOR SALE—EIGHTY HEAD GRADE SHORThorn young cows and heifers and calves; practically beef price; some registered. Write C. H. Kidwell, Laurier, Wash.

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DUROC-JERSEY PIGS, THOROUGHBRED; eligible for registration; $12 and $15. W. L. Livingston, Bridgeport Wash.

REGISTERED HOLSTEINS—BULLS, HEIFers and cows for sale; accredited herd. Oscar Dunlap, Junction City, Oregon.

REGISTERED BERKSHIRE BREEDING pigs, $16; big type, champion blood. Chas. O. Churchill, Shelton, Wash.

FOR SALE—REGISTERED O. I. C. WEANling pigs. S. G. Anderson, Route 2, Box 205, Puyallup, Wash.

FOR SALE—FIVE PUREBRED FEMALE JERseys and one bull. T. E. Bradley, Daisy, Wn.

REGISTERED SHROPSHIRE RAMS AND ewes. Write McK. Edwards, Valley, Wash.

FOR SALE—REG. HOLSTEIN BULLS; HERD fed, accredited. Whitla Ranch, Mica, Idaho.

HARNESS and SADDLERY 189

SEND FOR FREE HARNESS AND SADDLE catalog today; cut out the middleman, buy direct from the manufacturer. Lowest prices in the west; satisfaction guaranteed. Established 1881. Write Pierce Harness Co., Dept. T, Spokane, Wash.

FAIRS 370

GRAYS HARBOR COUNTY FAIR—BIG FARM and livestock show, at Elma, Wash. August 29 to Sept. 2; premium list free. Write C. H. Palmer, secretary, Elma, Wash.

JOB PRINTING 372

WEDDING ANNOUNCEMENTS AND INVItations, catalogs, booklets, high school annuals, letter heads, envelopes, cards, butter wrappers, etc. Union Printing Co., 412 First ave., Spokane, Wash.

$1.50 POSTPAID—YOUR NAME AND ADdress on 200 sheets and 100 envelopes, Hammermill bond writing paper, neatly boxed. Parker Printing Co., 405 Pacific blk., Seattle, Wash.

CLEANING, DYEING, Etc. 420

FRENCH DRY CLEANING BY PARCEL post. Ladies' and gents' suits, furs, hats, etc., prompt service. Address City Dye Works (Dept. A), E422 Sprague ave., Spokane, Wash.

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ANY KIND OF HIDE TANNED WITH HAIR on, or for leather. Fur and taxidermy work done to order. M. R. Mohr Co., 321 Sprague, Spokane, Wash.

KODAK FILM DEVELOPING 472

FREE ENLARGEMENT WITH 75C ORDER high gloss print. Spokane Film Co.

MATERNITY HOMES 497

MATERNITY HOSPITAL; STRICTLY PRIvate; doctor in attendance; prices reasonable. Mrs. Elizabeth Peel, matron. W1324 Broadway, Spokane.

BUILDING MATERIAL 588

TURNS PLASTERING INTO PLAY—PERFECtion plaster wall board can be nailed on just like lumber, and makes a perfect plaster job. Western Wallboard Co., Seattle, Wash.

SEEDS 620

FARM SEEDS—ALFALFA, CLOVER, SWEET clover and corn are our specialties. It is to your interest to get our samples and prices before buying. Also garden and flower seeds. Send for catalog. Let us know your requirements in grass and field seeds. Darrow Bros. Seed & Supply Co., Twin Falls, Idaho.

HUNGARIAN VETCH SEED, 10C POUND. Write for prices on common vetch. Red and alsike clover seed. We have the best. Corvallis Feed & Seed Co., Corvallis, Ore.

TIMBERLANDS FOR SALE 645

¼ SECTION TIMBERLAND, IN LAUREL, Wash. Inquire C. H. Abelson, Idaho Falls, Idaho. R7.

FARM LANDS FOR SALE 651

400 ACRES GOOD FARM AND STOCK LAND; near sawmill. Owner, E1623 Rich ave., Spokane.

FARM LANDS FOR SALE (Continued) 651

CUTOVER LANDS, EASY TO CLEAR: $8 TO $20 per acre; 25 miles north of Spokane; on hard surfaced highway; Great Northern and Milwaukee railways; excellent opportunity for dairying and stock raising with Spokane markets and creamery near at hand. Will help the man who will live upon this land and agree to clear a part each year by giving lumber to help start his buildings, and a pure-bred Jersey bull to groups of farmers. Interest and payments low. Write Milan Farms Development company, Dept. T, Old National Bank bldg., Spokane, Wash.

POTATO, POULTRY, BERRIES. ALL cleared and in meadow. A few feet from paved highway; located ½ half mile from railroad station, good store and sawmill; excellent neighbors, fine schools, close to several good towns. Priced at only $100 an acre. Sold in 5, 10 or 20 acre parcels. Small payment down, balance in 10 years at 6 per cent. This is the best land at the price that we know of. Write or call for full information. Carter, MacDonald & Miller, 208 Columbia st., Seattle, Wash.

VALUE $45,000; SACRIFICE FOR $25,000; must be sold at once; terms to suit; 4630-acre stock ranch, in Crook county, Wyo.; stockmen!! Sheep men!! Investors!! You can't afford to miss this, 500 acres cultivated hay land; 500 first-class tillable; 2130 tillable pasture; 500 timber; four good sets buildings; good soil; abundance of water; well fenced and cross-fenced; this is not an experiment, but a real sheep or stock ranch and almost a gift. Lock Box 2215V, Spokane, Wash.

HIGHEST TYPE FARM LAND, WHERE SETtlers get steady and permanent employment and live at home. Level bench and river valley land; all good soil; an already well developed farm district; school, markets, roads, etc. Around Onalaska, Washington, and near Pacific highway (15 miles southeast Chehalis); 20 acres or more, $15 to $50; long, easy terms. A clean cut and fair proposition. Go to Onalaska or write Graham Land Company, American Bank bldg., Seattle.

160 ACRES, NEAR RAILROAD AND STATE highway; about 500,000 feet saw timber, mostly yellow pine; 3000 to 4000 railroad ties (ties are 60c); about 50 acres can be irrigated when cleared; fine alfalfa land; plenty outside range on forest reserve; 4-room house, woodshed and cellar; small barn; about 50 acres cleared; trout stream runs through place. $1800; will take trade up to $600, car, city property or cattle. Address owner, Box 3, Orient, Wash.

DO YOU WANT A HOME IN A RICH VALLEY near Spokane, on three transcontinental railroads? Where soil is perfect, rainfall ample. Summers cool, winters moderate? The kind of stump land that pays to clear? Timothy and clover green eight months in year; natural stock country. Land cheap, 10 yearly payments at 6 per cent. Humbird Lumber Company, Box 00, Sandpoint, Idaho.

LOGGED-OFF LAND IN STEVENS COUNTY, Washington, at greatly reduced prices. Most of land sells at from $5 to $20 per acre. Thickly settled community. Good schools. Hard surfaced and paved road to Spokane. Best county in state for dairy and stock raising. In most places water can be found at shallow depths. Write for folder. Phoenix Lumber Co., Dept. T, Spokane, Wash.

WASHINGTON LANDS — SEND FOR FREE booklet descriptive of a section free from cyclones, floods and temperature extremes; fruit, berry and poultry culture, markets fine; opportunities travel, hunting, fishing and home life ample. Our lands priced right, with terms to suit. Norpla, C, Olympia, Wash.

BIG OPENING SALE OF YAKIMA VALLEY farm land, under an assessed state and government approved irrigation project; best, deep soil; close to town and good roads. Price $25 per acre and up. Very easy terms. Western Lands, Inc., owners, 918 Green bldg., Seattle.

10 ACRES, 5 CULTIVATED; FAMILY ORchard; 2 wells, spring; 5-room house, other buildings; ¼ mile from highway; 1½ miles to town; 16 to Vancouver; $600 cash will handle. Write owner, 789 Rhode Island ave., Chehalis, Wash.

LTG LUMBER COMPANY LAND SALE—IN Skagit county; 40-acre tracts, $1400; $200 cash, balance easy. Lots work for the settler. Splendid district, roads, schools, towns. Information free. H. C. Peters, 726 3d ave., Seattle.

40 OR 80 ACRES; BEST BUY IN SPOKANE county for the price; plenty of hay, wood, water, fruit, garden truck; all good land; small amount stock, machinery; ready to move in; some terms. Lee Zachary, R. 1, Elk, Wash.

SELL YOUR PROPERTY QUICKLY FOR cash; no matter where located. Particulars free. Real Estate Salesman company, 501 Brownell, Lincoln, Neb.

FOR SALE—80 ACRES, HIGHLY IMPROVED land; near El Antro, Calif.; first water right; can grow crops all year. Address Box 353, Caldwell, Idaho.

CALIFORNIA FARM FOR SALE ON EASY terms; good land, climate, water, neighbors. R. P. Garrett, Lemoore, Calif.

75 ACRES; GOOD HOUSE AND BARN; PLENty lowland pasture; fine place for cows. Wm. Bennett, Springston, Idaho.

920-ACRE GRAIN AND STOCK RANCH. Write for particulars. Calvin Crider, Bickleton, Wash.

FARM LANDS—Wanted 654

NO COMMISSION — SELL YOUR FARM through Washington Farm Bureau Exchange, represented in 45 states. Lists of farms for sale by owner mailed free. 312½ Lindelle, Spokane.

I HAVE INQUIRIES FOR FARMS IN NORTHwest. Describe fully and state price. R. A. McNown, 310 Wilkinson bldg., Omaha, Neb.

FARM LANDS—Wanted to Rent 660

DAIRY FARM IN WASHINGTON, WITH OR without stock. K 10, Idaho Farmer, Spokane.

IRRIGATED LANDS—For Sale 663

CORBIN ADDITION TO GREENACRES—IN the beautiful Spokane valley; 30 minutes from Spokane; paved road; 40 inches of water for irrigation; gravity flow. Ask for booklet with all information.

Return coupon—The Fred B. Grinnell company, Spokane, Wash. I am interested in the Spokane valley. Please send booklet and all information to

Name .....

Address .....

SUBURBAN TRACTS—For Sale. 672

FOR SALE—4 LOTS, SMALL HOUSE, CHICKen house, barn, fruit; near saw and shingle mills, churches, schools; near Portland. Lock Box 223, Ridgefield, Wash.

FOR SALE OR EXCHANGE 702

FOR SALE OR EXCHANGE—ALL OR PART of 120 acres; level garden land; agricultural district; suburban to Vancouver, British Columbia; city water; great future value. Owner, Westenhaver, Eburn, British Columbia.

Cattle Ranch To College

By Russell Doubleday Copyright by Doubleday & McClure Co

The first time we met John Worth, the leading character in this story, he was taking an active part in preparing the little frontier village of Bismarck, N. D., to withstand an Indian attack. We next saw him playing the part of a man, although he was only 12 years old, in defending the village when the warriors appeared.

After the Indians were repulsed by the frontiersmen under the leadership of Jim McKenzie, the sheriff, and order was restored, Mr. Worth, John's father, set out for the north to search for outcroppings of coal, he being a miner as well as a freighter. During his absence, Mrs. Worth felt many misgivings owing to the dangers that confronted the wilderness traveler, but bravely assumed responsibility for John, his brother Ben, aged 10, and the baby. Mr. Worth had not been gone many days when he returned, clothed only in an Indian blanket and a pair of worn-out moccasins. He had been the victim of a thieving party of redskins who had taken all his clothing, leaving him naked on the prairie, where early winter winds would have brought certain death but for the friendliness of an old Indian whom he had once befriended. This old warrior's blanket and moccasins saved him.

It was not long, however, before he was on the trail again and when he came back in the spring he reported that the Indians were becoming more and more hostile toward the whites and that it would not be safe for any mining expedition to venture away from the village for some time yet.

It was that summer (July 4, to be exact) when Bismarck was celebrating in true western style, that a small steamboat making occasional trips on the Missouri river, returned unexpectedly and broke up the merriment by startling news.

"Custer and his men have been wiped out by the Indians on the Little Big Horn," said the messenger from the boat to the crowd in Black Jack's dancing pavilion.

CHAPTER IV.

Hitting the Trail.

The Custer massacre threw the whole country into a spasm of fear.

The killing of 300 trained fighters and a general, all renowned for their daring and knowledge of Indian warfare, must give the enemy a confidence that would be hard to overcome.

Every one wondered where the next blow would be struck and who would be the next victim. All enterprises were checked, all peaceful journeys postponed. Not till the autumn of the following year was it deemed safe for the Worth family to carry out their plan of "pulling up stakes" and leaving Bismarck.

During the year which had elapsed John and Ben had grown in mind and body. They were sturdy, strong boys, and were a great help to their father. Perfectly able to take care of the stock, they could ride like centaurs and shoot with their "guns" (as the Westerner calls his revolver) with astonishing accuracy. They used to practice at tomato cans 50 yards away and soon became so expert that for nearly every shot a neat round hole appeared in the tin. If you think this easy, try it. One can will probably last you a long while.

Long before, Charley Green had made a formal request to be included in the migrating party and had been accepted. He was really quite a valuable man now, for he had been tried in a number of ticklish places and had shown a solid strength and coolness in the face of danger.

One bright autumn day the pilgrimage began.

Several men were to accompany the family to a mine that had already been located 50 miles away. Here the winter was to be spent, and then, if all went well, another mine might be opened further westward.

The final preparations for moving were soon complete. The household goods were packed into the great lumbering prairie wagons, canvas topped and wide of beam; the little log-built shack was left intact, its rough, heavy door swinging open.

The frontiersman's household outfit was very simple. The bedding consisted of blankets; cooking utensils of iron and tin, dining table furniture of the same materials, a few chairs, a table or two, and the baby's crib completed the list. The Worth family had the largest library in town. It contained their great brass-bound Bible, "Pilgrim's Progress," the Catechism (and how the boys dreaded it!), "Robinson Crusoe," "Scott's Poems" and the "Arabian Nights." These precious books were of course taken along, for though the boys' father read little and lacked even the rudiments of education, he had the pride of ownership.

It can be seen at once that this simple collection of necessaries would not take long to pack and load. Charley Green remarked that "the whole outfit wouldn't be considered security enough for a week's board in Boston."

"That's true," answered Mr. Worth, as he lifted the sewing machine (the only one for miles and miles around) tenderly into the wagon. "But our household stuff is considered very fine, and people come from long distances to use this sewing machine."

"The first of May can't have any terrors for you," persisted the ex-collegian.

Mr. Worth frowned a little, for although Charley's fun was good-natured, he had a keen dislike to being ridiculed, and had always been accustomed to considering his equipment as something rather grand—as indeed it was, compared with his less fortunate neighbors.

After a final glance around to see that nothing had been left, the head of the family put his wife and baby into the first wagon, but before climbing in himself he called out to John and Ben to go back to the corral, saddle two of the horses, and drive the remaining ones after the wagon train.

The two boys were soon busy catching and saddling the horses. As John was "cinching" up Baldy, he heard the snap of his father's long black-snake whip and the creak of the heavy wheels. Then for the first time he realized that the only home he had ever known was to be left permanently. The old place suddenly became very dear to him, and the thought of leaving it was hard to bear; in fact, he had to bury his face in Baldy's rough, unkempt side to hide the tears that would come despite his efforts.

Ben, on the contrary, was very cheerful and whistled between the sentences of talk he flung at his brother. The two years' difference in their ages showed very plainly in this matter.

"Here, get a move on you, John," he shouted, "my horse's all ready."

The older boy bestirred himself, and in the rush and hurry that followed he soon forgot his momentary regret.

When they caught up with the wagons they found the procession headed toward the center of the settlement and almost in its outskirts.

The town had grown considerably both in population and area since we first saw it, and ordinarily the departure of a freighter's outfit would excite but little remark. The exodus of the Worths, however—one of the few families, and one of the very first settlers—was quite an event. Many of their friends were on hand to wish them good speed. The boys felt like "lords of creation" indeed. Were they not bound on a journey of unknown duration, liable to have all sorts of delightful adventures? They held their heads up and pitied their boy friends who were to be left behind—and it must be confessed that the stay-at-homes pitied themselves.

The wagon train made its way slowly down to the river, where the sheriff bade them goodby.

"I'm sorry to have you go," he said, nodding to Mr. and Mrs. Worth. "And those kids of yours," he added, "I wish you could leave them behind; it will be pretty tough on them, and besides, I'm fond of the little beggars. However," he went on, as the boys' father shook his head, "I suppose you know what you're doing. Well, good luck. So long."

"So long," replied the travelers in chorus.

The whole outfit was ferried over the river, passed through the little village of Mandan clustered around the fort, and then struck out across the open prairie. It made quite a procession, the light wagon in front, drawn by two horses and driven by Worth, then a long string of mule teams hitched to the first of a train of prairie schooners, whose white canvas-hooped tops shone in the sun. The cooking utensils in the vehicles and hung under them banged and clattered, the wheels creaked, the teamsters' long whips, which took two hands to wield, cracked and snapped.

At the head of the party rode Charley Green, with his long-eared charges, busy at his self-imposed task of "mule wrangling." He was new to the business, and it seemed as if the beasts he was herding were aware of this. For a while all would go smoothly, the animals closely bunched, heads down, ears drooped forward, the picture of innocence and dejection; then suddenly a lanky brute would start out from one side as if propelled from a gun, and no sooner had Charley dug the spurs into his pony in his efforts to head it off than another mule would start off on the other side. Then the whole bunch would scatter, radiating from a common center like the spokes of a wheel. John, Ben and one of the men (called Tongue-Tied Ted, because of his few words) took a hand in the game at last, and together they rounded up the stock into a compact bunch again.

All this was very amusing for the old hands, but Charley did not seem to enjoy it.

"Mule-wrangling is no snap," he grumbled. "Why, it's easier to stop a whole rush line than to take care of that gang of long-eared, rail-backed, dirt-colored, horse imitators."

He had to tackle the job alone, however, for only by experience could he learn, and experience is a hard and thorough teacher.

The boys trotted alongside, now riding far ahead, now making their ponies show off near the wagons. Excursions were made from time to time to shoot at prairie dogs, rabbits and coyotes. But even this grew monotonous after a while, and they began to cast about in their minds for amusement. "Let's go to the river where it makes a bend over there and take a swim," said Ben, at last.

It was no sooner said than done. They were left to look out for themselves much of the time, so they went off without saying a word to any one.

Soon the caravan was lost to view, and after a few minutes' more riding even the shouts of the men and the barking of the dogs could not be heard.

They rushed to the knoll and searched again.

The boys had that delightful feeling of entire freedom and half fear which comes to the inexperienced thrown upon their own resources. The prairie was perfectly still and the heat was scorching, for the sun was still high. It was a little awesome, and for a minute John and Ben wished they were back with their friends. The thought of a cool dip was very enticing, however, and they would both have been ashamed to turn back now, so they cantered along, keeping up each other's courage by shouting and laughing. Reaching the river, they scrambled down the steep slope, leaving their horses to graze on the level, and in a jiffy were enjoying a swim in the "Big Muddy." The bottom was free from quicksands, so the brothers enjoyed themselves to their hearts' content.

They swam, ducked, and dug in the mud, as full of glee as could be. For an hour or more they reveled in their sport; then John dropped the handful of dirt he was about to throw and looked around, half scared. "Hallo," he said, "it's getting dark. We'd better get a move on." They slid into their clothes as only boys can, and in a few seconds had regained the top of the bank.

The sun, a fiery red ball, was low down in the western sky and almost ready to drop out of sight altogether.

"Why!" exclaimed Ben. "Where are the horses?"

They looked hurriedly around and then scanned the rolling prairie and sage bushes in every direction.

But the horses were not to be seen. Nor was the wagon train in sight. Not a living thing was visible on the horizon; not a sound could be heard anywhere. On every side there were only monotonous clumps of sage, and the sun was getting lower and lower every moment.

They rushed to a knoll and searched again. All around stretched the prairie—bare, still, hopeless. Then they looked at each other for the first time. Ben began to whimper.

"Come, brace up," said John, taking the elder brother's part. "I know the trail; we'll catch up to them in no time."

His tone was cheerful, but he appeared more at ease than he really was. It was not a pleasant situation for even a full-grown man, one well versed in the signs of the plains, its landmarks, and deceptions.

The boys were in an unfamiliar section of the country, without food or means of transportation, at nightfall. Their lessons of self-reliance stood them in good stead now, and they started off bravely, striking away from the river in the direction of the wagon trail. After walking a half hour they came across the distinct deep rut of wagons.

This was a great encouragement; it was like a friendly grasp of the hand, for they felt that they were now in touch with men and living things, though neither was within sight or sound.

Only the palest kind of twilight now remained, but the trail could be seen quite distinctly and both boys took heart.

"I'd give my gun for a piece of jerked buffalo meat," said Ben.

"Well, I wouldn't mind munching a bean myself," replied his brother. "But say, won't that feed taste good when we get to the camp? Just think of that big fire with the men lying around it, and the wagons drawn in a circle outside all."

"Oh! stop," broke in Ben, peevishly. "I'm hungry enough and tired enough already, and your talk makes me 10 times worse."

Hour after hour they tramped along, their courage ebbing with every step. Expecting when they reached the crest of each little rise to see the bustling camp at the foot of the slope, each time they again took up the weary march with a heavier load of disappointment and uneasiness.

Thirst, as well as hunger, now began to attack them. It was dry weather, and the dust rose into their faces as they walked, tickling throat and nose, and causing the greatest discomfort. From time to time they lingered to rest, but when they stopped the darkness frightened them, and the awful stillness, broken only by the wailing howl of a coyote and the low moan of the rising wind, drove them on relentlessly.

At last Ben declared that he couldn't go any further, but as soon as they stopped his courage failed him and he burst into tears. John comforted him as well as he could, but he was himself at his wits' ends.

"Come along, old man,"-he urged after a while, "let's have one more try at it."

Again they started off wearily and slowly, John with an arm about his younger brother. They had walked only a few minutes when Ben felt his brother's arm clasp him tighter and heard him give a hoarse shout.

He strained his eyes ahead. There in the darkness was an indistinct moving mass. They redoubled their efforts, and presently discovered that it was a wagon drawn by a single team that seemed hardly able to stand and moved forward at a snail's pace.

"Did you see anything of a freight outfit along the trail tonight?" said John huskily to the driver.

The man half raised himself from his

(Continued on page sixteen.)

Bits of Fun FOR Everyone

Paid for Doing Nothing.

Magistrate (to Italian organ grinder)—What do you earn in a week?

Italian—Six pounds, sare.

Magistrate—What! Six pounds for playing an organ?

Italian—No, sare; not vor playing—vor shut up and go avay!

An Ignorant Bunch.

The prosecuting attorney had encountered a somewhat difficult witness. Finally he asked the man if he was acquainted with any of the men on the jury. "Yes, sir," announced the witness, "more than half of them."

"Are you willing to swear that you know more than half of them?" demanded the lawyer. "Why, if it comes to that all of them put together," came the emphatic reply.—The Christian Advocate (New York).

He Finished His Soup.

Diner (to conductor of restaurant orchestra).—Do you play by request?

Conductor—Certainly, sir.

Diner—Then play dominoes.

Now He's a Poor Fish.

"My daughter sprang from a line of peers," said the ardent father.

"Well," said her feller, "I jumped off a dock once myself."—Naval Monthly.

FAMILY CIRCLE

ALICE W. BARLAND
EDITORIAL CONTRIBUTOR

Experience Letters

Dear Mrs. Barland and the Family Circle: I have taken THE FARMER for over seven years and as I am a cripple and don't get out much I look for it every Friday, as that is the day it comes. I always turn first to the Circle page.

We came west in the spring of 1903 from Oconto county, Wisconsin, and I wonder if there are any of my old schoolmates reading THE FARMER. My name was Susan Sylvester before I married.

Let me say to the young people, tell your troubles, big and little, to your mother; you will never be sorry for it.

A READER, Wash.

Dear Mrs. Barland: I have often taken up my pen with the determination to write to the Circle, but have had to put it aside for some pressing duty which is ever present with us farm women. Your columns contain many helpful suggestions for the busy housewife. The letter from the lady who made the "Home Beautiful" out of a homely shack should be an inspiration to all of us. Not from the gilded palaces, but from the lowly cottages come the strongest characters in our national life.

I have been especially interested in the advice given to the girls and boys and have also been interested in the letters written by the younger generation. We should all keep in mind that the affairs of our glorious nation will soon be in the hands of the boys and girls of today.

Mothers are constantly warning their girls against the dangers which surround them as they go out into the world and come in contact with the opposite sex. Why should this be necessary? It is because the double standard of morality has been taught and accepted so long. I have heard girls say, "I wish I were a boy, they can do anything and no notice is taken of it." This is too true and will always be true so long as there is one standard for men and another for women.

We hear people say, "Mothers must talk to their girls." Why, mothers have been talking to their girls down through the years past and it is about time they began to talk to their boys and the fathers take a hand, too, in proper guidance. It is the plain duty of fathers to talk plainly to their sons and give them to understand that the same standard of morality is expected of them as their sisters. A few generations of this sort of training and there would be fewer mothers weeping over the spoiled lives of their daughters.

We see all about us parents who insist upon their girls getting in at night at a reasonable hour, but whose sons are out with or without the family car, "jazzing around." If the attention of the father is called to this he will more often than not reply, "Oh, John will come out all right, he is just sowing his wild oats." Usually he is being assisted in that occupation by some mother's girl whom he wouldn't think of marrying.

We justly mourn the loss of the 80,000 boys who gave their lives for humanity on the battlefields of France, but very seldom do we give a passing thought to the thousands of girls who disappear every year; 60,000 was the toll for the year 1922.

Dear readers of THE FARMER, we shouldn't rest till this country is impressed with the awfulness of the tragedy of this great loss of girls. How swift would be the reform if our boys, like the hero in Sir Walter Scott's beautiful story of "Ivanhoe," should take up the lance of the protection of the young womanhood of America.

A GRANDMOTHER.
Oregon.

Family Circle Boys

Dear Mrs. Barland: I am a boy of 22 and have been very much impressed with the letters written by the boys and girls in The Idaho Farmer. I have lived in the east until a few years ago and I find that the girls there are much coarser and rougher than they are in the west. Of course I do not mean to say that they all are, but as a general rule they are. If you go out with the average girl or boy there, the girl thinks it an insult if you take a cigarette and do not offer her one. The same is also true of anything to drink. Of course the boys are very much to blame also, because they do these things in the presence of the girls. I have found one of the best little girls in the west and hope some day to make her mine, and would think no more of smoking in her presence than anything. We do not go to dances, but go to a good show about once a week. We take our lunches on Sundays and with some other young folks go out for a good time and enjoy it very much. I believe this is very good amusement for Sunday after church. We get back in time for church in the evening. I do not mean to say that we are what some young people call "sissys" just because we go to church.

I have just finished reading "So Long's" letter and I know he has the right idea, and if all girls and boys would live up to the standards set by him we would be a far better generation to take hold and go on with the work when our times come.

My advice to the girls is, don't give a boy the least privilege or he will want more.

I certainly agree with "So Long" that no boy can be trusted all of the time and it is the same with girls, and one should help the other to do the right things always.

I am not in favor of public dances, but have gone to a good many in the east as that is one of the greatest attractions offered there. I should like to see the topic discussed of whether a girl should go with more than one boy at the same time, as I think that is a vital question, and as to myself I do not believe in it.

I am very proud to say that I do not use tobacco in any form, nor intoxicating liquors.

"A WILLING HELPER."
Idaho.

Testing Linens

Housewife Should Buy Carefully

The following suggestions, taken from an extension service circular of the Oregon Agricultural college, will be helpful to the housewife when buying her linens. She is cautioned in the circular not to depend upon one test. Try them all, if in doubt as to the quality of the cloth.

Among the tests are:

1. Notice the number of threads used in the weaving of the cloth. Fine linens will have many more threads to the inch than coarse linen. Using a magnifying glass or linen glass to count the threads and to study their appearance.

2. Table cloths or materials woven with a close, firm weave wear better than those having loose weaves and long "floats." A float is a thread carried across a portion of a pattern on the wrong or right side. These loose threads wear out before the body of the cloth does.

Table cloths with small, close pattern iron more smoothly than others do. The pattern and the satin or twill background do not always shrink the same, thus the cloth may look rough.

3. Linen thread is more uneven and has more luster than cotton. Some cotton threads are spun to imitate linen. Hold the cloth up to the light; compare the differences in the thread.

4. Linen feels cool and leathery. Linen crushes and wrinkles easily. It will hold the wrinkles longer than will cotton.

5. Sized linen feels harsh and stiff. Unsized linen feels leathery, soft, and flexible. Test for sizing by flecking with the finger nail, vigorous rubbing, or boiling. Good linen does not require sizing.

6. Rub linen briskly. If the surface becomes rough and fuzzy it has cotton or tow in it. Good linen fiber is 12 to 20 inches long. Short linen fibers are called tow; these are used for coarser, poorer qualities in linen manufacture.

7. Good linen does not give off lint. Break a thread of linen and of cotton. The former is tenacious and the broken end is erect and the fibers close together. The ends of the cotton thread are spread out in all directions. Tear a piece of linen and of cotton. Linen is harder to tear, and has an uneven torn edge. It gives a dull sound when tearing. The cotton tears easily, with shrill sound, and has a smooth edge. A little practice on this test may be necessary before one is sure of the results.

Imitations and Adulterations.

1. Finishes, such as sizing or high polishes are put on cotton, making it resemble linen.

2. Sizing is used to make the linen seem heavier and of better quality. Cotton thread is spun to resemble the linen thread.

3. Cotton is combined with linen, which is to be sold as "all linen."

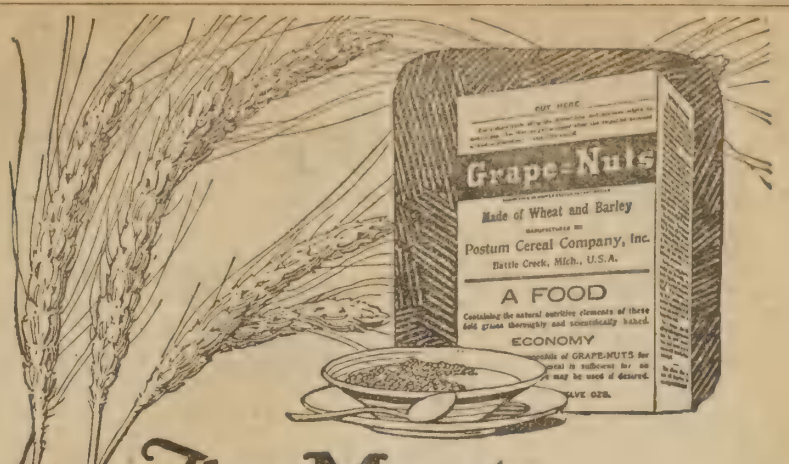
4. Tow is substituted for good long linen fibers. This soon wears fuzzy and the cloth rubs rough.

5. Mercerized cotton is substituted for linen, and sold as linen.

6. Fringings on table linens, towels, or bed linens soon wear out. Machine hemstitching and scalloping do not wear as well as a damask hem.

RADISHES IN WHITE SAUCE.

Take a bunch of radishes, scrape and cut rather thick, boil in salted water until tender, strain water off, have ready a pint of nicely made and well seasoned white sauce, in which put the radishes, make thoroughly hot again, garnish the radishes with olives and a few sprays of parsley.



The Meat of the Wheat

STARCH is the "meat" of the wheat berry. It is the great energy-producing element of the grain. But, in order to do you any good, it must be thoroughly digested, and it is right here that such a food as Grape-Nuts renders special service.

Grape-Nuts, made from wheat and malted barley, supplies the meat of the wheat in most digestible form.

That is because in the making of Grape-Nuts a large proportion of the starch is converted into dextrins and maltose—forms into which *all* starch elements must be changed before they can be assimilated by the system.

Grape-Nuts not only digests easily, but also *aids in the digestion of other foods.*

Crisp, delicious Grape-Nuts with milk or cream is a complete food. It supplies the life-essential vitamin-B; also iron, phosphorus and other important mineral elements for nerve, tooth, bone and other body structure.

The daily use of Grape-Nuts is a form of health insurance which has demonstrated its value for more than 25 years.

Grape-Nuts
FOR HEALTH
"There's a Reason"

Your grocer has interesting details of our offer of over $7500.00 for Grape-Nuts Recipes. Ask him about it; or write to Recipe Dept., Postum Cereal Co., Inc., Battle Creek, Mich.

It Costs a Dollar to Feed a Squirrel. It Costs Two Cents to Kill Him. Let's Kill Him.

Kill The Destructive Squirrel

During the past ten years, the ground squirrel has destroyed more crops than frost, rain, drought, heat or any other destructive agency. Millions of dollars can be saved annually by banishing this rodent. The safe, sure and simple way is to use—AERO BRAND CALCIUM CYANIDE.

Records for this product show from 95 per cent to 99 per cent kill. In contact with the natural moisture of the earth, a small portion inserted in holes generates Hydrocyanic Acid—an extremely poisonous gas which no animal can withstand. 100 lbs. is sufficient for 800 to 1000 holes.

AERO BRAND CALCIUM CYANIDE is nonexplosive, noninflammable and is shipped in tight metal drums. Used and endorsed by farmers everywhere. Most economical.

Detailed information and Price List gladly sent to any address upon request.

AMERICAN CYANAMID COMPANY
AZUSA. CALIFORNIA
P. O. Box E13.

AERO BRAND Calcium Cyanide

The department editors of this paper are anxious to be of service to you. Do not fail to write to us if they can be of help to you.

High Points in News of the Week

The consensus of opinion of officials in President Harding's party, fixed as the conclusion of an inspection of Alaska approaches, is that the territory will develop gradually, but that no sensational boom can be expected, as a result of the visit of the chief executive.

President Harding, Secretaries Work, Hoover and Wallace and the remainder of the presidential party arrived at Valdez Friday, and are voyaging to Cordova and Sitka, the two stops remaining before Vancouver, B. C., which the Henderson is to reach next Thursday of this week, proceeding to the United States at Seattle the following day.

* * *

A plan to withdraw 200,000,000 bushels of wheat from the market and store it on farms until prices advance is announced by O. E. Bradfute, president of the American Farm Bureau federation. The farm bureau plan provides for financing the project under the new intermediate credit act. President Bradfute declares that farm wheat bins under the intermediate credit act might be designated as government bonded warehouses, for which bonded warehouse receipts could be issued against the wheat stored on the farm. In this manner, he asserts, the grower would be enabled to borrow up to three-fourths of the market value of his wheat with the warehouse receipt as collateral, enabling him at the same time to hold his wheat until prices advanced and it became advisable to sell.

* * *

David W. Davis, commissioner of reclamation accompanied by F. E. Weymouth, chief engineer of the reclamation service, will leave Washington, D. C., in September for an inspection of practically all of the western reclamation projects.

* * *

General Francisco (Pancho) Villa, commander of rebel armies in Northern Mexico for ten years, was shot and killed Friday when he, with his bodyguard, was attacked near his ranch by a hostile party.

Villa's rise to power dates from the day when he started across the Rio Grande with two companions, six "borrowed" horses, $7 in money, and a meager supply of beans, coffee and sugar. Less than a year later he was the head of a well-equipped army of nearly 20,000 men, a war chest of several million dollars, which he had accumulated by the seizure of rich estates, and a full equipment of weapons, including artillery, practically all of which he had seized from the federal forces. Military tactics continued to be those of a raider, but they were eminently successful. From Juarez in the north to Torreon in the south he had control of more than half of Mexico. He was the Robin Hood of Mexico.

* * *

Governor J. A. O. Preus of Minnesota, republican candidate for U. S. Senate was defeated by Magnus Johnson, farmer-laborite by a plurality of about 85,000 votes in election Monday. While Johnson was elected to only the unexpired term of the late Knute Nelson, which ends in March, 1925, he did not deny that he would be a candidate for the six-year term in the 1924 January election.

Pacific Coast Nurserymen

Election of F. W. May of Yakima, Wash., as the next president of the Pacific Coast Association of Nurserymen, selection of Yakima as the next convention city and a trip to Arrow Rock dam, were the closing features of the three-day annual convention of nurserymen at Boise, Idaho, last week. Mr. May takes the place of Charles T. Hawkes of Caldwell, who was president of the association for the closing year. C. A. Tonneson of Burton, Wash., was re-elected executive secretary. S. A. Miller was re-elected to the board of trustees.

David C. Petrie, landscape architect of Boise, was elected vice-president for Idaho. Vice-presidents for the six states and British Columbia, which make up the association are: Fred Walton, Salt Lake; C. B. Miller of Milton, Ore.; C. Malo of Seattle, Wash.; M. R. Jackson of Fresno, Cal.; Richard Laritz of Victoria, B. C.

More than 75 nurserymen for the six states and the Canadian province were in attendance.

Pierce Guernsey Meeting

The members of the Pierce County Guernsey Cattle club are planning on holding their annual meeting at the experiment station grounds at Puyallup, August 17. An extensive program has been arranged for and the committee expects a big crowd of the fawn and white breeders to be present. Last year the members held an all-day tour and visited many of the herds of the county and had a banquet at Puyallup at noon. This year's event will be much different, but is expected to be equally interesting.

MORE TO BUY FARM PRODUCTS.

Development of home industry means more local people to buy the products of the farm.

Farm Business and Markets Outlook

(Continued from page three.)

as to the future and a marked unwillingness to make commitments very far ahead.

The committee of economists selected by Secretary Wallace of the Department of Agriculture to report on the agricultural outlook says that "our credit position is unusually strong and more than equal to any demands which may be made upon it in the crop moving season. There is no present prospect of any money stringency, or a rise in interest rates sufficient to affect business or the farmer unfavorably. The probability of a severe business depression in the near future seems to be slight."

The unfavorable factors in the situation include (1) the higher costs for labor and materials which reduce business profits and make business men less willing to go ahead with production; (2) the fear on the part of distributors that ultimate consumers will begin to hold back when the goods priced to carry the full effect of advances in costs during the spring reach retail channels; (3) the impaired buying power of the farmer, and (4) evidence of a decline of business activity in Europe, notably in Great Britain, Germany and France and the likelihood that Europe's purchasing power will decline further in the next year unless political differences can be quickly adjusted.

LATEST QUOTATIONS

PORTLAND, Ore., July 21.—Cattle—Choice steers, $7.50@8.00; medium to good steers, $6.75@7.50; fair to medium steers, $5.75@6.75; common to fair steers, $4.75@5.75; choice heifers, $5.00@5.25; choice cows and heifers, $4.25@4.75; medium to good cows, heifers, $4.00@$4.25; fair to medium cows, heifers, $3.00@$4.00; common cows, $2.00@3.00; canners, $1.50@2.00; bulls, $3.00@4.00; choice dairy calves, $7.50@8.50; prime light calves, $7.50@8.50; medium light calves, $7.00@7.50; heavy calves, $4.00@7.00.

Hogs—Prime light, $9.00@9.25; smooth heavy, 230 to 300 lbs., $7.50@8.75; smooth heavy, 300 lbs. and up, $7.00@7.50; rough heavy, $4.50@6.00; fat pigs, $8.75@9.00; feeder pigs, $8.75@9.15; stags, subject to dockage, $3.50@5.00.

Sheep—Choice valley lambs, $10.50@11.00; medium valley lambs, $9.50@10.50; common valley lambs, $7.50@9.00; cull lambs, $6.00@$7.50; light yearlings, $7.50@8.00; heavy yearlings, $6.00@6.50; light wethers, $6.00@$6.50; heavy wethers, $5.50@6.00; ewes, $1.50@$5.50.

SPOKANE, July 21.—Cattle—Prime steers, $7.00@7.50; good to choice steers, $6.50@7.00; medium to good steers, $6.00@6.50; fair to medium steers, $5.25@6.00; common to fair steers, $4.50@5.25; choice cows and heifers, $5.00@5.50; good to choice cows, heifers, $4.50@5.00; medium to good cows, heifers, $3.50@$4.50; fair to medium cows, heifers, $2.75@$3.50; canners, $1.50@2.50; bulls, $3.00@4.00; light veal calves, $7.00@8.50; heavy veal calves, $6.00@$7.00; stockers and feeders, $4.00@5.50.

Hogs—Prime mixed, $8.75@9.00; medium, $8.25@8.75; heavies, $5.75@8.00; fat pigs, $8.50@8.75; stockers and feeders, $8.25@8.50.

Sheep—Prime lambs, $9.50@10.25; fair to medium, $8.00@9.00; yearlings, $6.00@7.00; wethers, $4.00@6.00; mutton ewes, $3.00@5.00.

THE GRAIN MARKET

PORTLAND, Ore., July 21.—Wheat—Hard white, Bluestem, Bart, $1.05; soft white, western white, $1.03; hard winter, northern spring, western red, 98c.

Grain Futures—Wheat—Hard white, Bluestem, Bart, July, $1.05; August, $1.04; September, $1.01; soft white, July, $1.03; August, $1.02; September, $1.01; west white, July, $1.03; August, $1.02; September, $1.01; hard winter, July, 98c; August, 97c; September, 92c; northern spring, July, 98c; August, 97c; September, 92c; west red, July, 98c; August, 97c; September, 92c.

Corn—No. 2 E. Y., ship July, $37.50 bid, $39 asked; August, $36.25 bid, $37 asked; September, $35.50 bid, $37 asked.

SEATTLE, July 21.—Wheat—Hard white $1.04; soft and western white, hard and soft red winter, northern spring, western red, $1.

PULLMAN, Wash., July 21.—Red, 80c; white, 85c.

WALLA WALLA, July 21.—Bluestem and Bart, 90c; Club, 88c; Turkey red, 83c.

DAYTON, July 21.—Club, 89c; red, 84c.

LEWISTON, July 21.—New red, 80c; white, 85c.

RITZVILLE, July 21.—Bart, 85c; red, 82c; Fife, 80c.

DAVENPORT, July 21.—Bluestem, 89c; Gold Coin, 86c; Club, 86c; dark northern spring, 86c; northern spring, 83c.

HAY AND FEED GRAIN

SPOKANE, July 21.—Wheat—Feed wheat, $42 ton; oats, $42 per ton; rolled, $44; corn, $44 per ton; cracked corn, $46 per ton; barley, $38 per ton; rolled, $40; bran, $29 ton; bran and shorts, $30 ton; shorts, $32 ton.

Alfalfa, $20 ton in ton lots, $18 carload lots; timothy, $28 ton in ton lots, $26 in carload lots.

PORTLAND, July 21.—Millfeed—City delivery prices; Millrun, $30 per ton; middlings, $45; scratch feed, $50; rolled barley, $37; cracked corn, $48; rolled oats, $45.

Hay—Buying prices, f. o. b. Portland: Alfalfa, $16 ton; cheat, new, $13@14; valley timothy, old, $26, new, $18; eastern Oregon timothy, old, $27; clover, $13.

GENERAL PRODUCE

PORTLAND, July 21.—Butter—Cubes, extras, 39@40c lb.; prints, parchment wrapped, box lots, 42c; cartons, 43c. Butterfat, 41c delivered Portland; 38@39c station buying price.

Eggs—Buying price; White hennery standards, 24½c@25c dozen; mixed color standards, 23@24c. Selling price, Front street: selects, 29@30c; candled ranch, 27c. Association selling prices, cash at store, selects 26c, firsts 24c, pullets 24c.

Cheese—Prices to jobbers, f. o. b. Tillamook, Triplets, 27c; longhorns and loaf, 28c per pound.

Poultry—Hens, 14@23c; broilers, 18@24c; ducks, 15@22c; geese, nominal; turkeys, nominal.

Pork—Fancy, 12c per pound.

Veal—Fancy, 14@14½c per pound.

FRUITS—Apples, $1.50@3 box; berries, 5@15c lb.; cantaloupes, standards, $4@5.75 crate; apricots, 90c@$1.75 crate; raspberries, $1.75 per crate; watermelons, 3@4½c lb.; plums, $1@2 box; peaches, $1@1.75 per box; loganberries, 90c@$1.10 per crate; pears, $2.50@3 per box; black caps, $2 crate; currents, $2@2.25 crate; ice cream melons, 4½c lb.; casabas, 4@4½c lb.

Onions—Walla Walla Globes, $2.50@3; California yellow, $3 per sack.

Potatoes—New Oregon, 2@2½c lb.

Vegetables—Cabbage, Oregon, bulk, 1½@2c lb.; lettuce, $1.25@2 crate; garlic, 17@20c lb.; tomatoes, $1.75@2.75 box; celery, $1@1.75 doz.; peas, 8@9c lb.; peppers, green, 25@35c lb.; cucumbers, $1.25@1.75 box; beans, 5@7c lb.; corn, 60@70c doz.; bunched beets, 40@45c doz.; bunched carrots, 40@45c doz.; radishes, 30@35c doz.; green onions, 35c doz.; beets, $2.50@2.75 sack; rutabagas, $2.50 sack; turnips, $3.50 sack; carrots, $2.50@2.75 sack.

SPOKANE, July 21.—Poultry, Live Weight—Hens, 4 lbs. and over, 18c; light hens, under 4 lbs., 12c; springs, 18c to 20c; old roosters, 8c.

Fresh Ranch Eggs—$5.50 to $6.50 case, according to quality.

Butterfat—42c lb.

BOSTON WOOL

BOSTON, July 20.—The Commercial Bulletin will say tomorrow:

"The wool trade has reached a position of greater stabilization than has existed for a number of weeks and looks to the future with increasing confidence.

"In the west consignments make up the bulk of the movement at the moment. Some scattering sales, usually of small quantities, are reported here and there in the range of 40 to 46 cents, depending upon the wool.

The Commercial Bulletin will publish the following quotations tomorrow:

Domestic, Ohio and Pennsylvania fleeces—Delaine, unwashed, 56c; fine, unwashed, 51c; half-blood combing, 56@57c; three-eighths blood combing, 55@56c.

Scoured basis:

California — Northern, $1.37@1.40; middle county, $1.20@1.25; southern, $1.05@1.10.

Oregon—Eastern No. 1 staple, $1.40; fine and fine medium combing, $1.25@1.35; eastern clothing, $1.15@1.20; valley No. 1, $1.15@1.20.

Pulled—Delaine, $1.30@1.31; AA, $1.20@1.25; A supers, $1.05@1.10; mohair best combing, 78@83c; best carding, 70@75c.

SETS NEW STATE RECORD.

In the final week of the yearly test, in which she produced 30,688 pounds of milk and the fat equivalent of 1140 pounds of butter, Steilacoom Inka Posch, the Washington state hospital junior 4-year-old Holstein, set a new state record for milk at that age and produced 28.2 pounds of butter, three pounds more than she produced in the first week of her test. As a seven-day milk producer she displaces Hollywood Segis Belle Ormsby, owned by the F. S. Stimson company, though the latter retains the fat production honors by a margin of 5.5 pounds.

GROW WHAT YOU EAT.

The farmer buys too much of his food.

Range of Live Stock Prices for Week Ending July 18, 1923

CATTLE.	Chicago.	Spokane.	Portland.	N. Salt Lake.
Ch., prime heavy steers (1100 lb. up)	10.50@11.65			
Good heavy steers	9.60@10.65			
Medium heavy steers	8.35@10.00			
Common heavy steers	7.00@8.75			
Ch., prime light steers (1100 lb. d'n)	10.25@11.40			
Good light steers	9.25@10.50			
Medium light steers	8.00@9.90	6.75@7.75	7.00@8.35	6.50@7.25
Common light steers	5.85@8.60	4.50@6.75	5.00@7.00	5.25@6.50
Common to choice butcher heifers	5.75@10.35	3.50@6.50	3.00@6.00	4.00@5.50
Common to choice butcher cows	3.65@8.90	3.00@6.00	2.50@5.50	3.50@5.00
Bologna and beef bulls	4.15@6.00	3.00@4.00	3.00@4.00	2.00@3.25
Canners, cutters, cows, heifers	2.60@4.00	2.00@2.75	1.50@2.50	1.50@3.00
Canner steers	3.25@5.75	2.50@3.50		
Medium to choice light veals	9.00@12.00	7.00@8.00	7.00@8.50	7.25@8.00
Common to choice heavy veals	3.25@11.75	6.00@7.00	4.00@7.00	
Com. to choice feeders (750 lb. up)	5.75@8.50			
Com. to choice feeders (750 lb. d'n)	4.50@8.40	4.00@5.50		4.50@5.50
Com. to choice stocker cows, heifers	3.25@6.00			
HOGS.				
Top of market	8.00	8.75	9.10	7.50
Bulk of sales	6.50@7.80	7.50@8.70	8.25@9.00	6.75@7.25
Heavy (250 lb. up)	6.50@7.80	7.40@8.75	8.00@8.75	
Medium (200-250 lb.)	6.75@8.00	7.75@8.75	8.50@9.00	6.50@7.50
Light (150-200 lb.)	6.65@8.00	8.50@8.75	8.75@9.10	6.75@7.50
Light lights (130-150 lb.)	6.55@7.95	8.25@8.50	8.75@9.00	
Smooth packing sows (250 lb. up)	5.85@6.75	6.00@6.75	5.50@6.00	5.75@6.25
Rough packing sows (200 lb. up)	5.50@6.15	5.25@6.00	4.50@5.50	5.25@5.75
Medium to choice pigs (130 lb. d'n)	6.25@7.40	8.00@8.25	8.50@9.00	5.75@6.25
Stock pigs		7.50@8.00	8.50@8.75	5.50@6.00
SHEEP AND LAMBS.				
Medium to prime lambs (84 lb. d'n)	12.00@15.25	10.00@12.00	9.50@11.00	10.50@12.50
Culls and common lambs	7.50@12.50	7.00@10.00	6.00@9.50	7.00@10.50
Medium to prime yearling wethers	9.00@13.00	7.00@9.00	6.00@8.00	7.00@8.00
Medium to prime wethers	4.50@8.75	6.00@8.00	5.00@6.50	5.50@6.00
Common to choice ewes	3.50@7.00	3.00@6.00	2.50@5.50	3.00@5.00
Culls and common ewes	1.00@3.25	2.00@3.00	1.50@2.50	2.00@3.00
Feeder lambs	10.25@13.00			

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Your Health

By Royal S. Copeland, M. D., F. A. C. S.

Today I want to tell you about a condition which becomes serious if not given early attention. Like all other forms of malignant disease, it is unpleasant to talk about. I refer to cancer of the stomach.

Dr. Copeland.

It will be a great thing for this world when the cause of cancer is discovered. We know little about it at present, but fortunately there are great laboratories and devoted laboratory experts working on cancer. Some day we will wake up to read in the morning paper that the problem has been solved.

Until Pasteur's epoch-making discovery there were many horrible deaths from hydrophobia. Until the successful development of anti-toxin there were endless numbers of deaths from diphtheria. Smallpox has lost its horror since vaccination became universal.

The time will come when cancer will be swept away by the discovery of the cause and the capture of the agent. That will be a great day in this world!

There are a few rules which are worth while to bear in mind.

Anything which lowers the bodily resistance creates a condition favorable to the onset ravages of disease.

The blood must circulate freely. The organs of elimination must function perfectly, carrying away the poisonous wastes of the body. The lungs must be filled day and night by life-giving oxygen. There must be no centers of pus development. No form of chronic irritation or interference with local circulation should be permitted to exist.

Living a normal, temperate, well-directed life will go far toward making cancer and all the other diseases unlikely to occur. Such a life from earliest childhood will make less common the cases of cancer of the stomach which now appear between the ages of 40 and 60.

Loss of appetite, frequent vomiting and progressive loss of weight are suspicious symptoms. Perhaps the victim has been very well before and suddenly develops the digestive trouble.

Just Folks

Come with me upward along a leafy lane, through grass knee-high, besprinkled with native flowers and ferns, embordered with moss-covered walls of stone picked up on either side; higher and higher the view broadens over the hills, valleys and glistening lakes of central New England. Then climb over the wall and into a farm field that was of old, now largely grown over with bushes and in which the grass is again besprinkled with wild flowers, and just below, the old sugar maples still yield to moderns the sweets of the household.

Here was the faraway nook where one could, as a boy, sink back on the soft carpet of mother earth and watch the fleecy clouds playing hide-and-seek with the sun, and there sloughing all the fuss and feathers of life, be at one with leaf and bud and flower and tree again.

There in that abandoned paradise of a June day was pointed out to my eyes for the first time two piles of stones, each pillowed in the green, one the filled-in cellar of the pioneer home—for New England had her pioneer days as well—where my father was born; the other was the filled-in well that gave the family its living waters.

As that day and that walk hover over me as a dream, the innate yearning for the open comes and the half-hidden wish nestles in my heart that my father, his father and his father's father might have found their resting place far up on that hillside beside the two piles of moss-covered stones, leaving to the now crowded cities the dead all their glory of engraved marble and granite. A few moss-covered unwritten stones, pillowed in the green, overlooking God's own country—that surely would be the God's acre of our forebears.

EAS

Latest High Class Patterns for the Home

Please order the patterns you desire at least two or three weeks before you wish to use them. Desiring to obtain the latest high-class patterns for its readers THE FARMER has made arrangements to have them sent direct from the east, and under present mailing conditions it takes about that time for them to reach you.

4423. Misses' Dress—Cut in three sizes: 16, 18 and 20 years. A 16-year size requires four and one-fourth yards of 36-inch material. The width at the foot is one and seven-eighth yards. Price 10c.

4269. Ladies' Dress—Cut in seven sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. A 38-inch size requires two and one-half yards of 36-inch material for the waist and two and three-eighth yards for the skirt. The width at the foot is two and three-eighth yards. Price 10c.

3814. Girl's Dress—Cut in four sizes: 6, 8, 10 and 12 years. A 10-year size will require two and one-fourth yards of 27-inch material for the guimpe and three and one-fourth yards for the dress. Price 10c.

4424. Ladies' Dress—Cut in seven sizes: 34, 36, 38, 40, 42, 44 nad 46 inches bust measure. A 38-inch size requires six and one-fourth yards of 32-inch material. The width at the foot is two yards. Price 10c.

4081. Ladies' House Dress—Cut in seven sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. A 38-inch size requires five and three-fourth yards of 32-inch material. The width at the foot is two and five-eighth with plaits extended. Collar and cuffs of contrasting material requires three-fourth yard 32 inches wide. Price 10c.

4441. Girls' Undergarment—Cut in five sizes: 2, 4, 6, 8 and 10 years. A 10-year size requires 1 and three-fourth yards of 36-inch material. Price 10c.

4420. Ladies' Apron—Cut in four sizes: small, medium, large and extra large. A medium size requires four yards of 27-inch material. Price 10c.

4445. Girls' Dress—Cut in four sizes: 8, 10, 12 and 14 years. A 12-year size requires three and three-eighth yards of 32-inch material. Price 10c.

3687. Girls' Apron—Cut in four sizes: 4, 6, 8 and 10 years. An 8-year size requires one and five-eighth yards of 27-inch material. Price 10c.

2222. Union Suit With or Without Sleeves for Men and Boys—Cut in seven sizes: 26, 28, 32, 36, 40, 44 and 48 inches breast measure. Size 36 requires two and seven-eighth yards of 36-inch material without sleeves. With sleeves it requires three and one-eighth yards of the same width. Price 10c.

4437. Child's Rompers—Cut in four sizes: 2, 3, 4 and 5 years. A 3-year size requires one and one-fourth yards of 36-inch material. Price 10c.

4435. Child's Dress—Cut in four sizes: 1, 2, 4 and 5 years. A 4-year size requires one and seventh-eighths yards of 27-inch material. Price 10c.

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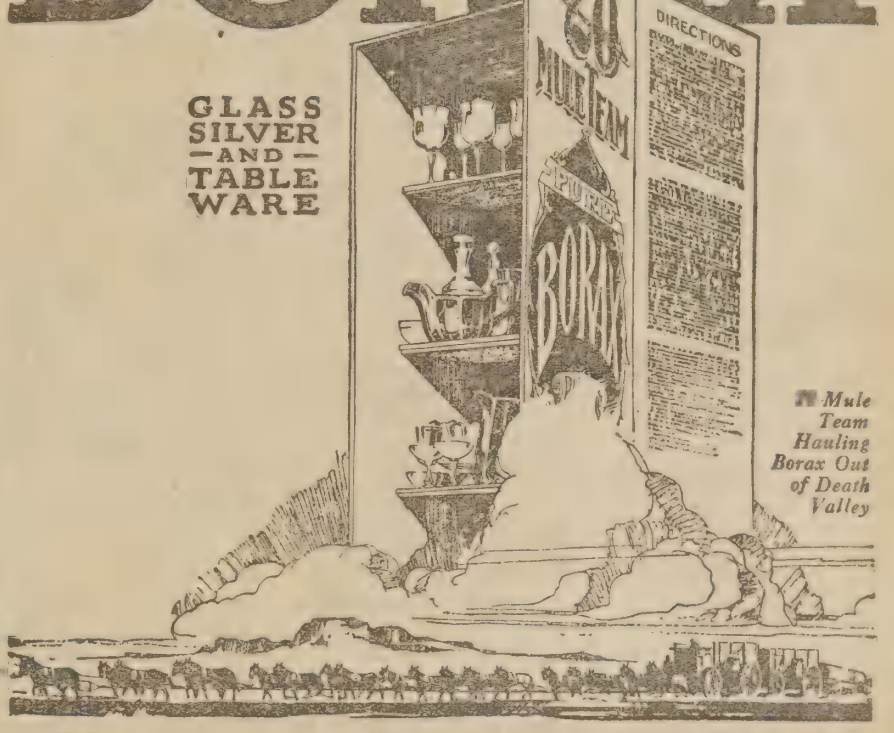

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NATURES GREATEST CLEANSER

Kathryn Fry says she is very proud of a New Testament which was given her for good attendance at the Junior league on Sundays. (Aunt Nellie thinks that is something to be proud of, too.) This cousin in eastern Washington has some little pups and kittens to play with.

Fox and Tip are two white dogs belonging to Frances Higginbotham, in Grant county, Wash. Snowball is her white cat. Frances has other pets, too. One of them is a pony named Dick. Dick is black and has one white foot. Frances says she is glad school is out, so she can have a good time. She is one of our new cousins and we are glad to hear from her. She is 10. Her birthday is August 12.

Birthday Greetings

THURSDAY, July 26—Clarence Hedlund, 9 years old; Helen Howe, 10; Jean Lockwood, Helen Mitchell, 11.

SUNDAY, July 29—John Albert Malone, 11 years old.

MONDAY, July 30—Carrie Buckels, 6 years old; Robert Parks, 11; Ivan J. Putnam, 11.

TUESDAY, July 31—Armas Lampi.

LETTERS WELCOMED BY AUNT NELLIE.

Among recent letters received by Aunt Nellie are those from cousins whose names follow. A few of these will be published each week in the regular edition of THE FARMER and others will appear from time to time in The Junior Farmer:

Florence Sicilia, Vina Kimm, Mozelle Van Syckle, Vera Neff, Hilda May Waltner, Dorothy Barry, Gladys Haines, Margrethe Wolburn, Leona Reinhart, Verla L. Dyer, Marian Freese, Frances Haxton, Nina Downing, Bessie Martinson, Dorothy Gebhardt, Esther E. Els, Evelyn Hall, Vesta Rogers, Ruth Carlin, Olive Ruth Olsen, Bernice Jones, Marguerite Hamilton, Margret Kreyssler, Alvena and Violet Matson, Alice Sanborn, Velda and Eva Lindner, Linnie Gammon, Molly McCormack, Thelma Melger, Ella Kemp, Gladys Stone, Lena Townsend, Shirley Aldrich, Floreda Young.

Alice Wolf, Eva Cade, Alice Hunt, Grace Marlatt, Dorothy H. Graham, Ralph Radford, Mildred Dezarn, Marie Jensen, Frances Mae Fox, Ernestine Miller, Bertha Enroth, Ethel Wynecoop, Glenna Loraine Dohrn, Nelle Hill, Matilda French, Stella Cade, Hazel Niva, Bernice Rudrud, Marguerite Wilson, Hilda Wyngarden.

BEDTIME STORIES

By THORNTON W. BURGESS.

JENNY GOSSIPS WITH CHATTERER.

Now, Jenny Wren is a great gossip. Everybody knows that. Her tongue is going from morning to night. For the most part it is harmless gossip, but not always. She didn't mean it to be harmless this morning as she settled herself in the old apple tree nearest the stone wall on the edge of the old orchard and at once began to gossip with Chatterer the red squirrel.

"Good morning, Chatterer!" exclaimed Jenny. "I hope you are feeling as well as you look."

"I should put it the other way," grinned Chatterer, who happened to be in the best of spirits that morning. "I hope I

"Good morning, Chatterer!" exclaimed Jenny.

look as well as I feel, because in that case I must look very fine indeed."

"That red coat of yours is one of the handsomest coats I know of. I always did admire red. You don't know how envious we folks who have to dress so plainly get sometimes. Speaking of plain dressers, have you noticed those upstarts who have come out from the city to live here in the old orchard? I mean Bully the English sparrow and his wife. Goodness knows, my dress is plain enough, but I do try to keep it in order! But Mrs. Bully doesn't. Why, she doesn't seem to care a crooked feather how she looks!"

"I judge by some of the sounds I have heard that they are not altogether easy to get along with," replied Chatterer.

"Easy to get along with!" Jenny Wren fairly danced as she snapped this out. "Easy to get along with! Why, we don't pretend to get along with them. We just don't have anything to do with them! They are beneath our notice."

Chatterer chuckled. "I notice that they stay just the same, and, so far as I can make out, they seem very much at home," said he.

"Yes," sputtered Jenny, "they are at home all right. I suppose you know where they are living."

"No," replied Chatterer, "I can't say that I do."

"You don't say!" exclaimed Jenny. "Well, they are living in that old house that Drummer the woodpecker built two years ago and in which Swimmer the swallow started housekeeping this spring."

"What has become of Skimmer?" inquired Chatterer.

"Oh, they drove him out and took the house away from him. It was the most outrageous thing! That's just what it was—out-rage-ous! Now they've built a nest there themselves, and I heard Mrs. Bully say this very morning that they've got six eggs! Think of that! I've no business to say such a thing, but I can't help wishing that something would happen to those eggs. Well, I must be hurrying home. Don't, for goodness sake, repeat what I have said."

With this off bustled Jenny Wren, leaving Chatterer in a brown study.

(Copyright by J. G. Lloyd.)

Chickens Finance Modern Home

If there is any one in western Washington who still believes that poultry raising when properly conducted is not profitable, he should visit the M. P. Hokenstad farm near Snohomish, on Blackman lake, in Snohomish county. This farm has been built up and improved, including a modern eight-room house, from the proceeds of the commercial poultry flock.

The farm is only 20 acres and is along the banks of Blackman lake, but it has all been built up during the last nine years. The first year it was managed as a dairy farm, when Mr. Hokenstad purchased six cows with which to start a commercial dairy. Before the end of that year he lost some of the cows from disease and sold the remainder at a great sacrifice. He later tried 30,000 celery plants, but lost three-fourths of the crop from poor weather and bad markets. The commercial orchard has made a small share of the income, but not as much as its owner had anticipated.

"It was during our second year on the farm that we decided to try raising chickens," explained Mr. Hokenstad. "We bought 200 day-old chicks and raised them according to the directions laid down by the experiment station bulletins. We had good luck with them and decided

The Hokenstad Home.

to get a larger number the following year. We did so, but felt it necessary to get some better stock, and so we bought a setting of the highest quality of eggs we could find for $75. These were used as a foundation for our present poultry flock, and to this we can credit much of the high production of the flock.

"It was necessary to work up as we went along, since we were already in debt for the farm. We had 200 hens the first winter. We kept chickens and have doubled the number each year since that time. We maintained the high standard from the first, and culled out all hens that did not show the indications of good layers. When we started trapnesting we found it was much easier to pick out the poor layers, and we have kept up the practice ever since.

"We are not making any attempt to raise show birds, but are working for high production. We feel that we should have good stock in the first place, and then cull carefully. The hens always have a good balanced ration, and are given plenty of minerals and green feeds in order that they may produce to their highest capacity.

"We keep accurate account of all costs and know exactly how many eggs we are getting from one pound of grain. We always know what it is costing us to produce a dozen eggs, and we are therefore able to check up on the hens at any time.

"We keep the houses absolutely sanitary, but we do not waste any time overdoing the matter. Sanitation is essential, but it can be overdone. Proper ventilation is also necessary, yet at the same time the birds should have protection from drafts, and we have a large curtain which can be let down over the open front in case of bad weather or extremely cold weather.

"It was necessary to build a new laying house a few years ago in order to handle our increasing flock. We now have a capacity of 2000 hens, and the pullet house, where only the pullets are kept during the first year of production. The main building is on the half monitor plan. Trapnests are all below dropping boards, and the dust bath is below the main floor.

"We make every effort to get all of the white extras we can, and find that this is a simpler matter when the trapnests are used, since the hens stay in the outer part of the nest after laying. When she goes on the nest she closes the trap behind her, and thus keeps out any other hen which might run after her. We have 1400 laying hens this year, and will keep 750 of the best hens for breeders. We plan on adding 750 new pullets each year to keep the flock at its present size.

"We raised all of our own chicks in the large cellar of the dwelling house with individual coal oil incubators. For several years we have been selling day old chicks and find it a good source of income.

"In brooding our own chicks we keep the brooder house where the soil can be changed each year by giving the birds a clean pen, and cultivating the old one. We believe that this precaution is a very important one and will prevent losses from growing chicks, and keep them healthy at all times. It is a simple matter to have the pens arranged in this way and we find it very profitable, since we are not bothered by undue losses with the young stock.

"During the first few years we developed a special trade for eggs, dressed poultry, and other farm produce. We would make special trips to Everett on certain days during each week, and found that in this way we were able to realize a better profit for our products. During the last two years, however, we have changed our plans and are selling all of our eggs and surplus poultry through the Washington Cooperative Egg and Poultry association. This method has done a lot in solving the marketing problem for the producer, and we feel that we are getting as good returns from our eggs as when we sold them direct to our customers. We can better afford to spend less time in delivering the eggs and have more time at home to attend to the flock."

The new eight-room dwelling house, which has only recently been completed on the Hokenstad farm, is the latest chapter in the story of the Hokenstad success with White Leghorns. The house is modern in every way, and has many conveniences which are common in city homes, and can be had at a small expense in farm homes when a special effort is made to put them in. At first thought, it seems almost impossible that such an accomplishment could be made in so short a time, especially when both Mr. and Mrs. Hokenstad were just learning the poultry game. They admit it has been a hard job and it has kept them both busy. They have been raising three children at the same time.

Demand for Seed Potatoes

There is a good demand for seed potatoes in Clallam county and M. D. Wortman of the Ellwah valley is raising five acres which he intends to sell for seed this fall. The patch is on sandy bottom land close to the river and the early growth of the plants was very encouraging. In fact the plants came up two weeks after planting.

Half of the patch is the Burbank variety and the rest is a variety that resembles the Burpee, but is called the Green Mountain by many of the growers in this district. Last year Mr. Wortman had a patch of potatoes that produced 100 sacks to the acre and he looks for a crop that is equally as large this year.

JOIN JUNIOR DAIRY CLUBS.

Thirty-eight boys and girls joined the junior dairy clubs of Skagit county. C. H. Bergstrom, county agent, is assisting club members in selecting their stock, which will be purebred, with 500 pounds butterfat backing or equivalent.

At a dairy judging demonstration held in the Nasel community in Pacific county, on the farm of Ed Simonds, four cows with cow testing records were used. Thirteen dairymen attended the contest and nearly all placed the best cow third.

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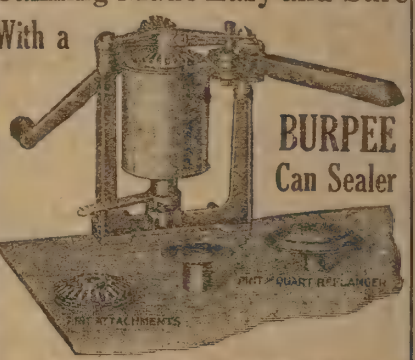

Can at home the same way they do in the large canneries. The cans cheap and may be used three times. The device for sealing the cans is inexpensive and makes canning a pleasure. You can can from your garden and orchard to supply your family with the best of food for every meal the year round. Meat, fish, clams, etc., may be canned with perfect success.

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In writing advertisers, be sure to say you saw their advertisement in The Washington Farmer.

A Maker of Beef Cattle History

By HOWARD HACKEDORN

There is no beef cattle breeding plant in the west more widely known than Hercules Shorthorn farm, owned by Frank M. Rothrock, Sprague, Wash. Few in America are better known. And in the history of that farm no other individual animal is so well known or has played such prominent part as has Gainford Perfection, now senior herd sire at the age of 10 years. For six years he has been a foundation sire at Hercules farm, and there he is destined to spend the rest of his days if the attitude of his owner toward him does not change. Ere long his years of service will end, but his many sons and daughters will perpetuate his quality in scores and hundreds of Shorthorn herds throughout America.

Gainford Perfection, 442173, grand champion Shorthorn bull of Canada for 1914-16, but never shown in this country, was purchased by Frank M. Rothrock, one of the present directors of the American Shorthorn Breeders' association, in the spring of 1917 to head his herd at the Hercules ranch at Sprague, Wash. At this ranch he is still the senior herd sire and stands out today as one of the greatest sires in the northwest.

He was calved March 22, 1913, and was bred by J. A. Watt of Elora, Ontario, Canada, who retained him in his herd until he was sold to the Hercules ranch. Gainford Perfection is a straight Bruce Fanny and the names of C. and J. Bruce appear several times in his pedigree. His sire, Gainford Marquis, 370987, carries 21.25 per cent of the blood of the champion of England (17526), of which bull A. J. Sanders says, "One after another of the sons and daughters of this, the greatest stock bull Scotland has ever known, grew up into cattle of the real rent-paying sort."

Gainford, as he is familiarly called by those who have made his acquaintance, has demonstrated his merit as a sire of good cattle, which is shown by the winnings of his offspring in the northwest under such judges as Charles Yule. I. F. White, William Hartnett, W. C. Rosenberger and Captain T. E. Robson, and by the prices received for his calves. His get have consistently received the converted blue and purple ribbons. Only twice in four years has his group of four sons and daughters been defeated in the get-of-sire class. These times Uppermill Lord, 391777, owned by John Seely & Son of Mount Pleasant, Utah, was awarded the blue ribbon in 1920 and 1921 at the Western Royal. Both these decisions were reversed at the Pacific International the following week.

The winnings of the sons and daughters of Gainford at the Western Royal and the Pacific International, the outstanding cattle shows of the northwest, for the years 1919, 1920, 1921 and 1922 number 34 first, 16 seconds, 18 thirds and 12 fourths. From these there were selected eight junior champions, two senior champions and five grand champions, not including two grand champion steers.

At the Shorthorn congress sale and show in 1919, one of the largest spring

This picture of Gainford Perfection was taken when he was in his prime.

sales and shows in the United States, he advanced his claim for recognition as a great sire, through his sons and daughter, Hercules Diamond, 705964, first senior yearling and champion bull, Hercules Knight, third junior yearling bull, and Hercules Topsey, 605964, third 2-year-old cow. This group was also awarded the blue ribbon in the get-of-sire class. Hercules Diamond was also the highest-priced animal of the sale, selling for $5000 to John R. Jones of Williamsville, Ill. This same bull the following fall at the International was placed first in his class. Hercules Topsey topped the sale for cows by selling in his class. Hercules Topsey topped the sale for cows by selling for $2650 to H. Reese & Sons of Pilgar, Neb. In the fall this cow was senior champion at the National Western Stock show at Denver and stood forth in her class at the International. Hercules Knight was placed third in the junior yearling class and was sold for $1700 to Charles Plageman of Eckley, Col.

Hercules Matchless, 704703, another of his daughters, has an enviable show record. She has been junior champion three times, senior champion twice and grand champion twice. At the Western Royal in 1920 she was awarded the grand championship over Glide's Little Sweetheart, 378263, the grand champion female of the International held at Chicago, Ill.

Sni-A-Bar farms of Grain Valley, Mo., sent a representative to the last Pacific International to purchase the good junior yearling bull, Hercules Conqueror, 1026690, by a son of Gainford, Hercules Chancelor, 814629. This bull was one of the highest priced bulls sold during the season any where in America, selling for $2100.

Another grandson of Gainford, through his daughter, Hercules Rosabella, 814679, sold for $1225 to Reginald Parson of Seattle for his Shorthorns in northern California.

Hercules Snowstorm, 1026696, by Village Sultan, 650623, and out of the wonderful Hercules Matchless by Gainford Perfection, topped the Hercules 1921 annual spring sale by selling for $960 to J. I. Trimble of Garfield, Wash., in whose herd he now stands as senior herd sire.

Hercules Model, 1043754, another son, and a wonderfully flashy youngster, with a world of promise, shown during the fall (1921) as a junior calf was awarded two junior championships and a grand championships, winning the latter prize at the Pacific International in 1921. Later in the week this bull calf topped the west coast sales for the year by selling for $1575 to J. D. McGuire of Tenino, Wash. This promising young bull met untimely death in June this year.

A large number of sons and grandsons of Gainford Perfection now stand at the head of the northwest herds.

In the fat classes Gainford Perfection upholds his envious record as the sire of seven first prize steers, one second and one fourth, including two championships.

Hercules Topsman, third prize yearling in 1920 in a class of 22 bulls at the Pacific International, one of the good sons of Gainford Perfection, is now in service at the Hercules ranch. He is the sire of the first and third prize junior bull calves, Hercules Brilliant and Hercules Marquis, at the last Pacific International. Also this bull is the sire of Topsman's Type, grand champion steer calf at the Western Royal in 1922, shown by the Washington State college. This calf was taken to the Chicago International by the college herdsman, Mr. Hanna, where he was made champion college steer with some 16 Canadian and northwest colleges competing. He was beaten in his class only by the Shorthorn calf which was later made grand champion of the show. This calf was sold to the Oklahoma Agricultural college and in whose herd he was champion Shorthorn steer at the southwestern spring shows.

BUILDING UP JERSEY HERD.

Robert Trenchman of Elma has an excellent herd of grade Jerseys on his farm north of town, and is gradually building up the number of purebred animals and expects to have an entire herd of registered animals in the course of a few years.

One of the cows, Rosy Buff's Sister, has a record of 413 pounds. Another animal, a 2-year-old, has an unofficial record of 436 pounds, 334.9 pounds of which was produced in eight months and 20 days. Several of the young heifers in this herd are from Lad's Juno, who is the sire of the present herd bull. They are all a good even bunch of heifers, and even the grade cows indicate that they are profitable producers.

There are 225 acres on this place, but only 40 acres are in cultivation. The pasture land is out in the cleared stump land where it is not yet ready for cultivation. There is plenty of grass for the cattle, except during late summer, at which time green crops are fed along with the grain rations.

There is a wood and hoop silo on the Trenchman farm, which was built in 1917. It is one of the first of its kind to be built in western Washington. It was tarred both inside and out, and is still in excellent condition, having been used every year since it was erected. It is 32 feet high and holds 75 tons. It was built at a cost of $125, which does not include labor.

Mr. Trenchman has found time to put in a few home conveniences, such as built-in cupboards in the kitchen, zinc drain boards, farm lighting plant and pressure water system. These have all been added as money and means permitted. Mrs. Trenchman has planned other improvements about the house, which they want to put in sometime in the future.

When they first began building up this farm home, they decided that the necessary home conveniences should be put in before the family car was purchased. They have lived up to their agreement, and they now have the family car. Both Mr. and Mrs. Trenchman have hopes of building up a high-class dairy farm and they have made a long stride in the direction of their goal.

NEW STATE CHAMPION FOR MILK.

A new state champion for milk, at least in the junior 4-year-old class of the 365-day division, is Steilacoom Inka Posch, a Holstein bred and developed by the Western State hospital at Steilacoom. She also makes another in the lengthening list of western 30,000-pound cows, for her total milk production was 30,688 pounds, three and one-half tons more than that of Cascade Piebe, whom she displaces. The butterfat records of the two animals are practically the same, and official confirmation will be required before the championship is determined. Steilacoom Inka Posch is by a son of Sir Johanna Ruth Fayne, selected eight years ago to head the grade herd at the hospital and the means of greatly increasing its average of production.

HERD AVERAGES 62.3 POUNDS FAT.

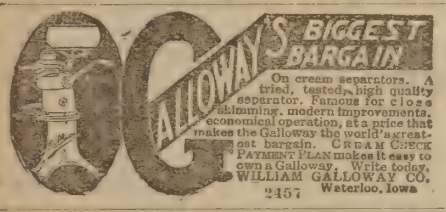
A butterfat average of 62.3 pounds for one month from 15 cows getting ordinary care is exceptional, but A. E. Moore of Falls City, King county, has a habit of keeping his herd producing at their best at all seasons of the year. The entire herd was being pastured on clover meadow when the above record was made during May, but the production dropped off slightly when the animals were changed to blue grass pasture.

One of the cows, a Guernsey, produced 110.2 pounds of fat for the month of May, according to the county cow testing association records, and has been giving around 40 pounds of milk at each milking during her heavy production period.

Mr. Moore has a new herd bull, a registered Guernsey, Belsies Agustus. He comes from the W. A. Goodwin herd at Cornelius, Ore., and is now 3 years old.

THOMSEN SELLS GUERNSEYS.

P. H. Thomsen of Salzer valley has sold 10 head of high-grade Guernsey cows at $150 per head. Mr. Thomsen is to secure the heifer calves from these cows now carried in dam. The Thomsen herd was the high herd last year in the Lewis County Testing association. This is one of the first shipments of Guernsey cattle from Lewis county to outside points.



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It is easy to feed—just mix it with the salt or feed. A five-pound can costs $5.00 and contains sufficient Sav-A-Calf to feed 20 cows for one year. If you are not satisfied with it we will refund your money.

READ WHAT USERS SAY.

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TOWELL BROS.,
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Dear Sir:

I want to say that I had fine luck with my cows since I used your Sav-A-Calf. Never lost one calf, where I lost over half last year, before I saw your ad in the paper. I thought I would have to sell my cows, but after trying your Sav-A-Calf they are doing just fine.

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Wheat Basin, Montana.

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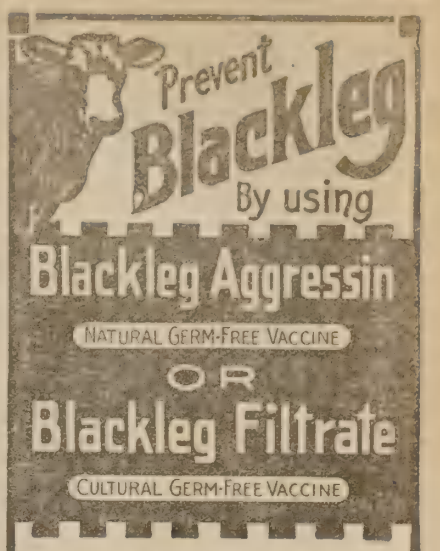

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S. D. CORNELL, Grandview, Wash.

EXPERIMENT STATION
URBANA ILL

From Cattle Ranch to College

(Continued from page ten.)

lounging position. "Freight outfit?" said he, sleepily. "No."

Then he woke up a little more as Ben broke into tears again. Perceiving their woebegone appearance, he sat erect, and for the first time took in the situation. "Why, what are you kids doin' here this time of night? Where's your horses? Where's your people?"

John told the story in a few words, while Ben, quite overcome, leaned his head against his brother's arm and went fast asleep standing up.

"And haven't you had anything to eat since noon?" queried the driver in wonder.

"No, nor nothing to drink," answered John, his voice shaking a little in spite of himself at the remembrance.

"Well, I'm sorry, but I'm afraid I can't help you much. I haven't got a bit of grub myself. Thought I would only be out a little while, and expected to reach the rest of my outfit by dinner time, so I didn't bring any feed myself. One of my nags gave out, so I couldn't catch the teams. I guess I can give you a little lift, anyhow. But see here!" he ejaculated, "I guess you're on the wrong trail, ain't you? Your folks must have took the other branch way back yonder; they wouldn't be likely to come over this side."

Brave John collapsed at this. He and Ben had been traveling all this weary time in the wrong direction!

"Never you mind, sonny," said the man, kindly. "We'll find some way out of it," he went on after a minute's silence; "those trails join again after a piece. Perhaps you may meet your outfit there. This branch follows a bend in the river, while the other cuts across country and meets it. See?"

"Yes, sir," said John, dejectedly.

"Come, help me get this team of mine started; you'll be sure to find your outfit camped near the fork; there's good water there and they'll wait for you."

Encouraged once more by his words, John lifted Ben bodily and laid him in the wagon. Then, after a good deal of urging with voice and whip, he got the worn-out team in motion.

For half an hour they moved along without a word being spoken; their new friend relapsed into his huddled-up position, Ben lay asleep in the bottom of the wagon, and John communed with himself. He wondered what his mother thought of their absence, and he felt the responsibility of an elder brother. He knew that the horses would turn up riderless, and that his father would send back over the trail that had been covered by the train, but would not find them. The thought of their anxiety made him doubly impatient at the slow progress made. He longed for Baldy to gallop on and set their minds at rest. Still, they moved along at a pace little faster than a walk. Each step of the weary beasts seemed as if it must be the last.

At length John, who was the only person awake, noticed that the off horse began to sway as he stumbled along. He roused he man at his side and told him he thought the animal was about done for. But the words of warning were hardly out of his mouth when the poor beast dropped like a lump, made a few fruitless attempts to regain his feet, and then lay quiet.

Here was a pretty mess for all hands!

The man, with one fagged horse and one almost as bad, 10 miles from camp, with no food or water, on a trail over which hardly any one pssed.

The boys, footsore from the long tramp, with a gnawing hunger and parching thirst and nothing to satisfy either, their destination they knew not how far off, and no means of reaching it other than afoot.

There was but one thing to do: set out once more and trust to providence that the camp would be found at the junction of the two trails and that their strength would hold out long enough to accomplish the journey.

John promised to send some one back with horses and food if the stranger did not turn up within a reasonable time, and the youngsters then resumed their weary march, John almost carrying his brother.

The moon had come out and showed the boys the deeply marked road. They had but to follow the track, so it became simply a question of endurance and pluck. The simple, hardy life they had always led and the constant exposure to heat and cold had toughened their little bodies and had given them a reserve fund of strength which now responded to the call upon their utmost powers. Strained as every faculty was, they plodded on doggedly, hour after hour. Just after midnight they topped a little rise, and involuntarily cried out in unison. There ahead of them was a blaze that gave them new life. They had reached the junction of the two trails, and the camp. The wagons were drawn in a circle just as they had pictured to themselves, the camp fire was burning brightly in a shallow pit (to prevent its spread to the surrounding prairie, and some of the men, wrapped in their blankets, were lying like long, bumpy bundles on the ground, while a bunch of mules were feeding at a little distance, guarded by the "night wrangler."

In the center of the enclosure, where the ruddy light of the campfire brought out their anxious faces in strong relief, stood the boys' father and mother. John and Ben ran forward as fast as their tired legs could carry them. They shouted—as loud as their dry, dust-coated throats would allow.

It made them gulp simultaneously to see how the expression of the two faces changed; the woman's growing wholly tender and joyful, the man's altered to that of relief rather than joy. John knew from past experience that while the mother would be glad to comfort and caress, the father would not permit any such soft treatment. They would be lucky if they got off with a sharp rebuke.

Mrs. Worth rushed to meet them, but her husband restrained her. "You boys go over to the cook-wagon and get something to eat, then turn in. We've got to get off soon after daybreak. I'll see what you have to say for yourselves tomorrow."

The cold supper John and Ben indulged in that night would probably not interest the ordinary pet dog of your acquaintance. It consisted of cold, greasy pork and beans, poor cold coffee without milk, and soggy bread, but they thought it was food fit for the gods. Hunger satisfied and thirst quenched, they were glad enough to curl under a wagon, a blanket their only covering and a saddle for a pillow.

Before getting to sleep they heard the teamster who had befriended them come into camp; his team had revived enough to painfully cover the remaining distance to the Worth's outfit.

They had hardly dozed off, it seemed to them, when they heard the cook's shrill call, "Grub p-i-i-i-le," and knew that breakfast was ready and all hands must be astir.

After the blankets had been made into a neat roll and put away in a wagon, breakfast was despatched promptly, for cook, even on the frontier, is an autocratic person, not to be kept waiting.

The meal was much like the supper of the previous night, except that the food was hot. The boys then went down to the creek and soaked off the dust that had gathered during their long tramp. In an incredibly short time the train had broken camp and was on the move again. The cook's few dishes and pots were given a hasty rinse in the creek and packed, the mules and horses driven in, and the fresh ones harnessed and saddled. The "day wrangler" took the place of the "night wrangler," who promptly lay down in one of the wagons and went to sleep.

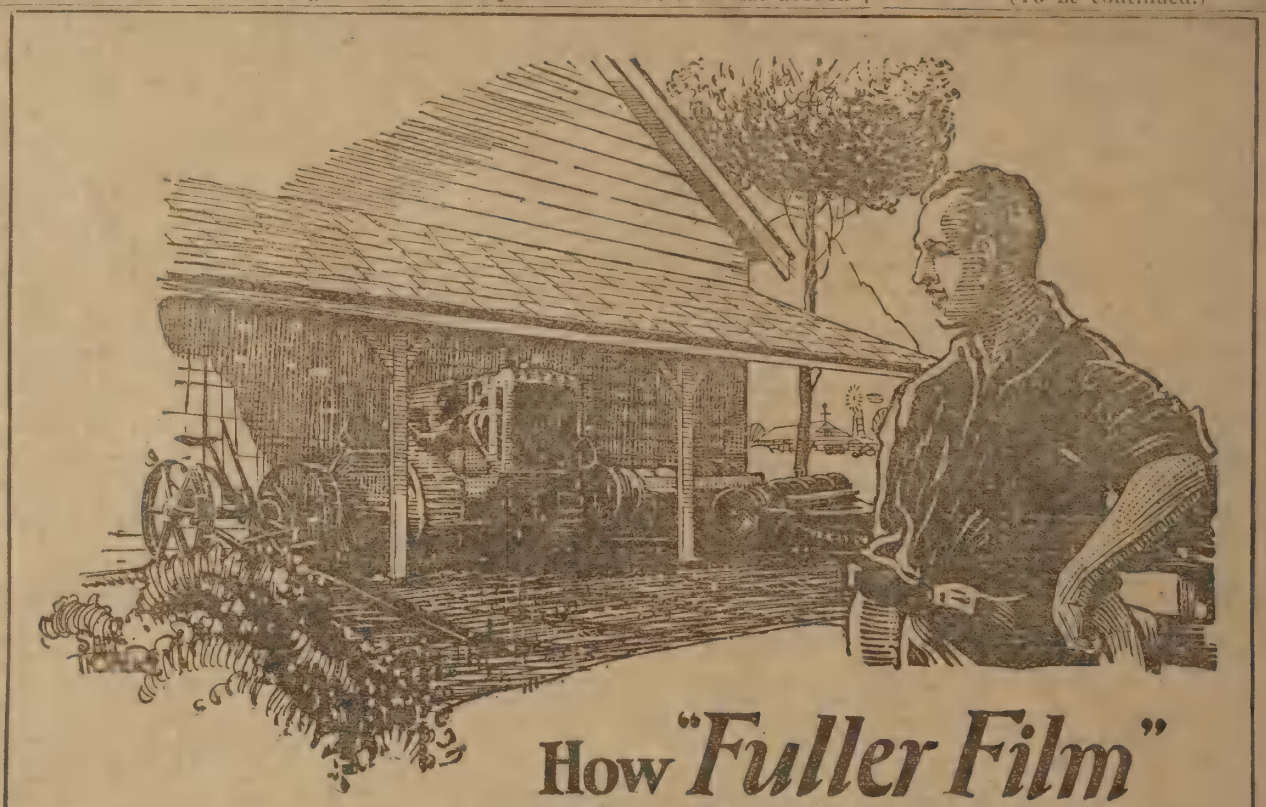
The procession fairly moving, John and his brother were called up to explain their absence of the afternoon and night before. This John did with fear and trembling, for he feared his father's wrath. He got off, however, with a severe reprimand and positive orders not to go out of sight of the wagons at any time, and the boys went off congratulating themselves on their lucky escape.

All that day the caravan traveled steadily, stopping only at noon for dinner and for water. Towards evening they came near their destination, reaching a clear creek bordered with green. Up from the stream rose a hill, and half way up was a strange-looking house, part of which seemed to be buried in the side of the slope.

The boys were somewhat surprised when they were told that this was to be their home for the winter.

"Look, John," exclaimed Ben, "we're going to live in a hole in the ground."

(To be continued.)



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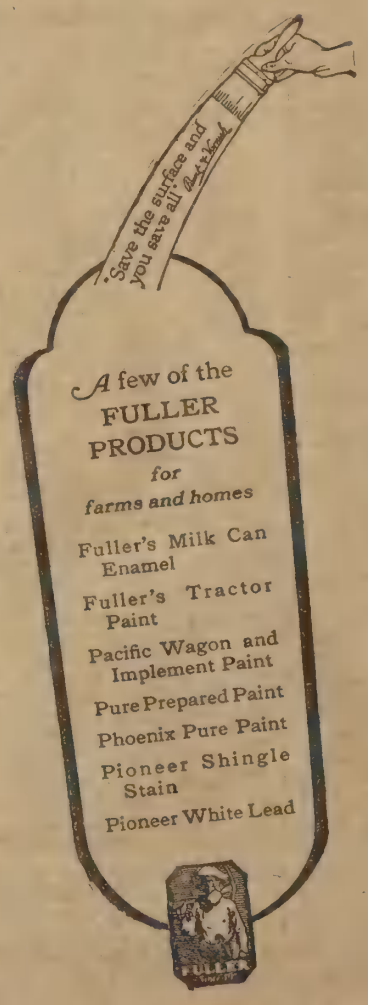

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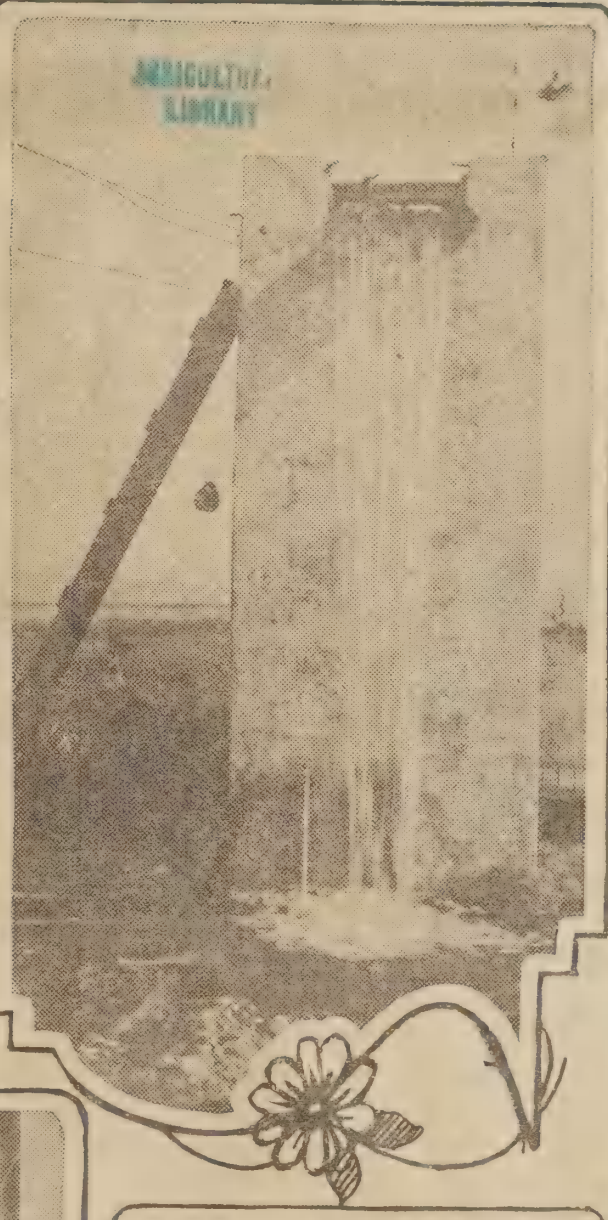


TRENCHES on the battle fields are not much like the irrigation ditches of peaceful America, but men who made good in the former are making good in Washington with the latter. This state is lending its aid to some of those who served it in the World war by locating them on productive farms. Read the story on page 3.

Farm Leader's Message to Pacific Northwest Wheat Growers---Page 5

Urges Export Wheat Bounty

Dr. S. B. L. Penrose Believes It Would Aid Farmer in Stabilizing Market for Home Consumption

"Let the government pay a bounty on this surplus wheat that must be exported and protect the price for home consumption," says Dr. S. B. L. Penrose, president of Whitman college. "Such a system would make it impossible for the price of the export wheat, fixed by the foreign buyer, to fix the price in the American market. That bonus might be 25 or 50 cents a bushel sufficient to protect the wheat grower at home.

"To prevent the dumping of foreign wheat in this country, the government could readily impose an additional import duty of 25 to 50 cents a bushel on wheat coming into this country. That would virtually shut off foreign wheat. The American wheat grower would have the home market for himself.

"To justify the government in adopting these measures in the interest of the wheat grower, the government should ask the wheat grower, in turn, to approve the ship subsidy and furnish an American-owned merchant marine to move his exportable surplus. The wheat grower should do this."

The Wheat Surplus.

Dr. Penrose bases his conclusions on the admitted fact that the 200,000,000 bushels of American wheat normally available for export fix the price on the normal home consumption of approximately 600,000,000 bushels. The disposal of the exportable surplus is the big problem confronting the wheat grower. It is admitted that the price of American wheat under the present system is fixed in Liverpool. American farmers, for years, have protested against this unnatural situation, but thus far their protests have been unavailing in changing the system.

How Plan Works Out.

The Penrose plan would work out somewhat in the following manner: If the exportable surplus should reach the normal figure of 200,000,000 bushels, and the bounty were 25 to 50 cents, the government would be called upon to pay $50,000,000 to $100,000,000 to protect the farmers' market at home, in contrast to an investment of $1,400,000,000 if the government were to take over the entire crop of 800,000,000 bushels at $1.75 per bushel as some are advocating under the price guaranty plan. The latter plan would almost inevitably involve the government in heavy losses.

It is estimated that the remaining 600,000,000 bushels under the Penrose plan would command the Liverpool price, plus the bounty, the increase being far in excess of the $50,000,000 or $100,000,000 the government might pay out in the export bounty.

Farmers Could Pay Bounty.

In this connection, it has been pointed out, that the wheat growers themselves could well be assessed or taxed enough to meet the proposed bounty on export grain because of the much higher return they would get on wheat sold for American consumption. It is argued that it would be good business for the wheat farmers to spend $50,000,000 to $100,000,000 if by so doing they could get $150,000,000 more for the wheat they sell at home. A price only 25 cents per bushel higher as the result of the bounty would increase their revenue $150,000,000 on home consumption of 600,000,000 bushels.

Under the Penrose plan, if the wheat price were 85 cents a bushel, as at present, determined by the price for export wheat, the government would step in with, say, a 30-cent bonus, bringing the price to the farmer up to $1.15. The export wheat would still move at 85 cents, but the farmer would receive $1.15 and would not sell at home for less than that. With 200,000,000 bushels removed from competition in this way, it is reasonable to expect an advance equal to the bounty in the price for home consumption, Dr. Penrose believes.

May Cause Slump

The suggestion of Dr. S. B. L. Penrose, president of Whitman college, that the government come to the aid of the wheat grower in his present situation by placing a bounty on all wheat for export and increasing the tariff on import wheat proportionately, is favorably commented upon by business men and wheat growers' and farmers' representatives. The proposal carried added weight with them because of the absence of any political motive and because of the reputation of Dr. Penrose for conservatism in economic programs.

Walter J. Robinson, general manager of the Washington Wheat Growers' association, admitted that his proposal contained much merit and would undoubtedly be thoroughly discussed because of the position Dr. Penrose occupies and his influence, both with business men and the agricultural interests. Mr. Robinson thinks such a proposal coming from Dr. Penrose is little short of revolutionary and indicates a vastly changed attitude toward the wheat grower and his problems by neutral observers who have studied them.

"I read and reread Dr. Penrose's proposals with great interest," said Mr. Robinson. "There is a great deal of merit in them. If Dr. Penrose or anybody else can assure the wheat grower that a bounty on export wheat will not react by reducing the price on export wheat and leaving us no better off, the wheat grower will not oppose his plan.

"However, that is the thing we fear about his program. It is not new to us, but it has been given no publicity. C. A. Harth of The Dalles, Ore., a director of the Oregon Cooperative Wheat Growers, took that plan back to Washington, D. C., last winter, but it was turned down in favor of some of the other relief measures suggested at that time. The danger in the plan, as we see it, is that it will tend to dump wheat on the export market and shoot that market all to pieces. The foreign governments would take advantage of an American government bounty to make low offers and there is a danger that the American wheat grower would accept these, feeling that the government would reimburse him.

"Our suggestion for this year has been stated before. We believe if the government would merely announce that after June 1, 1924, a certain price would be paid on the surplus wheat remaining at that date, the price would go to that figure now and the government, in all probability, would not be required to spend 5 cents buying wheat. The ultimate solution, we think, is that offered last week by W. J. Brown, president of the American Wheat Growers, Associated, that the wheat growers join the cooperative movement and control 75 per cent of the supply and fix their own price on wheat for home consumption."

Sign Pooling Plan

Grain growers of Dayton and the surrounding country have adopted the contract plan of the American Wheat Growers' association, it is reported by W. J. Robinson, president of the Washington Wheat Growers' association, who attended a Dayton meeting last Thursday.

The farmers in the district favored a plan to pool 75 per cent of the wheat in the United States. This plan, however, was not feasible as far as the American association is concerned, as wheat in but 11 states, with three more pledged for next year.

"Some of the eastern states are operated by the United Grain Growers' association and at this time would not be eligible to a contract with the American," said Mr. Robinson. "They cooperate with the American plan, however, and much of the grain is handled through common channels.

"The American plan calls for a minimum of 65 per cent of all wheat raised in the states affected. In order to compromise with the farmers of the Dayton district it was decided that if it should be proved that 65 per cent was too small a margin, that an additional call for wheat should be made."

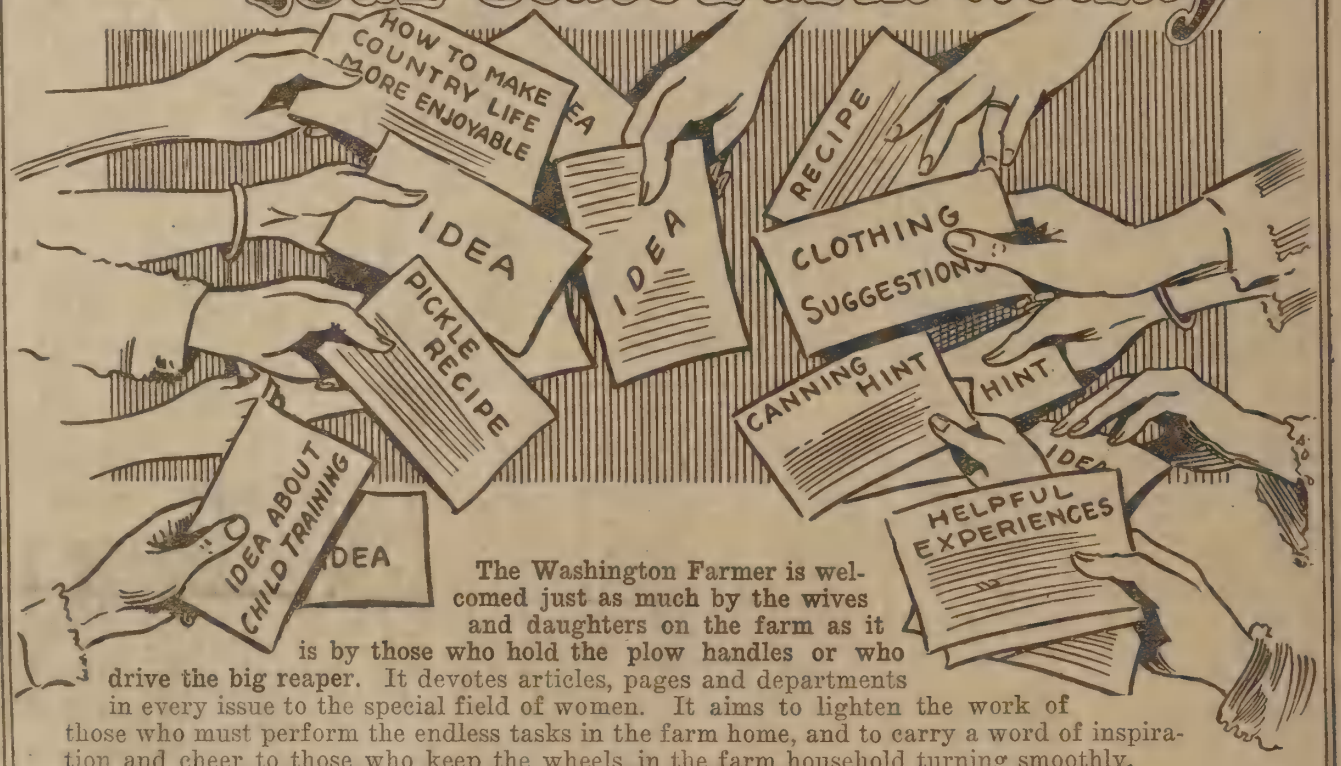
Wheat Growers' Board

The advisory board for the Pacific northwest of the American Wheat Growers' association was announced today by W. J. Brown, the association president, who is here promoting interest in the association among farmers, as follows:

Dr. E. O. Holland, president of Washington State college, Pullman; B. F. Irwin, Oregon Journal, Portland; Charles H. Stewart, vice president Northwestern Na-

(Continued on page fifteen.)

—Helpful Exchange of Ideas and Experiences offered by —Your State Farm Weekly



The Washington Farmer is welcomed just as much by the wives and daughters on the farm as it is by those who hold the plow handles or who drive the big reaper. It devotes articles, pages and departments in every issue to the special field of women. It aims to lighten the work of those who must perform the endless tasks in the farm home, and to carry a word of inspiration and cheer to those who keep the wheels in the farm household turning smoothly.

The "Family Circle," with its constant interchange of experiences, ideas, opinions and methods, becomes more and more popular as the weeks pass.

The friendly interest of our women readers makes them warm adherents of our cooperative plan for securing and renewing subscriptions. Here is the idea. Many publications charge a high subscription price because it costs so much to gather the subscription orders. We eliminate the expensive system of having a force of agents go from town to town and from farm to farm to secure and renew subscriptions. Instead, we ask our friends to send in their own orders at least sixty days in advance of the expiration date stamped on the wrapper of your paper, and to include the orders of friends and neighbors with your own.

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August 2, 1923.
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Ready for More World War Settlers

Tells How the State Will Furnish Farm, Buildings, Well, Irrigation System and Dairy Cows

IT might seem pretty soft to some of us to have the state buy us a farm, equip it with buildings, dig us a well, put in an irrigation system and buy us a herd of dairy cows with which to start business. Soft or otherwise, that is exactly what the state of Washington stands ready to do on its own terms for a limited number of its sons who served in the World war and what it has already done in part for 37 of them. It now has on hand 21 farms waiting the appearance of the right soldier boys to go upon them and make of them going concerns.

On the cover page of this issue of The Washington Farmer are pictures of two of these soldier boys. The one shown with his family is Shaun Kelly, formerly of Spokane, who has overcome difficulties and is making good. The other is shown ably backed by stacks of home-grown alfalfa, holding two Holstein cows that the state has purchased for him. He is Silas F. Murray of Soldier settlement tract No. 36 on the state's project near White Bluffs and Hanford.

The 1919 legislature of Washington passed a law known as the state land settlement act. It carried an appropriation of $150,000, to which the 1921 session added an equal amount, making $300,000 with which to finance this movement of providing homes where ambitious, capable ex-service men might make good as farmers.

Director D. A. Scott of the state department of conservation and development took personal supervision of the working of this act and in November, 1921, authorized the selection of the White Bluffs-Hanford country as the location for the soldier settlement project. This is in the Priest Rapids valley, about 35 miles up the Columbia river from Kennewick and Pasco on the west side of the river. It comprises tracts in an area about 25 miles long and several miles wide in a bend of the Columbia. There are about 200 privately owned and developed irrigated farms in the vicinity, irrigation being necessary for growing any kind of crop.

State Merely Helps.

Let's pause right here to call attention to the fact that the state of Washington is not giving farms to ex-service men. It is merely helping them to establish themselves on these farms.

Every dollar that the state advances to a settler must be paid back, but under such terms as any thrifty, capable young man can meet. The maximum advance which the state will make on a 20-acre tract is $4850, made up as follows: The land at $30 per acre, $600; a dug well, $400; house, barn and poultry house, $1500; pump and electric motor for lifting water, $600; irrigation distribution system, $825; fencing material, $200; clearing, leveling and weeding, $200; electricity at $175 per year for three years, $525. The settler must pay, when he selects his tract, $250 as earnest money. He must then pay $362.50 on or before six months without interest, but before he is given possession of the land. These figures cover cases in which he has chosen to accept all of the financial help which the state is prepared to offer him.

How the Settler Pays.

For the first three years thereafter he must pay the state $1 per year principal and 4 per cent interest on his unpaid balance. After the first three years, he begins paying his unpaid balance on an amortization plan of 20 annual installments, each installment thereafter amounting to $7.36 for each $100 which he owes the state. For instance, if his balance be $4000, his installment will be $294.40 each year for 20 years, by which time the debt will have been completely wiped out.

Must Have Hay.

There is manifestly no reason for having hay if one has nothing to feed it to and those in charge of the soldier settlement project very early ruled that half of each 20-acre tract should be planted to forage crops and be fed on the ground. Hence the necessity of some provision to assist the settler in securing live stock. To meet this situation, the American legion, through its land settlement committee, of which Fred M. Weil is chairman, brought about the passage of a bill in the last legislature known as the "soldiers' cow bill."

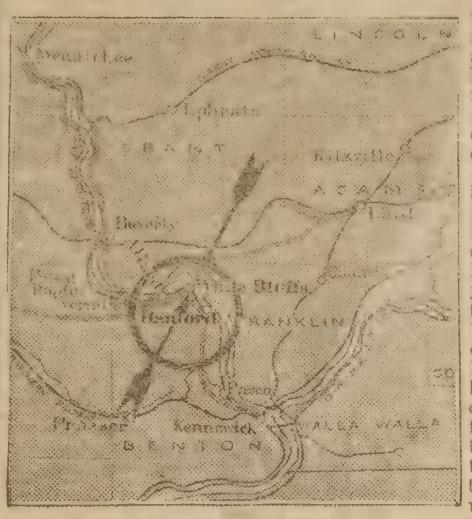
"Cow Bill" Provisions.

The terms under which the state will assist the settler in the purchase of heifers and milch cows, advancing 100 per cent of the purchase price therefor, follows:

The state will advance money to the settler at 6 per cent interest to purchase from one to four milch cows or heifers for each tract, requiring no down payment, under the following conditions, in part:

1. The settler must first have provided shelter, and grown feed for the stock on his own tract.
2. The settler to repay the state the loan made to him by assigning one-half of the cream check each month.
3. The state to hold the milch cows and heifers and their offspring as security until the settler repays the loan.
4. Should the settler dispose of the offspring, either by butchering or selling, any monies received from the sale of the animal or meat, to be paid by the settler to the state to apply on the principal and interest.
5. The project manager may refuse a loan with which to buy milch cows or heifers to any settler, who, in his judgment, can not or will not take proper care of the stock.
6. The settler may buy his own milch cows or heifers, if he desires, but before they are paid for by the state, they must be approved by the project manager, both as to price and value.
7. The cattle brought to the land settlement project either by the state or the settler must be subject to a tuberculosis test.
8. The breed of cattle to be purchased depends on the desires of the settlers in the neighborhood in which the settler's tract is located and on which he lives.

The first settler to avail himself of state assistance in establishing a dairy herd was Silas F. Murray, referred to earlier in this story and whose picture with his cows is shown on the cover page.



The two arrowheads within the black circle in the above map point to lands in the White Bluffs-Hanford land settlement project. The big bend of the Columbia river around these lands is also shown in the map.

The office of J. C. Scott, project manger at White Bluffs, is the meeting place of the Land Settlers' association, the local organization of the settlers. It is the duty of Mr. Scott to guide and assist the settler in the preparation of his land, the planting of crops and to represent the state in the local management of the project under the direction of the state director of conservation and development at Olympia.

Fred M. Weil, chairman of the American legion's land settlement committee, is a pioneer of the Priest Rapids valley. In 1907 he promoted and managed the company that built the town of White Bluffs, and with the exception of two years' service as a captain of field artillery during the years 1917, 1918 and 1919, has been active in the upbuilding of the Priest Rapids valley. It was largely through his efforts as a member of the legion's state land settlement committee that the project was secured for the White Bluffs and Hanford country. Mr. D. A. Scott has appointed Weil the state's colonization agent for a brief time in order that the ex-service men of the state might be apprised of their rights and privileges under the land settlement act on the White Bluffs-Hanford land settlement project.

Further information regarding the White Bluffs-Hanford land settlement project may be obtained by addressing J. C. Scott, project manager, White Bluffs, Wash., or Fred M. Weil, state colonization agent, 6666 Stuart building, Seattle, Wash.

No Isolation.

The soldier settlement is not isolated from the world, as some have been led to suppose, but is, in fact, located in a valley already well populated and served by the little towns of Hanford and White Bluffs, the one at one end of the settlement and the second at the other. The character of these towns may well be indicated by the picture herewith of the Hanford high school building. White Bluffs is not behind its neighbor in up-to-date characteristics.

The tracts upon which the ex-service men are settling are not all adjacent to each other, but lie in groups of two or three up to half a dozen. They are interspersed with developed farms and undeveloped lands, many of the farmers of the district setting worthy examples to the newcomers.

D. A. and J. C. Scott.

The Scott family plays more than a single-handed part in the furtherance of this undertaking. Not only has Director Dan A. Scott of the department of conservation and development general supervision of the undertaking by virtue of his position, but J. C. Scott, formerly Franklin county agent and one of the well-known agricultural experts of the irrigation areas of the state, is project manager. So far as we know, Dan A. and J. C. come from entirely different limbs of the Scott family tree.

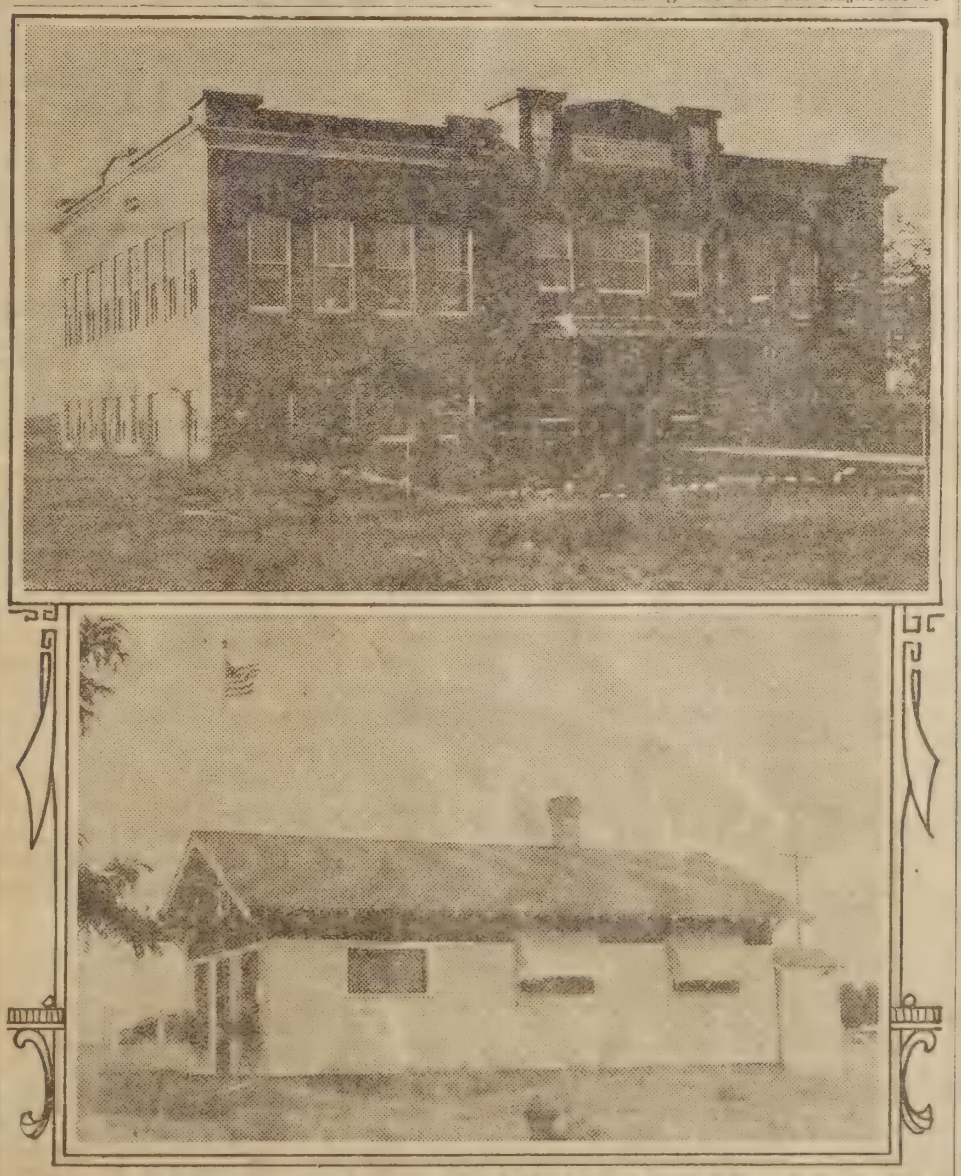
Abundance of Water.

The question may have risen in somebody's mind as to the supply of the water for irrigation. Notwithstanding the fact that the water comes out of wells that average a depth of 38 feet, the Columbia river is in reality the source, and the supply is as dependable as is that mighty river itself.

As stated before, the project lies in a bend of the river. Surveys have indicated that a considerable portion of the waters of the stream have refused to be deflected from their course, preferring to go straight across through a stratum of alluvial gravel which lies from 30 to 40 feet below the fertile surface of the valley. Thus the wells at this depth tap an inexhaustible, purified sheet of Columbia river water. "Place a chip on the water at the upper side of the well in the evening and next morning you will find it on the lower side," says Mr. Weil, who, in addition to being a leading instrumentality in securing the passage of the soldiers' cow bill, is at the present time officially engaged to tell the soldier boys throughout the state of the opportunity that awaits those who are agriculturally inclined and experienced.

Twenty-one Tracts Ready.

There are only 21 tracts available for immediate settlement, but it is the intention of the state to open 42 additional tracts late this year. General Manager Scott is severe in the selection of men to go on these tracts. He must be thoroughly convinced that each individual is sufficiently ambitious, sufficiently determined and sufficiently gifted to make a success in his farming venture. He believes, with many others, that upon the success of this project depends, in large measure, the future of either privately or publicly directed colonization of Washington lands in the future.



The larger of these pictures is of the Hanford high school building, indicating the educational facilities that the settlement country offers. The small building is the office of the manager, J. C. Scott, in White Bluffs, who can be reached there by any ex-service man interested in securing a tract under the project.

Wheat Men

Will be Asked to a Price Parley

J. Quincy Adams, president of the Farmers' union of Washington, announces that he will issue a call in the near future for a massmeeting of wheat growers of the Inland Empire to consider the wheat price situation. The meeting will be held in Spokane, but Mr. Adams has not set the time.

United States Senator C. L. McNary of Oregon has been invited to attend as the principal speaker and will be invited to talk on a guaranteed price for wheat. Other speakers are being sought.

While the Farmers' union has not committed itself for or against a guaranteed price, the subject is being discussed by farmers and their organizations everywhere. Considerable difference of opinion exists as to the proper steps to pursue and few of the farmer organizations agree on the proper program.

The proposed Spokane meeting is intended to clarify the atmosphere in the Inland Empire and crystallize sentiment on some definite program.

Spokane Valley

Vegetable Pool Is Under Way

A tomato and vegetable pool of Spokane valley growers similar to the strawberry pool just closed was decided upon at a meeting of 150 growers at the Opportunity town hall last week. Another meeting will be held at the same place next Thursday night to complete arrangements for the pool and report the probable amount each grower will contribute.

Edward Peirce of Opportunity, president of the Spokane Valley Growers' union, through which organization the strawberry pool was handled, made a partial report on the pool results.

"The pool was formed at the last moment, almost when the berries were red," he said, "but nevertheless, it has been of benefit. Of 300 members who agreed to deliver their berries, only two failed to do

(Continued on page fourteen.)

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Promises Record State Fair

A record state fair is indicated at Yakima this fall, according to E. L. French, state director of agriculture, who adds: "We have more room for stock, more space for exhibits and better arrangements for concessions. The track and grounds were never in better shape, and exhibitors from every part of the state are showing an awakening interest in the fair."

Pacific Northwest Development

It has been the contention of The Washington Farmer for years that development of the Pacific northwest as a section, embracing the four states of Washington, Oregon, Idaho and Montana, deserved serious economic study, especially with reference to the future trade on the Pacific.

It is therefore with special satisfaction that it receives the news of the appointment of Dr. E. A. Bryan as research professor of economics and economic history at the Washington State college, who is to give a special course in the economic development of the Pacific northwest.

Here is a fine opportunity to develop leadership among our young men.

What Public Spirit Really Is

At a Spokane luncheon a few days ago, State Senator J. F. Wilmer of Rosalia, Whitman county, gave voice to a far-reaching truth.

He was speaking of the movement on foot in Whitman county to aid the labor situation in the present harvest. This movement included the voluntary contribution of time and effort on the part of the business men of his town. Now and then a man called upon did not see how he could give the time, and yet he was doing it.

"The big value of this," says Senator Wilmer, "is the formation of the habit of giving time for community needs without getting paid for it."

This is getting back to what public spirit really is.

Quality Saves Freight

With a prospect of 16,000 cars of apples from the Wenatchee district this year, R. W. Van Tassell, one of the leading growers, declares it is high time to eliminate the C grade or small sized apples. He figures out that these smaller apples in the past have amounted to about 20 per cent of the crop, or 3000 cars. This would materially aid in obtaining cars for the shipment of the better grades.

"I figure that the C grades and small apples in the past have amounted to about 20 per cent of the crop," says Mr. Van Tassell. "If we could start today and say that we will not ship any C grade or small apples we would immediately reduce the crop of the district for commercial purposes 20 per cent. I believe that if the crop of this district was decreased 20 per cent it would cause an increased value of the balance of the apples of at least 10 cents per box."

It is proving more and more true that quality saves freight.

Prohibition Has Deep, Quiet Strength With the People

Up in the Canadian province of Manitoba the voters at a recent election overwhelmingly defeated, by a vote of two to one, a bill to make legal the sale of wines and beer served with meals in hotels. That was a far northern verdict against the liquor traffic.

On the same day a southern verdict was registered when the temperance committee of the Georgia house of representatives voted unanimously against a bill to repeal the state enforcement law.

The truth is that prohibition has deep, quiet strength with the people, while the more noisy clamor of the intoxicants is out of proportion to its effectiveness. If one were to judge from the assertions of wet politicians and wet newspapers, it might be thought that prohibition was rapidly losing out in the United States. As a matter of fact, the Anti-Saloon league of America pronounces 1922 "prohibition's best year," and points to these convincing victories:

(1) Prohibition won two state fights—in Ohio by 190,000 majority; California changed from 68,000 wet to 34,000 dry.
(2) National administration sincerely dry.
(3) In congress the dries gained five votes in the senate. The house is more than two to one dry.
(4) Better law enforcement in most localities.
(5) In most states good results increase.
(6) Likewise, in most states steady progress is being made in public sentiment.

The anti-saloon league announces the following program:

(1) Go right on with the fight, legislative and legal.
(2) Nominate and elect a dry president, vice president and congress.
(3) Strengthen federal and state enforcement by more education and better organization.
(4) Take at least part of prohibition unit out of partisan and factional politics and into civil service.
(5) Help to defend our boundary by encouraging other nations to go dry.
(6) Double the fund raised for league work.

THE FARMER predicted,when the New York legislature and Governor Smith repealed the state's enforcement law and put New York in an attitude of nullification of the constitution of the United States, that their act of defiance would arouse the friends of prohibition and strengthen the cause throughout the nation. Here is quick verification.

Dairymen Must Fight On

The "filled milk" bill passed by the last legislature has qualified for a place as a referendum measure on the next general election ballot in Washington, according to announcement made at Olympia by Charles A. Foster, superintendent of the election division.

In their eagerness to obtain signatures to defeat the operation of the "filled milk" bill those opposed to the dairy interests of the state are reported to have resorted to duplicate signatures. Prosecuting attorneys of counties where such duplications are found have been notified by letter, Mr. Foster says, in order that criminal actions may be instituted.

The dairymen must fight on. The battle is not yet won.

Believe in Wenatchee Southern

North central Washington fruit growers believe in the projected Wenatchee Southern railroad. They have been hit hard in the past, depending upon a single transcontinental railroad for transporting their fruit to the markets of the east. The Wenatchee Southern will give them another outlet.

That they believe in this is seen in the fact that last week, at a meeting at Wenatchee, 99 growers signed up for 600,000 boxes of apples, agreeing to pay 3 cents a box for three years to guarantee any operating deficit the road might have during the first few years of its operation. A concerted drive is being made to sign up all the tonnage in north central Washington. This would provide a guarantee fund of $350,000 per year for each of the three years, or a total of more than $1,000,000.

The purpose of the fund is two-fold. The first is to satisfy the interstate commerce commission that the Wenatchee Southern should be granted a certificate of public convenience and necessity to build a line to Kennewick. The second purpose is to satisfy the persons who will finance the building of the road that it is a safe investment. By this means the bondholders would be guaranteed interest on their money for the first three years of their operation.

If money counts in an argument, then the north central fruit growers are presenting a pretty strong argument in behalf of further transportation facilities for their products.

Mosaic of Berry Plants

A degeneration disease of berry plants, commonly known as Mosaic, has probably caused some of the damage which has been laid to winter injury in past years, according to Arthur Frank, plant pathologist of the Western Washington experiment station. Growers, however, should not get the mistaken impression that winter injury is not present. This trouble, which is caused by severe cold weather, causes killing, but does not cause weakening of the growth, such as the above mentioned disease.

Although this disease has been known to be present in western Washington for some time, it is still under investigation. Dr. S. M. Zeller, associate pathologist of the Oregon Agricultural college, recently made a trip into the Puget Sound country to investigate this trouble, and expects to put out a bulletin in the near future. Mr. Frank expects to have some definite results to announce from his own office before the berry season is over.

Culling Poultry Flocks

Culling poultry flocks is getting to be the fashion all over the Pacific northwest.

A culling school is announced by County Agent A. E. Lovett to be held at Yakima August 3. W. D. Buchanan, W. S. C. extension poultry specialist, will be present to conduct the school, which will be followed by an intensive campaign in the county.

Pupils are limited to two persons from each community in the county, preferably to persons elected by the poultrymen of each community. Those attending the school must agree to cull flocks in his or her neighborhood at a nominal wage or price and to assist in arranging culling demonstrations if five or more poultrymen desire such a demonstration.

Washington State Gleanings

The first car of the 1923 apple crop from Wenatchee was shipped July 11. The car comprised Yellow Transparents and Duchess, grown near Wenatchee. The fruit is about two weeks earlier than last year.

SELAH MAN CHERRY BOOSTER.

C. J. Samuelson of Selah is a booster for cherries. He has eight cherry trees on his ranch, and each one has been worth a trifle more than $53 to him this summer. From one tree 860 pounds of fruit was picked. The trees are Royal Anns, and the fruit taken from them was of unusually good quality.

ERDMAN WILL LEAVE W. S. C.

Dr. L. L. Erdman, who came to Washington State college last fall as research fellow to devote his efforts to a study of sulphur as a plant food, will leave Pullman August 1 to return to Iowa State college at Ames, where he has been elected assistant professor of soils and soil bacteriology. Dr. Erdman's investigations here were under direction of the national research council.

GROWERS ELECT OFFICERS.

The Graingrowers' Warehouse company of Wilbur recently held its annual election of officers and declared an 8 per cent dividend. The officers are: William Lauritzen, president; H. E. Haden, vice president; Roland P. Short, secretary-treasurer; James Llewellyn, manager; Holger Jorgensen, Frank B. Richardson, Henry Krause and Joseph Kunz, directors.

CANNERY HAS BIG CHERRY RUN.

More than 2,000,000 pounds of Royal Ann cherries, most of them from the Yakima valley, is what the Libby, McNeill & Libby cannery had put into cans when the cherry run was completed, July 14. This represents about $180,000 to growers, as the company paid 9 cents a pound for cherries. About 800 tons of valley spinach have been canned, and following cherries some 3000 tons of Bartlett pears will be put up. A large quantity of cucumbers is being made into pickles.

BUILD NEW WAREHOUSE.

The excavation of the first commercial warehouse to be built in the valley has begun, the contract for the building being let to William Lukens at a cost of approximately $8000, says a report from Anacortes. The building will provide for a power elevator, and will be electrically lighted with convenient switches throughout the building. Electrical power will be installed. The warehouse will be served by its own private spur, which has a capacity of four cars, and the loading platform will be so arranged that all loading will be aided by gravity. It is planned to have the building completed by the first of September.

National Farm Leader's Message to Our Wheat Growers

W. J. Brown, president of the American Wheat Growers, Associated, with headquarters at Minneapolis, was in Spokane last week in conference with the directors of the Washington Wheat Growers' association. In response to a request by THE FARMER for a special message to our wheat growers, on the ways and means proposed by his association for remedying the present deplorable grain marketing situation, Mr. Brown furnished the accompanying article.

In a talk with the managing editor of this farm journal, Mr. Brown expressed his surprise and gratification with the reception he had met in the Pacific Northwest thus far. He made special reference to the conference with the directors of the Washington Wheat Growers' association, declaring that he was amazed at the fund of information, at the grasp of the marketing problem, possessed by every one of these directors. He said this ability was on a par with that demanded of an executive of a big industrial enterprise; that while the men possessed opinions founded on thoughtful consideration, yet they were, one and all, willing to listen and weigh out the merits of any other proposition that might better further the ends in view.

Mr. Brown is convinced that the greatest need is for the business man to get the right angle on the farm situation, then he will be as anxious as the farmer himself that the wheat growing industry shall be put on a satisfactory basis.

MR. BROWN'S MESSAGE.

The American Wheat Growers, Associated, brings a long-awaited message of hope and encouragement to the American wheat farmer. This is the message:

The state wheat associations composing the American, with others have combined for the purpose of quickly securing complete control of 75 or more per cent of the wheat produced in the principal wheat states of the nation, for the purpose of orderly distribution of the same, and for the purpose of fixing the selling price of this wheat and incidentally the wheat of the nation. This selling price is to be the cost of production, including a fair wage for the farmer, plus depreciation and plus a fair return on his investment, taking into consideration the hazards of the business. In other words, the plan is for the farmer to take the place in the economic structure of the nation's business, that his importance as the proprietor of the world's basic industry demands.

During all the years since agriculture became a business the farmer has been an individualist in both production and marketing. From a production standpoint his success has been remarkable. Marketing of his products, however, has become a complex question, a science, as it were, and the farmer has not been able to analyze and employ to his advantage the elements composing it. In this marketing department he has naturally been unable to meet the buyer upon a common trade footing, because the buyer knows all the technical rules of the game, and can make new ones in emergencies, and the seller is not thus equipped or favored.

To Fix a Price.

What the farmer now proposes to do is to make a few rules and regulations himself, based upon safe and sane business usages, and fix a price at which he will sell his commodity, thus enjoying the same privilege had by other industries who produce the things the farmer buys.

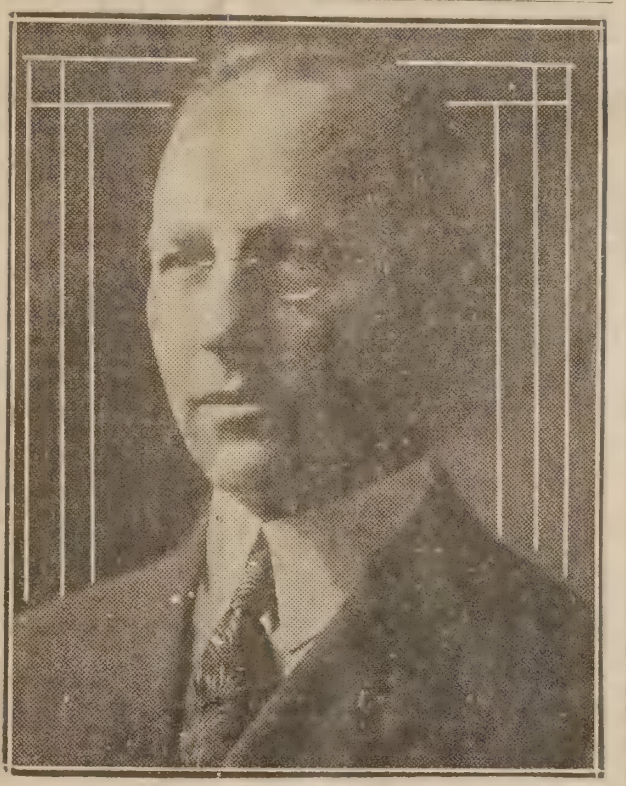
Of course the farmer is going to be scolded and lectured by and at the instance of those interests adversely affected, and he will be counseled and advised that this is impossible and impracticable, and it is safe to say that these interests will prove all these things to their own complete satisfaction.

Fifty years ago in the industrial world the airplane, the phonograph, the wireless and various other scientific accomplishments, now accepted as a matter of course, would have been considered an absurd impossibility, if one had possessed the temerity to propose such a thing.

Export Plan of Selling.

Is it not possible that the economics of the farmer and the plans he has been working under can be revised to place the farmer upon the same footing in the marketing of his products that all other lines of industry enjoy? In other words, is there anything sacred about the present plans of marketing the farmers' products and is there any sound reason why the farmer should not employ this same expert plan of selling his goods that is used by other industrial lines?

The manufacturer of this country sells his surplus product abroad in competition with like products from other countries, where costs of production are cheaper, but the American manufacturer does not permit the selling price of this export surplus to fix and dictate the price of that portion of his output used for domestic consumption. For this latter portion the manufacturer names the price himself.



W. J. Brown.

By W. J. BROWN,
President, American Wheat Growers, Associated

Taught by Mistakes.

This plan has been so successful for the manufacturer in this country that the farmer is going to adopt and adapt this plan in selling the products of the farmer. In adopting the proposed cooperative plan of wheat marketing, the farmer is fortified with the wisdom acquired through the mistakes of the past, and is strengthened in his effort by the many examples of cooperative efforts in marketing many other farm commodities now successfully functioning.

Commitments by the intermediate credit banks, ample for financing the 1923 wheat crop have already been made, and private banking institutions all over the country are offering their aid and assistance in financing the marketing of the crop. It is safe to assure the farmer that the plan proposed can be easily financed at a low rate of interest and it might perhaps be well also to mention the fact that no banking institution or intermediate credit bank has been, or will be, requested to assist in this financing plan except pursuant to safe and sane banking usages and customs.

The Membership Contract.

The membership contract proposed to be executed by the several members of the respective associations is to become effective only when 65 per cent of the wheat is signed up. The contract provides for the functioning of a price-fixing board composed of members of each state organization and others representing the public.

The membership in these state cooperative marketing associations is limited to producers of wheat. The American Wheat Growers, Associated, Inc., is a nonprofit organization and is the central selling agency of these state organizations and is composed only and wholly of two directors from each state organization of growers. Thus the producer keeps control of the whole machinery. The farmer has now learned that if he is to compete with the buyers and the organized middlemen, the selling organization must be expertly equipped. Therefore, the directors have completely equipped every department of American Wheat Growers, Associated, with experts in their several lines.

Success in Signing Up.

The success in signing up the membership in the several states to long-time contracts has been so great that the farmer now realizes that the time has arrived to take the big step and finish the job. It is a movement to which all lines of business, except the vested grain interests, can lend their aid, and this cooperation and support is essential. The great educational farm organizations have in the past been consistently recommending control in the hands of the farmer, and these organizations should and probably will get vigorously behind this movement.

The local farmers and business interests in the several localities of the several wheat states should take the matter up vigorously without waiting for outside help or suggestion. Just write the state organization for blanks and instructions.

This is the message. Analyze it and examine it, and, if the plan seems sound and feasible, get behind it with your most vigorous support.

FARM BUSINESS AND MARKETS OUTLOOK

WHILE the colors are still mixed, at least part of the news of industry and trade is of cheerful hue. The decline in wheat below the dollar level has focused universal attention on that product. Efforts to aid the market by keeping down the amount in commercial channels through greater country storage after harvest, using the new warehouse and intermediate credit machinery, have some promise of bearing fruit.

Financial conditions in Germany are in a bad mess, but, as a result, the countries involved in the Ruhr tangle may be persuaded to get together and adjust their differences.

Building operations, which have been slackening, have perked up again.

Sales of pig iron and of some steel concerns have increased, although they are not enough to maintain the present rate of operations, which is based on old orders.

Further declines in federal reserve loans show that inventories are not accumulating and the high rate of car loadings also indicates that goods are moving from the producer to the consumer in large volume.

Domestic consumption of practically all farm products is at an unusually high rate.

Grass Beef Harvest Starts.

The movement of grass cattle to the shambles started in earnest last week. Combined arrivals at the leading markets were the largest since last December. Kansas and Oklahoma steers filled the southwestern market hopper. Texas cattle are still coming freely and the corn belt appears bent on a partial clearance of short feds and native grassers before the range movement attains a full head of steam.

Prices on lower grades weakened, but better grades of steers, cows and heifers made slight gains for the week.

Big Hog Run Persists.

The hog market is far from being on summer rations. Receipts at 11 markets in the last two weeks have been equal to the usual December and January average and higher than the prevailing level from February to the end of June this year.

Prices are extremely erratic within a fairly narrow range. Values dropped close to the low point for the season early last week, but soon advanced to a top above $8 at Chicago, but the country seems to have more for sale than can be digested at that figure and the market sagged again at the close of the week.

Slump in Lambs Halted.

Lamb prices were on the toboggan for about two weeks and are about $1 lower than a week ago, reaching the lowest point of the season. The supply has let up slightly and, although dressed trade channels remain congested, the decline has halted in the last few days.

Manufacturers, large and small, have entered the wool market on a broader scale and more confidence is apparent in the stability of prices than for several weeks. Growers in the west are consigning their wools rather than sell at the prices offered, which are below the season's high point.

More Confidence in Wheat Values.

Wheat prices averaged slightly higher last week and finished with small net gains. Belief that prevailing prices discount the unfavorable conditions and that further declines, if any, will be relatively small is becoming more widespread.

Crop reports from the spring wheat states and Canada are slightly less favorable and with the change of attitude on the part of the wheat trade, reports of damage by rust and extreme heat have had more effect marketwise. Some deterioration undoubtedly has occurred, and even though harvest has begun on this side of the international line and will start in the prairie provinces of Canada within 10 days, there is much late wheat which could be injured considerably.

Official estimates from European countries as they come in are confirming earlier indications of larger yields than last year and Broomhall has reduced his estimate of the needs of importing nations in the next 12 months to 592,000,000 bushels, a figure which looks reasonable in view of the amount taken the last 12.

Export demand is persistent, but lacks the breadth needed to advance the market.

Cooperative marketing movements promise to have more influence on the international wheat trade than usual. The Australian wheat pool seems to be giving satisfaction to the growers; plans for a Canadian pool are being formulated and in the American southwest the movement to market is being delayed by storing locally, using the new federal warehouse and intermediate credit laws.

Corn Still Hitting the Top.

Corn prices are still around the high point for the year to date. Sales by producers have not increased enough as a result of higher prices, nor has demand been curtailed sufficiently to relieve the congestion.

Cash Grain Markets.

The range of cash grain prices for the week ended July 25 was as follows:

CHICAGO—Wheat—No. 2 red, 99 3-4c@$1.03; No. 3, 99 1-4@$1.02 1-2; No. 1 hard, 99c@$1.03 1-4; No. 2, 98 3-4c@$1.03. Corn—No. 2 mixed, 85 3-4@89 1-4c; No. 2 yellow, 88 1-2@90c; No. 3, 88@89c; No. 2 white, 87 1-2@89 1-4c. Oats—No. 2 white, 41 3-4@46c; No. 3, 40 1-2@44 1-2c. Rye—65 1-2c. Barley—62@69c.

Seed Markets Stable.

Both timothy and clover seed prices have been relatively stable during the last two weeks. The government's estimate on the condition of the clover hay crop was a supporting factor in clover seed and numerous unofficial reports point to a light yield. The alsike seed crop promises to be fairly large.

CHICAGO, per 100 pounds—Clover, $15@17.50; timothy, $5.50@6.50.

TOLEDO, per bushel—Prime red clover, $10.25; prime alsike, $10.15; prime timothy, $3.15.

Prices of wheat feeds and cottonseed meal advanced slightly last week.

Prices per ton (100-pound bags) in carlots: Chicago—Bran, $22.25; standard middlings, $26.25; flour middlings, $31; cottonseed meal, 36 per cent, $41; 43 per cent, $46.25; hominy feed, $32; gluten feed, $37.15; old process oil meal, $39.50; tankage, $57.

Hay Markets Rule Firm.

Receipts of new hay in most markets are increasing, but are largely of poor quality, and stocks in cities are low. Demand is fair and supplies are being cleaned up, with slight advances in price on the better grades.

(Continued on page twelve.)

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LIVESTOCK AND DAIRY

VETERINARY

By DR. S. B. NELSON.

Scabs.—What can we do for our pigs? They have scabs. H. T.
Sunnyside, Wash.

It is possible that the disease which you call scabs on your pigs is due to the necrosis bacillus. Suppose you try and paint the scabs once daily with tincture of iodine, and if they are loose, paint underneath and the edges of the scabs also.

Sow Is Sick—I have a sow 1 year old that has been running on green pasture and was fed a little chopped wheat. She can not get up. J. C.
Lind, Wash.

Try giving your sow three or four ounces of castor oil in her feed. The next day begin giving her 15 grains of potassium iodide. Be sure to keep her on green pasture and give her exercise. If possible, be sure that she has a place to sleep where she is out of the draft. If she sleeps on a wooden floor and there are cracks in the floor, fix them.

Worm Treatment—I have a kitten that whines continually. It is very poor.
Yakima, Wash. B. P.

Your kitten may possibly have stomach worms. Try the following treatment: Oil of chenapodium, 16 drops; oil of turpentine, two drops; oil of anise, 16 drops; castor oil, three and one-half drachms; olive oil, three drachms. Heat gently and mix. Give the kitten one-half teaspoonful in a little milk. If the bowels do not move in an hour give a purge of a little castor oil. Repeat in a few days if necessary. It may also be advisable to add a teaspoonful of lime water to its milk.

Growth on Cow's Back.—I have a cow with a growth on her back about six inches down from the backbone and four inches behind the shoulder blade. The growth is about two inches thick at the roots and about four inches thick at the end. It is five inches long. A. J. K.
Chehalis, Wash.

Your cow probably has one of those wart growths that occur on cows, sometimes due to malnutrition. I think, in this case, maybe as good a treatment as you could give is to tie the growth off with a heavy silk string; pull it as tight as you can, and then one or two days later put on another one and make it still tighter, until you have completely cut off the circulation and stopped the growth. At the same time give the cow one ounce of Fowler's solution of arsenic in one-ounce doses in her feed night and morning.

LIFE PRESERVERS FOR LIVESTOCK

By DR. E. E. WEGNER, W. S. C.

Little has been said about foreign bodies in the stomachs of cattle, which are, nevertheless, responsible for the loss of a great many valuable dairy animals. I say dairy animals particularly because these are kept closely about the barnyards and fed from mangers on feeds that are handled many times and have a good chance to contain bits of wire, nails, pieces of glass or other foreign bodies that may be dropped into the feed accidently. The cow chews her food very little the first time she takes it into her mouth and for that reason she does not encounter these substances with her teeth If she did she would probably spit them out as other animals usually do. Instead, she gives her feed a few vigorous bites and swallows it practically whole to let it soak and macerate in the paunch for a number of hours before it is again returned to the mouth for final mastication.

Then, too, this animal frequently deliberately picks up bits of metal and swallows them to satisfy her craving for some of the elements that are not supplied in her feed. These substances are not returned to the mouth when the other foods return for a second chewing (chewing her cud), but are segregated in a small compartment of the stomach designed, apparently, for that particular purpose (the reticulum or honeycomb).

"Impossible Objects."

It is not uncommon to find in this compartment a large number of foreign substances like nails, tacks, needles, bits of wire, glass, with an occasional umbrella rib or other seemingly impossible objects. The wonder is that these things do not cause more trouble than they do. They are the cause of the loss of a great many animals, however, since they frequently penetrate the wall of the stomach and pass into the surrounding organs of the body.

The symptoms that an animal manifests in such cases are suggestive of the nature of the trouble. They usually lose condition slowly, gradually fall off in their milk production, lose their appetite and waste away without any apparent cause. They move about slowly and frequently grunt with each breath. Later they may swell under the chest or in other low parts of the body. Constipation is a common symptom, especially when the animals are fed on dry feeds, this may not occur if the animals are in green pasture.

The compartment of the stomach that contains these substances is located just behind the diaphragm (the fleshy partition that separates the chest cavity from the abdomen) and it is common for these pointed objects to penetrate this partition and pass forward into the chest. When this occurs the lungs and heart are very certain to be interfered with.

Needle in the Heart.

As these bodies penetrate the tissues they carry infection from the stomach with them and the tract is nearly always marked by a mass of fibrous tissue and pus. It is not uncommon to find the chest cavity containing a great quantity of this material and the lungs and heart very seriously diseased. Recently I found a three-inch darning needle penetrating the heart and the whole chest cavity badly filled with infectious material.

Diagnosis of the exact condition of affairs is very difficult, though your veterinarian may correctly surmise the cause of the trouble. Treatment is very difficult and mostly impossible, since the trouble is far advanced before the body can be located, if it can be located at all. And even if the affected organ can be located, the body that caused the trouble may be very small and hard to find. Even on autopsy the small body may escape observation in the mass of diseased tissue. Sometimes, too, they are badly corroded or quite completely dissolved.

The only protection from them is in careful feeding to see that these small objects do not get into the feed. In opening bailed hay men sometimes clip the wire close to the tie and the short end gets into the hay, or the floor is cleaned and nails are swept into the feed. It happens also that these animals appear to hunt for such substances sometimes and eat them deliberately. Much harm may result, but the only protection is in a systematic attempt to keep such materials away from the cattle.—(Copyright, 1923, E. E. Wegner.)

Dog Days—

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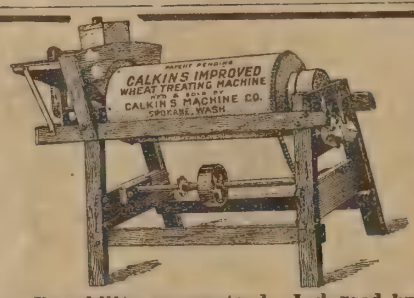

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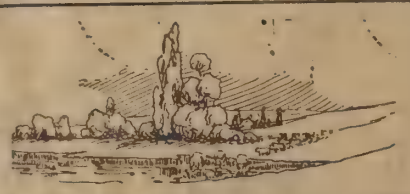

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LOOK AT THE GOOD FARM BARGAINS THAT ARE OFFERED ON THE FARMERS' "WANT AD" PAGE THIS WEEK.

POULTRY AND RABBITS

Moulting Time

Only Best Care Is Good Enough

It is the natural instinct of the hen to moult when she has nothing more important to do, according to Mrs. George R. Shoup of the western Washington experiment station. When left to shift for herself she will lay all summer until warm weather sends the bugs below their power of digging, the shade is inviting and the corn they eat is making them fat. Why should they grind out their eternal egg? Better by far drop all plumage and leisurely make new, so the ordinary hens of eight or nine months' laying cycle, known as short cycle birds, do this very thing, moult.

In western Washington there are, however, a great many "new hens," those that are bred to lay 12 to 16 months (long cycles) and fed rations balanced to take the place of natural bugs, thus producing eggs without fattening or overworking them, and keeping them singing the "egg-lay" melody during summer. These layers must be birds of unusual vigor to have this capacity and should be most highly valued by any one fortunate enough to possess them.

During hot weather the feeder should maintain egg production according to the birds' capacity, even until late September or October, by supplying:

1. Plenty of succulent, tender green feed.
2. Cool water several times a day.
3. Clean, light litter in a cool house.
4. Less heating feeds, such as corn, barley and no green bone.
5. By adding 3 per cent sustaining feed, such as sunflower seed or old process linseed meal to the ration.

When natural fall time moult comes, only the best care is good enough for any stock held over to the next year. Many fowls lay while dropping feathers, but most birds do one thing at a time, so when the moult comes they shed their coats, their combs shrink to one-half or even one-third the prior size, the birds become timid, shy and non-talkative.

Even the pets of the flock hide and the best birds are sad looking sights during this trying period. For this reason culling the moult is unjust to the birds as well as to the owner's pocketbook and should have been accomplished before moulting time.

Care During Fall Moult.

Care during fall moult is the means whereby birds are brought into full plumage, strong color of shanks, etc. (so-called pigmentation), and are built up to be able to lay the fertile, hatchable eggs, capable of producing chicks that pop out of the shell, yell lustily for what is needed and live in spite of the many errors of mortals. This care includes housing without drafts, but with good air; grouping birds in moult together to save them from their more aggressive sisters in full feather, as well as from the males; feeding a scant ration of grain, thus making them work and allowing them all the mash they want, with greens either on the range or supplied daily. A good mash for moulters is as follows:

Mill run, 480 pounds; middlings, 90 pounds; cornmeal, 100 pounds; charcoal, 25 pounds; English soy bean, 50 pounds; meat or fishmeal, 50 pounds; linseed meal (old process) 20 pounds.

It will require from 60 to 120 days to complete the moult, and as soon as the tail and wing feathers are full grown the birds are ready for another year's egg laying, at which time they can again be safely put on a laying schedule.

This long rest is no loss to the poultry owner who intends to stay in the business, because many times over the cost involved is the gain to the flock in per cent of good chicks obtained from eggs set, reduction of mortality and in vitality of stock raised.

Nothing is so much needed on a poultry plant as the three gains above enumerated, and the chance to obtain them lies in the owners' hands, largely if not entirely, at moulting time. If birds are urged to lay up to or beyond their natural capacity, allowed the least possible rest in which to moult and recuperate and again are urged into heavy egg production, this is handling for market eggs, pure and simple, and no poultry business can stand up many years by trying to replace the flock from stock so handled.

Birds are natural creatures, given to do one thing at a time, so why not accept this fact and keep in mind just what we wish from each group of birds handled?

Keep the market egg producers together in 500 or 1000 units and get as nearly as possible what will bring the highest money returns, the chalk-white, two-ounce eggs in large numbers.

With even greater care keep the hatching egg producers together in a specially planned breeding house, and work for the much higher product, large, chalk-white eggs, that are above 90 per cent fertile, and also hatchable even up to 80 per cent of the total eggs set.

Males moult and are not fit for breeders during that time. It is necessary, therefore, to mate birds that are in full plumage to help in getting prize hatching eggs.

The False Moult.

The false moult, dreaded by poultry keepers, whether it comes during high-priced winter egg production or during the spring when so many eggs are needed to pay for the feed of old stock and young, in many cases can be averted if understood. As long as birds lay at whatever rate is normal to them whether that be 18, 20 or 25 eggs each per month (according to capacity of birds), there is no danger of the false moult.

When the flock production drops to 40 per cent right then look to the green food supply as first aid, for then only can a moult be prevented by overcoming the slump in egg production.

With literally hordes of amateurs rushing into the business, it is not surprising to find a plentiful sprinkling of false moults. No rule of thumb can be given to prevent them. One thing certain, a serious study of feeds and their purposes as well as the natural conversation of the birds from day to day, is the one safe way to learn to avert an out-of-season moult.

No owner of poultry has become a poultryman until all the unnecessary qualms afforded by the moult of four-month-old pullets have been experienced. Nor is safety reached until the control of all adult fowl moults is understood.

Moulting is the process by which birds are able to drop old feathers and grow new ones. When the baby chicks outgrow their down they grow baby feathers first on their shoulders and then on their backs and bodies and when the feathers completely cover their backs, thus protecting them from the cold, they are ready to perch. Before pullets are mature enough to lay they moult several times, finally coming in full adult plumage when between four and five months of age.

These preliminary moults are tests of the vitality of the stock and the caretaker's skill in meeting the demands for feather making and both the heredity and skillful care are equally necessary to bring the young stock to that dove-like smoothness of feather and 3 to 3 1-2 pounds weight that foretells profitable market egg production during the fall and winter, with capacity left to carry on the complete year's production. When one sees the goodly numbers of flocks showing these characteristics the reason for the large shipments of high-priced eggs out of this state is better realized.

YOUR QUESTION ANSWERED.

Your question has been answered in these columns, but you have lost the item that contained the information you need. Ask it again by all means, but think how much better it would have been if you had kept the questions and answers as they have appeared in the past and filed them away for reference now.

DON'T CLAIM IMMUNITY.

Before you say you have no mites in your chicken house, tear out the roosts and other possible hiding places and look. Have the oil spray or the grease can ready when you do it.

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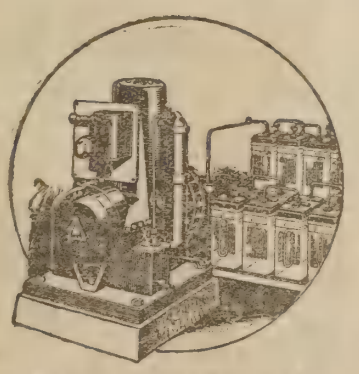

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ORCHARD AND GARDEN

Fruit Byproducts

The University of California maintains at Berkeley laboratories, equipment and a small staff devoted to the study, the teaching and development of fruit products and byproducts. The principal purpose in this laboratory is to find new ways of using and utilizing fruits, in order that impending overproduction in certain lines may be avoided, says W. V. Cruess of the fruit products laboratory of the University of California.

The American public consumes about 5,000,000,000 bottles of carbonated soda pop per year; probably less than 1-2 of 1 per cent of this total contains fruit in any form. The remaining 99 1-2 per cent plus consists of artificial flavor, color, coal tar dye, sugar and fizz water. Experiments have shown that many fruits can be converted into carbonated beverages, which can be sold retail not to exceed 10 cents per bottle. About 5000 bottles of the fruit beverages have been sold in Berkeley without very much sales effort. Those who have used the beverages are vociferous and unanimous in their praise and approval of the product.

The fruit beverages are not only pleasing drinks, but they are far more healthful for the consumer than the products with artificial flavor. Strawberries, blackberries, loganberries, raspberries, apples, raisin grapes, wine grapes, oranges, lemons, pomegranates, figs, raisins and prunes have all been used in beverages. As with many other fruit products, we find the blends of various juices and sirups the most successful products.

The fruit products laboratory maintains at Davis a commercial dehydrater which has cost about $5000 to build and equip. This plant has been operated during the last four seasons. During the last season approximately seven tons of cull Sacramento river pears, six tons of clingstone peaches, five tons of Royal apricots and several tons each of prunes and Thompson seedless raisins were dehydrated. The peaches and pears were peeled and lightly sulphured, the apricots were pitted and lightly sulphured. The prunes and grapes were lye dipped, as for sun drying. These fruits were dried under carefully controlled conditions and were packed in attractive cartons. These have recently been placed on sale and have been very well received and consumers have been willing to pay a premium in price for the attractively dehydrated fruits. It is believed that dehydration can be used in canneries as a means of drying the pie grades of fruit and of preventing such fruit being canned in competition with the better grades of fruit. In this connection dehydration, therefore, is of tremendous importance to pear growers, canning peach growers and to the canners of these fruits.

By means of concentation of fruit juices by vacuum concentration very attractive fruit sirups have been prepared from practically all of the fruits listed above under fruit beverages.

These sirups have proven even more popular than the beverages among housewives and others. They are used in many different ways, for example, in the preparation of home-made fruit punch, gelatin desserts, fruit jellies, pudding sauces, frostings for cakes, cake fillings, etc. The manufacture of these sirups affords a very promising means of utilizing many surplus fruits.

About 120 gallons per ton of very excellent vinegar can be made from cull pears. This product should afford a means of utilizing the waste peels and cores from canneries and small or misshapen fruit unsuitable for other purposes. Cooperative experiments have been successfully conducted with the vinegar manufacturers in increasing the yield of vinegar acid from apple juice by the use of selected pure cultures and by the control of organisms which destroy vinegar acid and alcohol.

The great American public is coming more and more to live out of a tin can; housewives are becoming more finicky and are making less and less jelly and preserves in the home. Anything that can be done to make jelly making certain and easy will increase the use of fruits for this purpose. Accordingly, extensive investigations have been conducted during the last five years on the preparation of and canning of fruit juices for jelly making. These investigations have been successful and a large factory has been established at Santa Clara, Cal., for the commercial production of these products. One of the big fruit organizations of southern California has taken up the preparation of marmalade juice and jelly juice from citrus fruits. The jelly juices have been made semi-commercially and sold to the housewives in Berkeley with very gratifying results. All that the housewife has to do is to open the can, add two cans of sugar to each can of juice, bring to active boiling and pour into glasses—a sparkling, clear, quivering jelly is the result.

America consumes some 600,000 tons of candy per year. Practically all of this is cane sugar, artificial color and flavor. The amount of fruit candy is so small that it would not appear in this total. Investigations have shown that fruit may be used in candy in dozens of ways. One very successful manner of using the fruit in candy has been to combine the fruit pulp with pectin and sugar to give a still jelly with the fruit embedded in the jelly. Pectin is the jelly principle from apples or other fruits. Several canners are investigating the possibility of canning the candy base for the use of confectioners. A large candy factory in San Francisco and many small factories throughout the state are experimenting with and using this new candy process.

CONTROL OF THE WORM.

The best spraying equipment is none too good. Every grower should own the best high-powered spray machine that he can secure. It should be carefully cared for—pump and engine kept in good condition—hose strong enough to carry 200 to 300 pounds' pressure—all couplings tight and the best rods or guns, depending upon the choice of the operator. With large, tall trees it is impossible to correctly spray them without having a tower on the spray outfit from which the operators can reach and apply the solution to the tops of the trees. In serious worm infestations it has been found that two-thirds of the wormy apples are on the upper one-third of the tree. The key to successful control lies in the thoroughness of the calyx spray, proper thinning of the fruit, removing all worm-stung apples and the application of the first cover spray. If the fruit is given a thorough coating and recoated with the poison every 18 to 21 days, clean fruit is the result. Spreaders have been found to be very beneficial in all pest-control work.

Bees in the Orchard

"It is not enough to have bees in some one place in the orchard, but it would be better for the trees if the hives were set at different places about the orchard," according to C. B. Scott of the Fruitvale district of Yakima. "I have always noticed," he said, "that the trees closest to the stands of bees had more cherries on them than trees farther away, and, as regards 20 trees away from the hives, they did not receive a great deal of attention on the part of the bees."

In view of this fact, he had the bees placed this year in two lots instead of one in the cherry orchard, and this gave him better results than from placing them in one place. It is generally supposed that the bees will work evenly over the orchard, but that is not the case, as they concentrate on the trees that are closest. He is therefore convinced that to scatter the bees through the orchard will pay even though it cost the grower more.

Cherries and pears usually bloom at the same time, but the bees seem to prefer the cherries to the pears. They will work on the cherries and leave the pears alone. Having a block of Bartlett pears which have not always set as well as they might, he thought he would make sure of getting them pollenized this year. Accordingly, he had a number of colonies of bees placed among the pears, but the bees instead of working on the pears would, as they came out of the hives, make their circles and gain altitude until above the pear trees and then strike out straight for the cherry orchard. There was a day, however, when a cold northwest wind was blowing and to get to the cherry orchard they had to face it. Instead of so doing they worked in the pears, but that was the only day that they gave them much attention.

Mr. Scott has 200 sour cherry trees and some sweet cherries. From the 200 sour cherry trees he harvested close to 18 tons of cherries. Although sour cherries are sure bearers, Mr. Scott would not plant them, he said, as the growing of this class of cherries can very easily be overdone, for they can be grown almost anywhere in the United States. That is not true of Bings, for they can be grown in only a few localities.

Rhizoctonia in Strawberries

Now comes another enemy of the strawberry crop, that of rhizoctonia. It has been described by M. J. Forsell of Everett, Snohomish county horticultural inspector. This is a factor that strawberry growers must recognize, especially with new plantings, he says. There are many plants that are affected by this disease, which is most common in potatoes.

In early summer this disease can be recognized by the appearance of plants affected here and there in the field. Affected plants will show up in fields which from all other standards of excellence appear the best. At the time of bearing the petioles around the fringe of the plant will appear brown and black. The leaves will soon dry up and the whole plant bear evidence that there is something radically wrong.

The difficulty is to be found on the roots. Here the plant body of the fungus can be seen by the aid of a microscope on the fine roots. On the large roots the difficulty may be located in the form of a white layer immediately under the bark. If a large root is cut squarely off a white ring may be seen and if the bark is removed an abundance of the fungus may be noted.

The plants affected to the extent of the lower leaves and petioles having become darkened produce a small and inferior crop.

Seed used for planting a potato crop which is to precede the strawberry planttation should be treated according to the standard methods for the control of rhizoctonia.

Morning Glories

Difficult Weed to Eradicate

By E. G. SCHAFER,

Will you kindly tell me of a way to get rid of wild morning glories? They are thick in my garden. MRS. W. H. M'G.
Mountain Home, Idaho.

The bind weed, or morning glory, as it is called, is one of the most difficult weeds to eradicate. This is due to the extensive root system which it produces. I believe one of the most successful ways of eradicating this pest is that of clean cultivation. If this method is to succeed, however, it will be necessary to cultivate at frequent intervals throughout the entire growing season. This method involves the actual starvation of the plant by preventing it from manufacturing food which is carried on in the leaves. In its attempt to grow, the energy stored in the roots will finally be extended if no green portion of the plant is allowed to appear above the ground.

I would suggest that cultivation be at a depth of two or three inches, since cultivation at this depth will not need to be as frequent as if at the mere surface only. I realize that this method would not seem economical if the weed exists on a large area. If you have only small patches, I believe it will pay you to eradicate it in this manner, even at a comparatively high cost, in order to keep it from spreading to other parts of your farm. It must be remembered that even though the weed be allowed to produce leaves for a few days only during the growing season, much of the energy expended during clean cultivation will be restored and the period necessary for its final destruction will be increased. In my opinion, if this method is adhered to rigidly, the weed should be exterminated by the end of the second season.

Hail Hit Apples.

Hail damage to apples and some other fruit is reported from a number of different parts of the Wenatchee district. Fortunately it was not too late to escape much of the hail loss by prompt thinning out of hail-pecked apples where they were too numerous. This was done in many orchards, with the result that it is believed no actual damage will occur, unless hailstorms are repeated. There has been a period of hail breeding weather for the last month or more, but this has now seemingly cleared up.

Read the "Want Ad" page this week for good offers of all kinds.

Mighty Lak'a Mule

Need a fabric tire for hard work? Want it at low first cost? Here is your tire—Goodrich "55." More work and wear resistance in it than has ever been molded into a 30 x 3½ fabric.

Thick, tough anti-skid tread. Sturdy, heavy side walls. The stuff of a mule in the shape of a tire. It *works back* your money over and over.

THE B. F. GOODRICH RUBBER CO.
ESTABLISHED 1870
Makers of the Silvertown Cord

Goodrich "55"

"BEST IN THE LONG RUN"

MONUMENTS F

COMPLETE STOCK. WRITE FOR DESIGNS and prices. Inland Monument Co., N1001 Monroe, Spokane.

PERSONALS R

HEALTH-GIVING CORSETING IN ALL ITS branches. Only exclusive specialist in the west. Write us. National Garment & Corset Co., W925 Riverside, next Review bldg., Spokane.

HELP WANTED—Male 3

MEN WANTED—TURN YOUR SPARE TIME into cash or devote your whole time to a highly paid, congenial business; good money year around; cash weekly. Middle-aged men find this attractive. Many of our men receiving $4000 to $5000 yearly under our plan. Experience not required. Washington Nursery Company, Toppenish, Wash.

SALESMEN TO SELL OUR COMPLETE LINE of "trees that please." For particulars write Capital City Nursery Company, Salem, Oregon.

HELP WANTED—GENERAL. 5

MEN AND WOMEN, AGE 17 TO 30. AT ONCE to train for positions with Western Union Telegraph Co. and various railroads. Pacific Telegraph Institute, Spokane, Wash.

AGENTS WANTED 9

AGENTS—C. T. A. PRICES LOWER THAN ever. Suits, $18, made to order; any size or style. Orders easy to get. Big profits. Agent's outfit free. Sample suit at cost. Write Chicago Tailors' Ass'n, Dept. 417, Sta. C, Chicago.

SCHOOLS AND COLLEGES 26

EARN $110 TO $250 MONTHLY, EXPENSES paid, as railway traffic inspector; position guaranteed after 3 months' spare time study or money refunded; excellent opportunities. Write for free booklet G-157, Stand. Business Training Inst., Buffalo, N. Y.

FRESH FOOD PRODUCTS 51-3

FISH—4 LBS. SMOKED SALMON, $1; 4 LBS. Alaska salmon bellies, $1; 4 lbs. black cod, $1, 3 lbs. best codfish, $1; delivered by mail. Coffin Fish Co., Seattle, Wash.

DRIED LOGANBERRIES; THIS YEAR'S crop; 2 lbs., 75c; 5 lbs., $1.85; 10 lbs., $3.60; 25 lbs., $8.75, postpaid. B. E. Cameron, Newberg, Ore., R1.

BEES AND HONEY 53

ALFALFA-SWEET CLOVER HONEY—2 60-LB. cans, $9.75; one can, $5, f. o. b. Rigby; one 40-lb. can, prepaid to fourth zone, $5.75; quality guaranteed. Heckman & Larsen Honey Co., Rigby, Idaho.

FAMOUS KITTITAS VALLEY ALFALFA HONey, extracted; postpaid 2d and 3d zones: 10 lb. pail, $1.85; 3 10s, $5; 3 5s, $2.75; 60-lb., $8. Kittitas Valley Apiaries, Ellensburg, Wash.

EXTRACTED HONEY — ONE 60-LB. CAN, $6.50; two 60-lb. cans, $12.75, collect; three No. 10 pails, prepaid, third zone, $5. Wells D. Rose, Sunnyside, Wash.

QUEEN BEES—BUY THE BEST. UNSURpassed Italian queens, 1, $1; 6, $5.75; 12, $11; 50, $45; 100, $85. Circular free. J. D. Harrah, Freewater, Ore.

HAPPY HOME HONEY—ALFALFA AND clover; 60-lb. can, $6.50; two cans, $12.75; case six 10-lb. pails, $7.75. H. N. Paul, Mabton, Wash.

BEST QUALITY EXTRACTED ALFALFA AND clover honey; 60-lb. can, $5; 2 cans, $9.50. Meyer Bros. Honey Co., Rigby, Idaho.

VALLEY BLOSSOM HONEY; QUALITY GUARanteed; 1 60-lb. can, $7.50; 2, $14.40. Ernest Sires, Route 7, Yakima, Wash.

NEW CROP EXTRACTED HONEY; FINEST ever; one 60-lb. can, $6.50; two, $12. Geo. O. Gould, Buhl, Idaho.

MISCELLANEOUS—FOR SALE 60

SASH AND DOORS—O. B. WILLIAMS CO., 1943 First ave. So., Seattle. Chicken house sash, 20" wide by 25" high, 80c; a dozen different sizes in stock for immediate shipment. Skylights for chicken houses, 36"x40"; price, glazed, $2. This is the size recommended by the Western Washington experiment station. We carry them in stock for immediate shipment. Sash and doors for all purposes at lowest prices. All orders receive prompt attention. Our large illustrated catalog No. 35, showing full line of building material and built-in fixtures for the home, free on request. O. B. Williams Co. Established 1899.

PIPE—GET PARTICULARS ON OUR SPEcial flue pipe, 1¼, 1½ and 2 inch. Big saving on it. We also have all sizes second-hand and new standard pipe at low prices. We also save you on roofing, belting, pumps, engines, cables, etc. Alaska Junk Co., S120 Adams, Spokane, Wash.

WALL BOARD—WRITE FOR SAMPLE OF Washington plaster wall board; won't warp, won't burn. Manufactured by Washington Building Products company, 6851 E. Marginal Way, Seattle, Wash.

NATURAL LEAF TOBACCO—CHEWING. 5 lbs., $1.75; 10 lbs., $3; smoking, 5 lbs., $1.25; 10 lbs., $2. Pay when received. Pipe and recipe free. Farmers' Cooperative Tobacco Union, Paducah, Ky.

NATURAL LEAF TOBACCO—CHEWING. 5 lbs., $1.25; 10 lbs., $2.50; smoking, 5 lbs., $1.25; 10 lbs., $2; 20 lbs., $3.50. Farmers' Union, Mayfield, Ky.

TOBACCO — FINE, YELLOW MAMMOTH chewing, 10 lbs., $3; smoking, 10 lbs., $2; 20 lbs., $3.50. Farmers' Club, Mayfield, Ky.

FILMS DEVELOPED FREE BY KODO. THE Picture King, S15 Stevens, Spokane, Wash.

GRAIN BINS AND TANKS 90

METAL GRAIN BINS SAVE YOU MONEY. Write for circular T and prices. Spokane Culvert & Tank Co., Spokane, Wash.

MACHINERY—For Sale 93

FOR SALE—ONE OREGON SPECIAL 20-FOOT cut, Holt combine; equipped for bulk and sacks; 26-horse hitch; $250 cash, balance two payments. Price $2000. George Myers, Connell, Wash.

TWO LATE TYPE, SNAPPY RUSSELL STEAM engines; two Rumely oil pulls, several separators, several small used gas engines. Fallquist Bros., W20 Riverside ave., Spokane, Wash.

THRESHERS, STEAM ENGINES, TRACTORS, trucks; all kinds of machinery. Exchange Machinery Co., W20 Riverside, Spokane.

THRESHING OUTFIT, 12-24 RUSSELL TRACtor and 18-34 Russell separator for sale. Charles Salokar, Valley, Wash.

EMERSON STANDARD MOWER REPAIRS. Spokane Farm Machinery Co., N812 Monroe, Spokane, Wash.

AUTOMOBILES—FOR SALE 112

SEE CHEVROLET FIRST—NEW AND USED cars at prices that will surprise you; stop in or write Inland Empire Chevrolet Sales Corp., 916 2d ave., Spokane. Open evenings. Open Sunday.

USED FORD TRUCKS AND DELIVERY CARS priced right; terms easy; will take Ford car on first payment. National Motor Company, 1212 First ave., Spokane. Phone Main 460.

FARMERS' WANT ADS

This is the farmers' "want," "sale" and "exchange" department for small advertisements of farmers, including live stock and poultry.

Advertising rates for ads running 1 to 3 times, 10c per word per insertion, with a special rate to Farmer subscribers, as follows: Ads running 4 to 12 times, 9c per word per insertion; ads running 13 times or more, 8c per word per insertion.

All commercial and land advertising, 10 cents per word per insertion. Open also to nonsubscribers.

In using these columns advertisers must observe (1) No advertisement will be inserted for less than $1.00. (2) Every word, number and initial, including name and address, must be paid for. (3) New advertisements, changes of copy or cancellations must reach general office, Spokane, Wash., 10 days in advance of publication date. (4) Cash must accompany order.

Above rates include insertion in The Washington Farmer, The Idaho Farmer and The Oregon Farmer, which constitute the Pacific Northwest Farm Trio, 46 Review building, Spokane, Wash.

AUTO ACCESSORIES AND PARTS 119

INTERNAL GEAR TRUCK PARTS; WIRE and disc wheels; sales and service. Pacific Gear & Auto Parts Co., 1022 First, Spokane.

STOVE REPAIRING 128

WRITE MYER RUBENS, SPOKANE, ABOUT stove repairs, welding broken parts, nickel plating.

PATENTS 150

PATENTS, TRADEMARKS, COPYRIGHTS. Write to B. P. Fishburne, registered patent lawyer, 398 McGill bldg., Washington, D. C.

FUR-BEARING ANIMALS 170

SILVER AND CROSS FOXES FOR SALE. William Rambo, 407 Sprague, Spokane.

PETS—Dogs, Birds, Etc. 171

FOR SALE—BOBTAIL SHEPHERDS. $10 each; 2 females, 8 mo. old; good drivers; very snappy, $15 each. Hentges, Valley, Wn.

CLOVERLAND AIREDALES—THE PERFECT farm dog; puppies for immediate delivery. Cloverland Kennels, Gooding, Idaho.

FOXHOUND PUPS, FROM GOOD STOCK, $5 and $6 each. Harry Hull, Oakland, Ore.

AIREDALE PUPPIES, BOTH SEXES, $15 AND $25. Luther Jones, Route 2, Boise.

POULTRY 174

WHITE LEGHORN PULLETS — MARCH, April and May hatches. From thoroughbred, mature hens, mated with cockerels of 225 to 265 egg record, Hollywood, Tancred or Gilbert strains; 8 weeks old, $1.20 each; 12 weeks old, $1.40 each; shipped with a guarantee of being satisfactory or any undesirable ones may be returned within three days and refund will be promptly made. Send 25 per cent with order; balance C. O. D. Mention this special offer when ordering. Queen Hatchery, 1430 First ave., Seattle, Wash.

CERTIFIED WHITE LEGHORN QUALITY chicks for summer and fall months, from selected free range, high egg producing breeding flocks, inspected and accredited by the Sonoma county farm bureau. Send for catalog and attractive prices. Safe delivery and full count guaranteed. Must Hatch Incubator Co., Inc., 445 Seventh st., Petaluma, Calif.

250,000 ACCREDITED BABY CHICKS FOR sale during May and June. Send in your order early. "A" grade, $6 for fifty; $11.50 per hundred; $110 per thousand. "AA" grade, $8.50 per fifty; $16 per hundred; $155 per thousand, f. o. b. Petaluma. Member of the Sonoma county farm bureau accredited hatchery list. White Hatchery, Petaluma, Calif.

WHITE LEGHORN BABY CHIX FROM flocks mated to males having sire's dam record of 240 to 297 eggs per year. Full particulars and interesting literature on request. We are accredited by Sonoma county farm bureau. The Pioneer Hatchery, 422 Sixth street, Petaluma, Cal.

SUMMER SALE "HENACRES" PULLETS; best for fall and winter eggs, $1.25 to $2 each. Hens for breeders, $1 to $1.50 each. High grade stock at reasonable prices. Booking orders now for 1924 baby chicks. Free catalog and price list. "Henacres," Box A, Prosser, Wash.

DANIEL'S WHITE ROCKS AND S. C. WHITE Leghorns; trapnested continuously; 8-week pullets and matured breeding stock at reduced prices. Free list. Ideal Poultry Yards, Hoquiam, Wash.

WHITE LEGHORN COCKERELS, WORLD record ancestors; pedigree with each bird; sired by son of Lady Wonderful. Special price on five or more. Prof. Frank Shepherd, Corvallis, Ore.

DOLLARS FOR YOUR EGGS—WE PAY THE top market prices for your eggs and poultry. Daily cash remittances. McClintock-Trunkey Co., produce department, Spokane.

O. A. C. BARRED ROCK COCKERELS, APRIL-May hatched, $1.50, $2. Mrs. Faulconer, Skamania, Wash.

LIVE STOCK 177

WE GUARANTEE TO PAY THE HIGHEST market price for your poultry and live stock. Veal market growing stronger. Owing to the constant changes in the market we are unable to quote prices in this paper from week to week. We will furnish tags and prices when you are ready to ship. Write us what you have to sell. Prompt returns. John Lewis & Co., Spokane, Wn.

FOR SALE—A FEW REGISTERED CHESTER White brood sows at $40 and $50. A number choice gilts, weighing 80 lbs., at $20 each, 2 for $35; 40 to 60 lbs., $15. All from prize-winning stock. Will register them free. R. J. Eorne, Farmington, Wash.

TOP PRICES PAID FOR CREAM, EGGS, poultry, pork, veal, also fruits, berries and vegetables in season. Inland Products company, Second at Cedar, Department E, Spokane, Wash.

WE PAY TOP PRICES FOR YOUR LIVE OR dressed veal, hogs, and poultry. Your check by return mail. Shipping tags on request. M. & J. Packing Co., Spokane.

WE PAY THE HIGHEST CASH PRICE AND remit every day for strictly fat dressed veal and pork and live poultry. Address Dept. T, Welch's, Spokane, Wash.

FOR SALE—REGISTERED O. I. C. BOARS, old and young; bred gilts. The Up-to-Date Poultry Farm, Marysville, Wash.

DUROC-JERSEY PIGS, THOROUGHBRED; eligible for registration; $12 and $15. W. L. Livingston, Bridgeport, Wash.

REGISTERED HOLSTEINS—BULLS, HEIFers and cows for sale; accredited herd. Oscar Dunlap, Junction City, Oregon.

REGISTERED BERKSHIRE BREEDING pigs, $16; big type, champion blood. Chas. O. Churchill, Shelton, Wash.

ENTIRE CALKINS & RIGGS HERD OF REGistered Guernseys, 21 cows, 3 bulls. Daybreak Farm, Battle Ground, Wash.

REGISTERED JERSEY COWS AND HEIFers; real production type. Allen Sutliff, Eugene View Farm, Eugene, Ore.

FOR SALE—REGISTERED O. I. C. WEANling pigs. S. G. Anderson, Route 2, Box 205, Puyallup, Wash.

BIG BONE SPOTTED POLAND CHINA gilts for sale. Harve Davis, Dayton, Wash.

LIVE STOCK (Continued) 177

FOR SALE—EIGHTY HEAD GRADE SHORThorn young cows and heifers and calves; practically beef price; some registered. Write C. H. Kidwell, Laurier, Wash.

REGISTERED SHROPSHIRE RAMS, FROM prize-winning stock. G. H. & J. J. Thompson, Macleay, Ore.

FOR SALE—FIVE PUREBRED FEMALE JERseys and one bull. T. E. Bradley, Daisy, Wn.

REGISTERED SHROPSHIRE RAMS AND ewes. Write McK. Edwards, Valley, Wash.

FOSHAY FARM, HUBBARD, ORE., OFFERS registered Hampshire pigs, both sexes.

HARNESS and SADDLERY 189

SEND FOR FREE HARNESS AND SADDLE catalog today; cut out the middleman, buy direct from the manufacturer. Lowest prices in the west; satisfaction guaranteed. Established 1881. Write Pierce Harness Co., Dept. T, Spokane, Wash.

HOTELS 306

FAIRMONT HOTEL—RATES $1 DAY AND UP. 319 Riverside, Spokane. Free bus.

FAIRS 370

SKAGIT COUNTY FAIR—THE GREAT FARM and livestock show of northwestern Washington; August 6 to 11. Premium list free. Write George Sieler, Secretary, Burlington, Wash.

JACKSON COUNTY FAIR—SOUTHERN OREgon's great farm and livestock show. September 12 to 15. Premium list free. Write H. O. Frohbach, secretary, Medford, Ore.

TWIN FALLS COUNTY FAIR—SOUTHERN Idaho's great fair and livestock show, September 11 to 14. Premium list free. Write J. M. Markel, secretary, Filer, Idaho.

GRAYS HARBOR COUNTY FAIR—BIG FARM and livestock show, at Elma, Wash. August 29 to Sept. 2; premium list free. Write C. H. Palmer, secretary, Elma, Wash.

WESTERN WASHINGTON FAIR, PUYALLUP, October 1-7, both inclusive. 133,000 in attendance last year. You are invited to participate. W. H. Paulhamus, Manager.

JOB PRINTING 372

WEDDING ANNOUNCEMENTS AND INVItations, catalogs, booklets, high school annuals, letter heads, envelopes, cards, butter wrappers, etc. Union Printing Co., 412 First ave., Spokane, Wash.

$1.50 POSTPAID—YOUR NAME AND ADdress on 200 sheets and 100 envelopes. Hammermill bond writing paper, neatly boxed. Parker Printing Co., 405 Pacific blk., Seattle, Wash.

CLEANING, DYEING, Etc. 420

FRENCH DRY CLEANING BY PARCEL post. Ladies' and gents' suits, furs, hats, etc., prompt service. Address City Dye Works (Dept. A), E422 Sprague ave., Spokane, Wash.

CRESCENT CLEANERS, INC. — BETTER cleaning, dependable service. S303 Walnut, Spokane.

TANNING 425

ANY KIND OF HIDE TANNED WITH HAIR on, or for leather. Fur and taxidermy work done to order. M. R. Mohr Co., 321 Sprague, Spokane, Wash.

KODAK FILM DEVELOPING 472

FREE ENLARGEMENT WITH 75C ORDER high gloss print. Spokane Film Co.

MATERNITY HOMES 497

MATERNITY HOSPITAL; STRICTLY PRIvate; doctor in attendance; prices reasonable. Mrs. Elizabeth Peel, matron, W1324 Broadway, Spokane.

BUSINESS OPPORTUNITIES 516

HOTEL, 22 ROOMS, IN BUSY WASH. CITY of 6000; easily clears $150 monthly. Price $3000; easy terms. Box 324, Mt. Vernon, Wn.

PARTNERS WANTED 519

YOUNG MAN; MUST BE HONEST AND INdustrious; with $5000; $2500 now and $2500 January 1, 1924; balance can be paid monthly out of milk check; to buy one-third interest in dairy, collecting $25,000 per annum, with $6000 to $10,000 net. Address K, Idaho Farmer, Boise, Idaho.

BUILDING MATERIAL 588

FIX BROKEN PLASTER WALLS WITH PERfection plaster wallboard; nailed on like lumber; takes calcimine or paint; sample and booklet from Western Wallboard Co., Seattle, Wash.

SEEDS 620

HUNGARIAN VETCH SEED, POSITIVELY aphis proof. Good forage crop. Write for circular describing same. We have common vetch, red and alsike clover. Corvallis Feed & Seed Co., Corvallis, Ore.

NURSERY STOCK 621

TREES—NOW BOOKING MAIL ORDERS AT reduced prices for limited time only. Apples, pears, peaches, nut trees, prunes, cherry, small fruits, etc. Live agents wanted. Lafayette Nursery Co., Lafayette, Ore.

FARM LANDS FOR SALE 651

VALUE $45,000; SACRIFICE FOR $25,000; must be sold at once; terms to suit; 4630-acre stock ranch, in Crook county, Wyo.; stockmen!! Sheep men!! Investors!! You can't afford to miss this, 500 acres cultivated hay land; 500 first-class tillable; 2130 tillable pasture; 500 timber; four good sets buildings; good soil; abundance of water; well fenced and cross-fenced; this is not an experiment, but a real sheep or stock ranch and almost a gift. Lock Box 2215V, Sokane, Wash.

HIGHEST TYPE FARM LAND, WHERE SETtlers get steady and permanent employment and live at home. Level bench and river valley land; all good soil; an already well developed farm district; school, markets, roads, etc. Around Onalaska, Washington, and near Pacific highway (15 miles southeast Chehalis); 20 acres or more, $15 to $50; long, easy terms. A clean cut and fair proposition. Go to Onalaska or write Graham Land Company, American Bank bldg., Seattle.

BARGAINS IN DRY AND IRRIGATED farms. Oregon Mortgage Co., Paulsen bldg., Spokar

FARM LANDS FOR SALE (Continued) 651

CUTOVER LANDS, EASY TO CLEAR; $8 TO $20 per acre; 25 miles north of Spokane; on hard surfaced highway; Great Northern and Milwaukee railways; excellent opportunity for dairying and stock raising with Spokane markets and creamery near at hand. Will help the man who will live upon this land and agree to clear a part each year by giving lumber to help start his buildings, and a purebred Jersey bull to groups of farmers. Interest and payments low. Write Milan Farms Development company, Dept. T, Old National Bank bldg., Spokane, Wash.

POTATO, POULTRY, BERRIES. ALL cleared and in meadow. A few feet from paved highway; located a half mile from railroad station, good store and sawmill; excellent neighbors, fine schools, close to several good towns. Priced at only $100 an acre. Sold in 5, 10 or 20 acre parcels. Small payment down, balance in 10 years at 6 per cent. This is the best land at the price that we know of. Write or call for full information. Carter, MacDonald & Miller, 208 Columbia st., Seattle, Wash.

62 ACRES, SNOHOMISH COUNTY; 25 IN crops; 22 fine timber; 15 river bottom, balance pasture, orchard; 7-room house, large barn, big poultry house, milk and pump house, garage, other buildings. Cows, horses, 100 chickens, farm machinery and tools; about 50 tons hay. All goes. Mile store, school, sawmill, mail route, phone. On main road; steady income for you. $9000. Some cash, balance terms. Write G 2, Washington Farmer, 617 Central bldg., Seattle.

DO YOU WANT A HOME IN A RICH VALLEY near Spokane, on three transcontinental railroads? Where soil is perfect, rainfall ample. Summers cool, winters moderate? The kind of stump land that pays to clear? Timothy and clover green eight months in year; natural stock country. Land cheap, 10 yearly payments at 6 per cent. Humbird Lumber Company, Box 00, Sandpoint, Idaho.

LOGGED-OFF LAND IN STEVENS COUNTY, Washington, at greatly reduced prices. Most of land sells at from $5 to $20 per acre. Thickly settled community. Good schools. Hard surfaced and paved road to Spokane. Best county in state for dairy and stock raising. In most places water can be found at shallow depths. Write for folder. Phoenix Lumber Co., Dept. T, Spokane, Wash.

HARRINGTON DISTRICT—540 ACRES GOOD wheat land; 100 acres pasture; creek; good buildings; macadamized road; 2 miles from Harrington; main line Great Northern; good schools, churches, stores; small payment will handle, balance easy terms; bargain; no trades. Owner, W. E. Shrader, Harrington, Wash.

FOR SALE—120 ACRES; THREE MILES from Twin Falls; under best irrigation system; two miles shipping station; good schools and roads; land producing splendid crops; no failures. Contract your crop at good price before you plant. Price $25,000; third down, balance to suit. Chas. C. Miles, Route 1, Filer, Idaho.

BIG OPENING SALE OF YAKIMA VALLEY farm land, under an assessed state and government approved irrigation project; best, deep soil; close to town and good roads. Price $25 per acre and up. Very easy terms. Western Lands, Inc., owners, 918 Green bldg., Seattle.

40 ACRES; PROSPEROUS FUTURE ASSURED; pleasant surroundings; near town, city markets; 12-cow pasture; estimated 1000 cords wood; valuable timber; only $400 needed. For particulars apply owner, Box 324. Phone 3796, Mt. Vernon, Wash.

BIG LUMBER COMPANY LAND SALE—IN Skagit county; 40-acre tracts, $1400; $200 cash, balance easy. Lots work for the settler. Splendid district, roads, schools, towns. Information free. H. C. Peters, 726 3d ave., Seattle.

111 ACRES; 35 UNDER CULTIVATION; 10 irrigated; 400-bbl. reservoir, fed by never-failing spring; 40 rods lake front; furnished house, team horses, 2 cows, 100 chickens; 1 mile from highway. Owner, E1108 12th, Spokane.

40 OR 80 ACRES; BEST BUY IN SPOKANE county for the price; plenty of hay, wood, water, fruit, garden truck; all good land; small amount stock, machinery; ready to move in; some terms. Lee Zachary, R. 1, Elk, Wash.

160 ACRES; 60 UNDER CULTIVATION; house, barn, family orchard; fenced; water; good road; school one mile; good location; $2000 cash, balance $500 each year; bargain. Dr. J. Finney, Harrison, Idaho.

1000-ACRE SHEEP RANCH; 150 ACRES CULtivated; two barns; fine house; water; seven miles sheep-tight fence. Price $22,000. Fred Markham, Hunters, Wash., owner.

SELL YOUR PROPERTY QUICKLY FOR cash; no matter where located. Particulars free. Real Estate Salesman company, 501 Brownell, Lincoln, Neb.

FOR SALE—80 ACRES, HIGHLY IMPROVED land; near El Antro, Calif.; first water right; can grow crops all year. Address Box 353, Caldwell, Idaho.

160 ACRES; CENTRAL MONTANA; GOOD wheat land; unimproved; $15 acre. H. R. McEneaney, E1307 Walton, Spokane.

75 ACRES; GOOD HOUSE AND BARN; PLENty lowland pasture; fine place for cows. Wm. Bennett, Springston, Idaho.

320 ACRES LAND; 25 CLEARED; SPRING house, barn. Particulars, write Box 381, Cashmere, Wash.

920-ACRE GRAIN AND STOCK RANCH. Write for particulars. Calvin Crider, Bickleton, Wash.

FARM LANDS—Wanted 654

NO COMMISSION — SELL YOUR FARM through Washington Farm Bureau Exchange, represented in 45 states. Lists of farms for sale by owner mailed free. 312½ Lindelle, Spokane.

I HAVE INQUIRIES FOR FARMS IN NORTHwest. Describe fully and state price. R. A. McNown, 310 Wilkinson bldg., Omaha, Neb.

IRRIGATED LANDS—For Sale 663

CORBIN ADDITION TO GREENACRES—IN the beautiful Spokane valley; 30 minutes from Spokane; paved road; 40 inches of water for irrigation; gravity flow. Ask for booklet with all information.

Return coupon—The Fred B. Grinnell company, Spokane, Wash. I am interested in the Spokane valley. Please send booklet and all information to

Name .....

Address .....

SUBURBAN TRACTS—For Sale. 672

FOR SALE—4 LOTS, SMALL HOUSE, CHICKen house, barn, fruit; near saw and shingle mills, churches, schools; near Portland. Lock Box 223, Ridgefield, Wash.

FOR SALE OR EXCHANGE 702

FOR SALE OR EXCHANGE—ALL OR PART of 120 acres; level garden land; agricultural district; suburban to Vancouver, British Columbia; city water; great future value. Owner, Westenhaver, Eburn, British Columbia.

Cattle Ranch To College

Russell Doubleday Copyright by Doubleday & McClure Co

The first time we met John Worth, the leading character in this story, he was taking an active part in preparing the little frontier village of Bismarck, N. D., to withstand an Indian attack. We next saw him playing the part of a man, although he was only 12 years old, in defending the village when the warriors appeared.

After the Indians were repulsed by the frontiersmen under the leadership of Jim McKenzie, the sheriff, and order was restored, Mr. Worth, John's father, set out for the north to search for outcroppings of coal, he being a miner as well as a freighter. During his absence, Mrs. Worth felt many misgivings owing to the dangers that confronted the wilderness traveler, but bravely assumed responsibility for John, his brother Ben, aged 10, and the baby. Mr. Worth had not been gone many days when he returned, clothed only in an Indian blanket and a pair of worn-out moccasins. He had been the victim of a thieving party of redskins who had taken all his clothing, leaving him naked on the prairie, where early winter winds would have brought certain death but for the friendliness of an old Indian whom he had once befriended. This old warrior's blanket and moccasins saved him.

It was not long, however, before he was on the trail again and when he came back in the spring he reported that the Indians were becoming more and more hostile toward the whites, and that it would not be safe for any mining expedition to venture away from the village for some time yet.

It was over a year before Mr. Worth was able to lead the mining party to a mine that he had discovered. It was a great day for the boys when the wagon train started across the wild prairie, but the first few hours out brought an experience that they long remembered. They rode away from the party for a swim in the river, and when they came back to where they had tied their horses they found them gone. Afoot they started after the outfit, now miles ahead and it was late at night when they wearily dragged themselves into camp and went to bed after a suppor of cold beans and coffee.

After considerable traveling the party reached its destination, and the boys looked with some dismay upon the dug-out that was to be their new home.

CHAPTER V.

In a Mining Camp.

"More like a tunnel with a porch to it, I should say," said John, as they approached the "dug-out."

Indeed, the Worths' new home was an unprepossessing abode even after the familiar furniture was in position, the bunks made ready for use, and a fire built in the fireplace.

As its name showed, it was merely a hole or tunnel in the slope of the hill, with a small log house built out from it. But though it was not luxurious, it was warm in winter and cool in summer, the earth protecting it from extremes of both heat and cold. The bare ground packed hard served for a floor, and the fireplace was set far back in the underground portion of the room, its smoke outlet being a chimney of sod projecting through the roof.

Into this new and strange dwelling the household goods were carried, a fire was built, and in a short while the place began to assume the appearance of a home. While this was being done, the men looked up their own habitations, and found that other dugouts, not so large or well finished but fairly comfortable, were all ready for occupancy. The mine had been opened already, and the workmen had previously constructed these huts, half caves, half houses, for themselves and for the "boss'" family.

It was all a new experience for the boys, and they investigated everything with great interest. The idea of living in a hole in the ground struck them for quite a while as very funny, and they made jokes without end about it to each other.

The wagons had been placed in the wide creek "bottom"—the space cut out of the bank by the current, which had since retreated to its present narrow channel. This "bottom" for years and years the stream's bed, was well supplied with rich alluvial soil, and was in consequence luxuriantly covered with fresh grass and vegetation of all kinds.

"I tell you, Jack," called Ben, when the boys scrambled down the steep path to the creek, "this is something like. Why, I can see bottom—and I declare, if I didn't see a fish sneak out of that rooty place there."

He hopped on one foot and then on the other in his excitement, and then, somehow—neither he nor John could ever explain it—he suddenly found himself splashing in the clear stream. John caught hold of his heels and dragged him out face down. His head had scraped the soft bottom and his nose had made a beautiful furrow in the mud.

"What were you trying to do?" inquired John, as soon as he could get his breath. "Catch the fish in your mouth?"

When Ben turned, spitting mud and digging out his nostrils, John almost exploded with laughter. "Maybe you think it's funny," spurted the younger boy, "but wait till you come to make a mud scow of yourself; then you won't laugh quite so much."

John struggled to suppress his mirth, and after a while succeeded—as long as his brother's mud-be-splashed visage was not in sight.

Face washed and good humor restored, the boys wandered further down the stream on a trip of discovery. New delights opened at every turn. A mile or so below the camp a beaver dam was found, and as they drew near, one of those clever, industrious little beasts shot down the slide they had constructed, with a kerflop into the pool. Here was sport, indeed. The boys wondered how many of the curious animals the brown, mud-plastered, dome-shaped houses contained. The doors to these houses were under water, and only the second story was above its level.

"I tell you what," said John, "we'll have to catch some of those beggars. Their skins are worth money." And so they vowed to remember the spot and capture some of the inhabitants of this semi-submarine village.

A little further along they came to a clearly marked path, the edge of which (the center was beaten hard) was indented with small hoof prints of deer and antelope. They saw, too, the cushioned print of the great prairie wolf. Evidently this was the haunt of game of all kinds.

On the way back the boys had little leisure to examine the paradise they had discovered, for the sun was sinking fast and they had wandered further than they realized. An inviting pool was noted, however, that would serve for a swimming hole, and Ben unhesitatingly dubbed this "plumb bully." John prevented him from plunging into it right away only by main force and the reference to his ducking, but he could not keep him from taking off his moccasins and wading in whenever an opportunity occurred.

As they neared the camp the last rays of the sun glinted down on them. The preparations for the evening meal were in full swing; the clatter of tin dishes, mingled with the clatter of tongues, and the smoke pouring from the sod chimneys bore a most savory odor that made the boys realize they were hungry.

"I wish we had a rifle," John was saying. "We could have got one of those ducks we saw down the creek for supper."

"Well, I'm going to have one, and a repeater, too," returned Ben. "I'll have one if I——"

"Look out!" yelled his brother, interrupting him. At the same moment he jumped to his side and pulled him violently back. Ben almost fell, but his brother held him up and dragged him still further.

"Look!" he said, breathless with excitement.

Ben's eyes followed the direction of his pointing finger. There in the trail on which they had been walking, on the exact spot where he had been about to plant his bare foot, lay a big diamond-backed rattler, asleep in the last rays of the setting sun.

"Phew! that was a close call," exclaimed John. "You want to keep a sharp lookout when you go barefoot. I can't watch out for you all the time."

The younger boy, pretty badly scared put on his moccasins without delay and kept his eyes on the trail after that. The rest of the way was covered in almost absolute silence, for the escape had been a narrow one, and both were sobered by it.

The plain, wholesome supper over, the boys were glad enough to turn in, and though the bunks were anything but soft and the surroundings unfamiliar, the exertions of the day before and the hardships of the night preceding it put them to sleep in short order.

It was not long before the whole camp was wrapped in slumber. The stock had been allowed to run free, it being well known that they would not stray far from the good feed that the creek bottom afforded. All was silent without and only the heavy breathing of the sleepers disturbed the quiet within. "Spuds," the dog, from time to time growled and barked inwardly as he dreamed of a fierce chase after a gopher or jackrabbit. At last even he subsided.

This absolute quiet was presently disturbed by a howl—long, wailing and dreadful—that sounded through the low roof as if the thing that caused it must be in the room itself. Ben jumped up so suddenly that he struck his head on his brother's bunk above him.

"What's that?" he cried, shaking with fear at a sound he could not explain. John, his head stuck out of the berth above, was frightened himself, and could not explain the noise.

Again the fearful wail came, this time not so distinct, but quite as awe-inspiring. The boys drew a long breath of relief when their father got up, took the rifle from the two pegs that supported it, and went to the door. His evident calmness reassured them. As he reached the door and fumbled with the latch, John and Ben heard a soft but rapid patter of feet and then his muttered exclamation:

"Plague take those pesky wolves, howling at a man's door in the dead of night."

So the boys made acquaintance with the great, gray prairie wolf at close quarters the first night of their stay afar from civilization.

In a few days the men were in full swing at the work for which they had come to this point. The boys were too young to take part in the mining operations, but even they had their chores to perform at certain times of the day, after which they were at liberty to do much as they pleased, within certain well-known limits. Their first duty on being wakened between 4 and 5 was to round up the stock and drive it in. This was not such easy work as it sounds. The journey in search of the animals was long, and was made on an empty stomach in the cold, raw morning air. Even when they were found, it was difficult to get them moving toward the camp. The animals seemed at times to be endowed with diabolical perversity, and would resist all efforts to start them running in the right direction. The mules and horses once corralled, the boys had an appetite for breakfast that a dyspeptic would give a fortune to acquire. After that hearty meal the brothers supplied the camp with wood and water and did what odd jobs were required about the home. This completed their work for the time.

After these duties were performed one morning John and Ben bethought them of the beaver village, and their spirits rose in anticipation of the sport. A full trapper's outfit had been brought to the camp. They got this out and made up a pack containing several steel traps, an ax, some fishing line and tackle in case a good pool was encountered, the always present revolvers and ammunition and a small store of food.

Though it was their first experience in trapping beaver, the boys were well versed in the theory of the business; they had never let an opportunity go by to learn all they could about such sport. So they started with a fair knowledge at least

He lost his balance and fell headlong.

of the habits and ways of the beaver whom they were to outwit. Their journey down to the dam led them along the creek, and they noted several inviting pools where bullheads and trout were likely to lurk, planning to come back and try to catch a string after they had set their traps.

Reaching the dam, they set to work. John being the elder, at once took command of the expedition. "You chop down some brush," he ordered, "while I go over and punch a few holes in the dam. These little beggars know a thing or two and won't run into an uncovered trap."

"What do you want to cut down brush for?" questioned Ben, as he shouldered the ax and prepared to obey.

"Why, you see, when I break the dam the water will rush out and show up the entrance to the houses; then after we go away the beaver will get to work to build it up again, and will go for the brush you have chopped down and get caught in the traps we will set in it. See?"

Ben's eyes danced at the prospect, and he raced off to do his part.

The boys were soon out of sight of each other, and John busied himself on the top of the dam with a strong stick, poking holes ruthlessly through it. He found it firmer than he had expected, and it took all his strength and skill to tear it open. He pushed his stick in vertically, in order to get a good purchase, and, encountering an unexpected obstacle, put his whole weight into the thrust. All of a sudden the obstruction gave away, the stick sank down till his hands struck the ground, he lost his balance and fell headlong into the deep part of the stream.

The water was well over his head, and after a struggle he began to realize that he was in a nasty situation. The dam was composed mostly of slippery mud, which gave him no hold, and burdened by his soaked clothing, he could not swim to the bank. The water was icy cold, and he felt almost numb at once. He called to Ben, but could not make him hear. Then he sank beneath the surface.

Again he went down, but he kept his presence of mind and struggled with might and main to gain a foothold on the slimy slope. In spite of his efforts to keep on top, he sank a third time, but this time barely below the level of his eyes. His work on the dam had accomplished its purpose and the water was rushing out through a leak, so that the depth was decreasing. He realized that if he could keep up a little longer he would be all right.

Again he sank, too tired to do more, but this time was able to keep his mouth above water by standing on tiptoe and stretching his neck to its fullest extent.

Before long the water had receded so much that he could wade ashore, though at times his feet slipped into holes that let him down until he was entirely under water. Reaching the bank, he dragged himself up and lay down flat, for the time quite exhausted.

He was more breathless than hurt, however, and in a short time was able to get up and crawl over to a sunny spot.

Ben came up presently and was inclined to joke with his brother on his mishap; but after John had told his story he took it more seriously.

The boys noted with satisfaction that the water was now so low that the submerged entrances to the beaver houses were visible. They, therefore hastened to place their traps in the brush that Ben had cut. They then moved up the creek to the fishing hole they had noted, to await developments and at the same time try their luck at fishing. Ben took the line while John stripped off his water-soaked clothes, hung them up to dry, and then lay down in a warm, sunny spot. It was late in the fall and the wind proved too searching for comfort in this condition, so a fire was built, by which he dried and warmed himself.

The fish were hungry and bit early and often, with the result that the pile of bullheads and trout on the bank was soon a goodly sight to behold. A few of them John cleaned and hung over the fire with a forked stick. The meal which followed was enjoyed to the full, and by the time it was finished John's wet clothes were fairly dry. Ben was for looking after the traps right away, but his bother's more experienced counsel prevailed, and they agreed to visit them at the earliest opportunity the following morning.

The first minute after the next morning's work was finished they hurried to the scene of John's accident. After considerable searching (for they had neglected to chain the traps fast to a log) they found one. In it was a beaver's foot, well provided with claws for digging, and gnawed off clean above the joint. The brave little beast had cut off his own leg to save his life.

"Well, I'm jiggered," said Ben. "If that don't beat all. Don't you wish you had come back when I wanted you to?"

"No; the beaver didn't show up till after dark, probably. Besides, there are three other traps, and there must be something in 'em or they would be where we left 'em."

They searched and searched and called each other names because of their carelessness in not making the traps fast. Finally they bethought them of the possibility of the little animals' dragging the cruel steel jaws with them to their houses, which, instinct would teach them, were their only safe refuges.

Sure enough, there were two of them dead, drowned at their own door; the third was alive and full of energy. Timid usually, the beaver when caught or brought to bay will fight courageously. Ben stooped to drag the trap and its captive out, but drew back so suddenly that his head struck John, who was also leaning over, a scientific blow on the nose. That maltreated and indignant organ began to bleed freely, and it did not console John to any great degree to learn that the little beast had turned on Ben and that he had come within an ace of having a finger bitten off by its long yellow teeth. He was so alarmed at this savage pugnacity that, without paying any attention to the rap he had given John, he still retreated, keeping his eyes on the hole. This was needless, however, for the animal was hopelessly entangled. A shot from John's revolver soon put the little creature out of its misery and enabled them to drag it out without danger.

They returned to camp, triumphantly bearing three splendid beavers. But John held his hand over his swelling nose and fast blackening eyes: he could afford to accept with equanimity all taunting references to his injured member, such as, "Your nose is out of joint," and "What a black look you have," for he had turned the tables on Ted, who had laughed at him, calling out: "Sonny, you think you're going on a beaver hunt, but you're really going on a wild goose chase."

Many more trips did the two boys make to this and other beaver villages, and the pile of salted skins grew to quite respectable proportions by the time the ice began to form on the creek.

With winter came many added pleasures and some extra work and discomfort. Paths to the mine and to water had to be

(Continued on page fourteen.)

FAMILY CIRCLE

ALICE W. BARLAND
EDITORIAL CONTRIBUTOR

IN GOD'S CATHEDRAL.

In God's cathedral there is naught but praise;
The columned firs uprise in stately trust.
And bear the azure with quiet thrust.
Their plumy capitals in light ablaze:
Below in shade the younger hemlocks raise
A pale green mist like incense smoke that must
Bear upward from repentant, yearning dust
Some prayer for pardon and for hope that stays:
The faithful ferns have spread their pleading palms.
And listen as the organ-wind resounds.
While choral birds chant sweet their holy psalms:
All passion flees and peace alone abounds.
To God's cathedral bring no jarring tone:
Heart of my soul, bow thou before the throne!
—Donald A. Fraser.

Experience Letters

Dear Mrs. Barland: We enjoy very much your department, in fact, all the paper is read with much pleasure and profit.

I am glad to hear the sentiments of the young folk and have great faith in the rising generation who, with the exception of a few, want to amount to something.

The golden rule is the great factor, I believe, that will help us to move ever upward. What calling could be more noble for young people than to fit themselves physically, mentally and morally and then settle in their own homes and raise a large family of good loyal American citizens, these in turn to shoulder the great responsibilities of life and home making, and to learn to enjoy life at its fullest and best?

Young folks, don't be afraid of responsibility, and seize every opportunity for advancement. Honor your fathers and mothers and show them you appreciate what they have done for you. Get out into the great outdoors and don't be afraid of soiling your hands, for work is one of the greatest blessings.

MRS. M. M. M., Idaho.

Dear Mrs. Barland: I am a reader of THE FARMER and enjoy it very much. I want to tell you of a wedding I attended which can be carried out by brides of small means. I have never seen or heard of one like it and I attended this one in the south about five years ago.

The bride was very eager to have a real wedding, but her father didn't have the means to give her one, so her mother suggested that she have a gypsy wedding and the idea pleased her very much. This was how it was done: They sent out small slips of paper on which was written invitations like this: "You are cordially invited to attend my gypsy wedding on June 1. Wear your gayest and brightest gingham gown and a bandanna kerchief on your head. If you can play, bring your stringed instrument with you; if you can sing, be prepared to do that.

"Be sure to be at"—give place and time and sign name.

After all were gathered they were taken in a hay wagon, with bells on the horses and with instruments playing, to the spot selected and prepared with lanterns and a bonfire, where the wedding was to take place.

We arrived before dark and had supper, which consisted of veal stew, bread and butter, hot coffee and sauce. We then played games and sang till dark, when the bonfire was lighted and the bride and bridegroom each retired with bridesmaids and best man and the parents of both, to lay aside the bandanna kerchiefs and for the bride to don instead a wreath of beautiful wild flowers and her bride's bouquet of the same kind tied with yards of baby ribbon. Two fiddles played the wedding march and they were then married by the light of the big bonfire. After this there were more games and a lunch was served about 10 o'clock of sandwiches, doughnuts and the wedding cake, with coffee. Then there were more games and music till 12 o'clock, when the bride and groom opened the packages containing the wedding gifts, thanked the givers and the gypsy wedding was over and it cost only $10. MRS. B. LEYDE, Oregon.

Family Circle Men

Dear Mrs. Barland: I have been a reader of THE FARMER for many years and the longer I read it the more newsy it gets. I am a farmer and a bachelor, but I enjoy reading the skits and spats of the boys and girls who write letters for the Family Circle. Your advice to them should be pleasing to all parents who look upon life and its dangers as they should.

I think that parents of this day need a good deal of advice, too. To turn children out from the home ungoverned and undisciplined is like planting one seed of mustard in a field; in a few years the whole field is foul.

As to the smoking question and any one having a right to smoke, there is no right about it, but a thousand wrongs—it is all wrong.

There have been some stones thrown at bachelors in the letters from time to time. I don't think any man is really afraid to get married, but there are too few girls who will make good farm wives. A good, bright farmer couldn't be happy with a wife of the so-called flapper sort. She would want to be going somewhere all the time and, in fact, this kind of a girl is too expensive for the wife of a farmer.

I have had many families living on my farm and I have had some very poor housekeepers among them, and, of course, some good ones. C. V. E., Wash.

Family Circle Boys

Dear Boys: The following poem was sent to me with the comment that it expresses the feelings of many young men. It is called "The Unattainable" and is taken from "Life." A. W. B.

Sam's album was filled with pictures of belles.
Who had captured his manly heart.
From the "Fairy" who danced for the front row swells.
To the maiden who tooled her cart.

But one face as fair as a cloudless dawn
Caught my eye, and I said "Who's this?"
"Oh, that," he replied with a skillful yawn,
"Is the girl I couldn't kiss."

Her face was the best in the book, no doubt.
But I hastily turned the leaf.
For my friend had let his cigar go out,
And I knew I had bared his grief:

For caresses we win and smiles we gain
Yield only a transient bliss.
And we're all of us prone to sigh in vain
For the girl we couldn't kiss."
—Harry Romaine.

Dear Mrs. Barland: I am an interested reader of the Family Circle and I think it the duty of all of us to help to make it more and more interesting.

I am a boy of 16 and live on a five-acre farm with my father and mother, who are getting old. I started high school last fall but quit in March because I saw I was needed on the ranch, as it is our only source of living.

When I started high school my intention was to become a baseball player, although I always liked to farm. But as time passed I got to thinking; a ball player is no help to the world except to furnish amusement to some people and a farmer is indeed a help to all, as we must all have food in order to live. So I have decided to help to feed the nation instead of helping to amuse it.

I think that more boys should go in for farming. So many go to college and high school to get an education that shall fit them for different lines of other business than farming. The world needs more farmers to supply food for the world.

I will tell you my experience with smoking. When I was about 10 years old, like lots of other kids I got to smoking and kept it up till we moved to our present home and I started to school. There I learned that there was a rule that no boy could play on the baseball team who smoked, and as I loved to play baseball I gave up smoking and have not touched tobacco since, and that was four years ago. It is my intention never to use it again, as I am old enough now to realize what it means to be a smoker. I am very thankful for the rule forbidding smoking for the ball team and I hope many other boys may be helped in like manner.

As for girls smoking, it is my opinion that those who smoke are not worth talking about. E. K., Washington.

Pickle Recipes

Mixed Pickles—One quart of very small white onions, one quart of very small cucumbers, two quarts of string beans, three quarts of green tomatoes, sliced and chopped very coarse; one head of hard white cauliflower, torn into small pieces; one medium-sized head of hard white cabbage, chopped coarse. After all this is ready, mix through all this one-half cup salt and set away for 24 hours.

Then mix together six red peppers, chopped coarsely, four tablespoons of mustard seed, two tablespoons of celery seed, two tablespoons of whole allspice, two of cloves, one large cup of sugar, two-thirds cup of best ground mustard. After 24 hours drain the chopped pickles and stir the spices and the chopped peppers all together, cover with best cider vinegar and cover and set on stove to simmer till tender. Stir to avoid sticking. A. W. B.

Tomato Catsup—Very fine. Cook one gallon of ripe tomatoes tender, strain then and cook again until they are thick About 15 minutes before taking off put into a muslin bag a small level teaspoon of cayenne pepper, one tablespoon of mustard seed, one tablespoon of whole allspice, one-half tablespoon of whole cloves, tie securely and allow to cook and at the same time add a heaping tablespoon of sugar, one teacup of vinegar and one level tablespoon of salt or a little more to taste. Bottle or put away in sealed jars. A. W. B.

Mustard Pickles—Two quarts each of green tomatoes and cucumbers, two bunches of celery, two quarts of small onions, two cauliflowers, three quarts vinegar, five cups sugar, one cup of salt, one quart of water, two cups flour, two tablespoons of turmeric powder, one small spoon of dry mustard, one can prepared mustard. Put all together except the flour in preserving kettle with water enough to cover and cook until tender, then add the flour mixed smooth in water and allow to boil up till it thickens and remove and put in bottles and seal. MRS. W. R. L.

Cucumber Relish—Twelve large cucumbers, three large onions, a little salt, two cups vinegar, one cup sugar, one tablespoon of mustard seed, one teaspoon each of celery seed, ground pepper and turmeric powder. Peel and slice the cucumbers and onions, sprinkle the salt over them and let stand over night; in morning drain them well and put into a granite pan with the vinegar and all other ingredients, bring to a boiling point, then bottle and seal while hot. Do not use ground mustard.—Mrs. L. S. H., Idaho.

Stuffed Peppers—Take two dozen green peppers and extract the seeds by making a slit on the side or cutting a round piece from the stem end, making of it a little cover which can be replaced when the pepper is filled and may be held in place with a toothpick. This will keep the peppers whole.

Pour a strong brine over the peppers and let them stand 24 hours, then take them from the brine and drain and soak them in clear water for a day and a night. Pour off this water, scald some vinegar into which put a small piece of alum and pour over the peppers and let them stand for three days. Prepare a stuffing of two hard heads of white cabbage chopped fine, seasoned slightly with salt and a cup of white mustard seed; mix well and stuff the peppers hard and full. Fasten on the covers, place them in a stone jar and pour over spiced vinegar scalding hot and cover tightly.

Peppers made this way are good and look so pretty, green or a beautiful red. I kept mine nearly a year just in a glass jar with a common cover. I found that peppers stuffed from the stem ends are easy to handle, do not break when stuffing.

Dill Pickles—Said to keep till used: Use fresh, crisp cucumbers, any size or all sizes, wash and pack in a crock or keg. To each gallon of pickles add one pint of salt. Put on dill, all but the root, two inches thick and weight well, so they will make their own brine. When ready for use freshen to taste. I use two fresh waters and give them two days' soaking. Pour over weak vinegar, hot or cold; if hot is used they will be ready for use sooner.—(A French recipe.)

Just Folks

Saying adds to seeing.

Company manners leak out.

Weakness can be capitalized.

Neighborliness modifies beliefs.

Waiting for happiness is a poor job.

The highest benedictions come from the lowliest lives.

Is rapid progress the best kind of progress?

What appears to be rapid progress may be only the visible result of years of foundation building.

If years of preparatory work have not been done, rapid progress means a sandy foundation.

Is Henry Ford the man for president? Does he possess the brain and heart needed in the White House?

During a recent trip through the country I found no subject that would arouse discussion more quickly, or a discussion over which persons would become more heated.

It is well to remember that different political conditions call for different presidential timber. The man who guides wisely may be as valuable as the great doer of things.

A statue of heroic proportions in the Metropolitan museum in New York forced upon me a new interpretation of bringing about world peace. A masterful craftsman, almost a giant, with hammer upraised above his head and with half a dozen swords resting on his left arm was beating them into plow shares, the lower portion of the swords already being hammered into a share.

The only inscription on the statue was the scriptural prophecy—you yourself must interpret.

Those swords were being beaten into the plowshares by the irresistible forces of brain and arm. The foundation industries of the world, rightly directed, are the only forces that shall banish wars and bring peace to all the world. It is not peace manifestoes, but downright honest, earnest and masterful work, which makes home life possible, that can solve world troubles. E. A. S.

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High Points in News of the Week

Gravely ill with broncho-pneumonia, President Harding was battling for his life in San Francisco, according to Tuesday morning's news. The five physicians attending the chief executive let it be known that they have used the word "fight" advisedly, adding, however, that Mr. Harding was "well adapted" from a temperamental standpoint to make the "fight" a strong one. "We know when the fight commenced," said one of the attending physicians, "but none of us can tell when the objective will be reached."

The entire California program has been cancelled, President Harding's illness beginning with an attack of ptomaine poisoning on the transport Henderson before arriving in Seattle.

For the first time an American president has stepped on Canadian soil and spoken to a Canadian audience. Realizing the significance of the occasion Thursday of last week the people of Vancouver gave him—Warren G. Harding—a reception that was impressive in its enthusiasm.

The president himself frankly admitted that neither he, Mrs. Harding nor the members of his party had been prepared for such a reception and declared that he regarded it as "new assurance that the United States and the Dominion of Canada will go along hand in hand and side by side toward fulfillment of the destinies of the two great democracies."

Speaking at the luncheon, he declared "the United States and Canada are doing more for human kind by the exemplification of neighborly friendship than any other two communities in the world."

* * *

As the presidential party were returning to Seattle from Vancouver, B. C., Friday morning, their ship, the navy transport Henderson, narrowly escaped sinking the destroyer Zellin, one of the escort ships, which, blinded by fog and battling with strong currents in the channel off Port Townsend, Wash., was thrown off its course and into the path of the Henderson. Both engine rooms of the Zellin were flooded, but all on board were safely taken off.

* * *

The chief feature of President Harding's visit to Seattle was his speech discussing the problems of Alaska. The president declared he had found that Alaska "is all right and is doing well." He added: "There is no need of government-managed, federally-paid-for, hothouse development. There must no reckless sacrificing or resources which ought to be held permanent in order to turn them into immediate profits. Where there is possibility of betterment in the federal machinery of administration, improvements should and would be effected. But there is no need for sweeping reorganization." He recommended more restriction on salmon fishing, the territory's greatest industry, while restrictions with respect to the utilization of the forests might well be lightened. Development of Alaska's coal mines must await time and the normal urging of economic conditions, he submitted, but the government should do whatever is necessary to encourage leasing and development of oil lands.

Other conclusions presented by Mr. Harding were that generous appropriations should be made for road building; that the federal government should be more liberal in encouraging the technical, scientific and demonstration work of the agricultural agencies, and that the government should retain ownership and operation of the Alaskan railroad.

The announcement of the president's attachment to the conservation idea is regarded as the first concrete result of his long journey into Alaska.

* * *

After nine months of haggling, the peace treaty with the Turks has been signed. How long it will last no one can forecast. It represents an amazing triumph for Turkey and the humiliation of Europe, is the comment of A. G. Gardiner, the well known editor of England. Turkey was one of the chief criminals of the war. Her treachery prolonged the war two years and cost the allies millions in money and hundreds of thousands of lives. The brunt of the war with Turkey fell on England and the complete defeat of the Turks gave hope that the prolonged infamy of their rule in Europe and the oppression of the Armenians and other subject races in Asia Minor and at last ended.

But this is all a dream. Turkey rises from defeat a rehabilitated and more securely entrenched nation than ever before. Her territory in Europe has been given back, Constantinople has been restored and Asia Minor is once more her own. Germany lies bleeding to death, but the unspeakable Turk rises refreshed from defeat, like a solitary hero of the war.

Farm Business and Markets Outlook

(Continued from page five.)

Prices per ton in carlots: Chicago—Choice timothy, $24@25; No. 1, 23@24; No. 2, $19@22; No. 1 light clover mixed, $19@22; No. 1 clover, $17@19; No. 1 and choice alfalfa, $16@25; midland prairie, $17@20; rye straw, $11@12; oat and wheat straw, $9@11.

Egg Prices Steady.

Heavy accumulations weakened the egg market early last week, but prices recovered on the moderately active demand which resulted and appear to be on a firm basis.

Butter Market Scores Advance.

Limited offerings of good butter insufficient to satisfy the demand and higher prices asked for foreign goods have forced the butter market higher. A material change downward is not probable. Production reports show a small decrease in the make, although weather and pasture conditions are excellent for a heavy production of butter. Storing of butter is going on freely, with accumulations at the four leading markets rapidly catching up with those of last year.

Because of firmer foreign markets, importations of butter were smaller last week, only about 1500 casks arriving at New York city from Denmark, Holland and Esthonia.

Prices on fresh butter on July 25 were, 92 score: Chicago, 39c; New York, 41c; Boston, 41c; Philadelphia, 41 1-2c.

Cheese Prices Lower.

Trading was very quiet in the cheese market last week.

Prices for No. 1 American cheese on July 25:

CHICAGO—Twins, 21 1-2@22c; single daisies, 21 3-4@22c; double daisies, 21 1-2 @22c; longhorns, 21 1-2@23 1-4c.

Fruits and Vegetables.

Potato prices continued to decline last week. Carlot shipments are considerably lighter than at this time last year, but are practically up to normal when compared with previous years. In addition, the supply of home-grown potatoes in the northern states is increasing so that the market for shipped-in potatoes in narrower than a month or two ago. Irish cobblers are quoted at $1.25 to $1.50 and Kansas Early Ohios at $1.25 to $1.35 per 100 pounds on midwestern consuming markets.

The movement of new crop apples is increasing rapidly, with shipments in the week ended July 21 of 910 cars, compared with 639 cars in the corresponding week last year. Prices have declined sharply and Yellow Transparents are quoted at $1.25 to $2 per bushel on the Chicago market.

LATEST QUOTATIONS.

PORTLAND, Ore., July 28.—Cattle—Choice steers, $7.50@8.00; medium to good steers, $6.75@7.50; fair to medium steers, $5.75@6.75; common to fair steers, $4.75@5.75; choice heifers, $5.00@5.25; choice cows and heifers, $4.25@4.75; medium to good cows, heifers, $4.00@4.25; fair to medium cows, heifers, $3.00@$4.00; common cows, $2.00@3.00; canners, $1.50@2.00; bulls, $3.00@4.00; choice dairy calves, $7.50@8.50; prime light calves, $7.50@8.50; medium light calves, $7.00@7.50 heavy calves, $4.00@7.00.

Hogs—Prime light, $8.75@9.25; smooth heavy, 230 to 300 lbs., $7.50@8.75; smooth heavy, 300 lbs. and up, $6.00@7.50; rough heavy, $4.50@6.00; fat pigs, $8.50@8.75; feeder pigs, $8.50@8.75; stags, subject to dockage, $2.50@5.00.

Sheep—Choice valley lambs, $10.50@11.00; medium valley lambs, $9.50@10.50; common valley lambs, $7.50@9.00; cull lambs, $6.00@7.50; light yearlings, $7.50@8.00; heavy yearlings, $6.00@6.50; light wethers, $5.50@6.00; ewes, $1.50@5.50.

SPOKANE, July 28.—Cattle—Prime steers, $6.75@7.25; good to choice steers, $6.25@6.75; medium to good steers, $5.50@6.25; fair to medium steers, $5.00@5.50; common to fair steers, $4.25@5.00; choice cows and heifers, $4.75@5.25; good to choice cows, heifers, $4.25@4.75; medium to good cows, heifers, $3.50@4.25; fair to medium cows, heifers, $2.75@3.50; canners, $1.50@2.50; bulls, $2.75@3.50; light veal calves, $7.00@8.00; heavy veal calves, $6.00@7.00; stockers and feeders, $4.00@5.25.

Hogs—Prime mixed, $8.50@8.75; medium, $8.25@8.50; heavies, $5.50@7.75; fat pigs, $8.25@8.50; stockers and feeders, $8.00@8.25.

Sheep—Prime lambs, $9.50@10.00; fair to medium, $8.00@9.00; yearlings, $6.00@7.00; wethers, $4.00@6.00; mutton ewes, $3.00@5.00.

THE GRAIN MARKET.

SEATTLE, July 28.—Wheat—Hard, soft and western white, $1; hard and soft red winter, northern spring, western red, 97c.

Grain futures: Wheat—Hard white, Bluestem, Bart, July, $1.03; August, $1.02; September, $1.01; soft white, July, $1.02; August, $1.02; September, $1.01.

Western white, July, $1.02; August, $1.02; September, $1.01; hard winter, July, 95c; August, 94c; September, 93c; northern spring, July, 95c; August, 94c; September, 93c; western red, July, 94c; August, 93c; September, 92c.

Corn—No. 2 eastern yellow, shipment July, $38.50 bid; $39.50 asked; August, $37 bid; $38.75 asked; September, $36 bid; $38 asked.

Mill run, August, $18 bid; September, $17.50 bid.

Hay—Buying price, new crop: Alfalfa, $16@16.50; clover, $13@14; cheat, $13; valley timothy, $18@19; oats and vetch, $15@16; oats hay, $14@15; straw, $9 ton. Selling price, $2 ton more.

PORTLAND, Ore., July 28.—Wheat—Hard white, Bluestem, Bart, $1.03; soft white, western white, $1.02; hard winter, northern spring, 95c; western red, 94c.

Today's car receipts: Wheat, 20; flour, 12; corn, 6; hay, 12.

WALLA WALLA, July 28.—Bluestem and Bart, 88c; Club, 87c; Turkey red, 80c.

DAYTON, July 28.—Club, 90c; red, 85c.

LEWISTON, July 28.—Red, 80c; white, No. 1, 85c.

RITZVILLE, July 28.—Bart, 85c; red, 82c; Fife, 80c.

ODESSA, July 28.—Bart and Bluestem, 85c; Turkey red, Marquis and Forty-Fold, 80c; Jones Fife, 78c.

HAY AND FEED GRAIN.

SPOKANE, July 28.—Wheat, feed wheat, $42 ton; oats, $42 ton; rolled, $44; corn, $44 ton; cracked corn, $46 ton; barley, $38 ton; rolled, $40; bran, $27 ton; bran and shorts, $30 ton; shorts, $30 ton.

PORTLAND, July 28.—Millfeed—City delivery prices: Millrun, $28 per ton; middlings, $40; scratch feed, $49; rolled barley, $37; cracked corn, $48; rolled oats, $45.

Hay—Buying prices, f. o. b. Portland: Alfalfa, $16 ton; cheat, new, $13@14; valley timothy, old, $26; new, $18; eastern Oregon timothy, old, $27; clover, $13.

GENERAL PRODUCE.

PORTLAND, July 28.—Butter—Cubes, extras, 40c lb.; prints, parchment wrapped, box lots, 42c; cartons, 43c. Butterfat, 41c delivered Portland; 38@39c station buying price.

Eggs—Buying price: White hennery standards, 26@27c per dozen; mixed color standards, 24½@25c dozen. Selling price, Front street; selects, 29@30c; candled ranch, 27@28c. Association selling prices, cash at store, selects, 29c; firsts, 27c; pullets, 26c.

Cheese—Prices to jobbers, f. o. b. Tillamook: Triplets, 27c; longhorns and loaf, 28c per pound.

Poultry—Hens, 15@23c; broilers, 20@25c; ducks, 15@22c; geese, nominal; turkeys, nominal.

Pork—Fancy, 12c per pound.

Veal—Fancy, 15c per pound.

SPOKANE, July 28.—Poultry, Live Weight—Hens, 4 lbs. and over, 18c; light hens, under 4 lbs., 12c; springs, 18@20c; old roosters, 8c.

Fresh Ranch Eggs—$5.50@6.50 case, according to quality.

Butterfat—42c lb.

BOSTON WOOL.

BOSTON, July 28.—The Commercial Bulletin quotes the following:

Domestic:

Ohio and Pennsylvania fleece—Delaine unwashed, 55@56c; fine unwashed, 48@50c; half-blood combing, 56c; three-eights blood combing, 55@56c.

Michigan and New York fleeces:

Delaine, unwashed, 53c; fine unwashed, 48c; half-blood, unwashed, 55c; three-eighths blood, unwashed, 55c; quarter-blood, unwashed, 48@50c.

Wisconsin, Missouri and average New England, half-blood, 52@53c; three-eighths blood, 52@53c; quarter-blood, 48@49c.

Scoured basis:

Texas—Fine 12 months, $1.35@1.40; fine eight months, $1.20@1.25.

California, northern, $1.35@1.37; middle county, $1.20@1.25; southern, $1.05@1.10.

Oregon—Eastern No. 1 staple, $1.38@1.40; fine and fine medium combing, $1.25@1.35; eastern clothing, $1.15@1.20; valley No. 1, $1.15@1.20.

Territory—Fine staple, choice, $1.40; half-blood combing, $1.25@1.20; three-eighths blood combing, $1.05@1.10; quarter-blood combing, 85@90c.

Pulled—Delaine, $1.30@1.31; AA, $1.20@1.25; A supers, $1.08@1.10.

Mohairs, best combing, 78@83c; best cardings, 70@75c.

Range of Live Stock Prices for Week Ending July 25

	Chicago.	Spokane.	Portland.	N. Salt Lake.
CATTLE.				
Choice and prime heavy steers (1100 lb. up)	10.50@11.75			
Good heavy steers	9.40@10.90			
Medium heavy steers	8.15@ 9.75			
Common heavy steers	6.75@ 8.25			
Choice and prime light steers (1100 lb. down)	10.15@11.35			
Good light steers	8.85@10.35			
Medium light steers	7.65@ 9.10	6.50@ 7.75	6.50@ 8.00	6.25@ 7.00
Common light steers	5.75@ 7.85	4.50@ 6.50	4.75@ 6.65	4.75@ 6.40
Common to choice butcher heifers	4.85@10.15	3.50@ 6.50	3.50@ 5.75	4.00@ 5.25
Common to choice butcher cows	3.50@ 8.75	3.05@ 5.50	2.50@ 4.75	3.00@ 4.50
Bologna and beef bulls	4.30@ 5.85	3.00@ 4.00	3.00@ 4.00	2.00@ 3.25
Canners and cutters, cows and heifers	2.75@ 3.60	2.00@ 2.75	1.50@ 3.00	1.50@ 3.00
Canner steers	3.25@ 5.50	2.50@ 4.00	2.25@ 4.00	2.50@ 4.00
Medium to choice light veals	9.00@11.25	7.00@ 8.50	7.00@ 8.50	6.50@ 7.50
Common to choice heavy veals	3.00@10.75	6.00@ 7.00	4.00@ 7.00	
Common to choice feeders (750 lb. up)	5.75@ 8.45			
Common to choice feeders (750 lb. down)	4.50@ 8.25	4.00@ 5.50		
Common to choice stocker cows and heifers	3.25@ 6.00			
HOGS.				
Top of market	8.10	9.00	9.25	7.15
Bulk of sales	6.40@ 7.90	8.00@ 8.85	8.50@ 9.10	6.50@ 7.00
Heavy (250 lb. up)	6.50@ 7.80	7.50@ 8.75	8.25@ 9.00	
Medium (200-250 lb.)	6.80@ 8.00	8.25@ 9.00	8.75@ 9.25	6.60@ 7.15
Light (150-200 lb.)	6.75@ 8.05	8.25@ 9.00	9.00@ 9.25	6.60@ 7.15
Light lights (130-150 lb.)	6.35@ 7.95	8.40@ 8.75	8.75@ 9.10	6.50@ 7.00
Smooth packing sows (250 lb. up)	5.75@ 6.60	6.25@ 7.00	6.00@ 6.50	5.75@ 6.00
Rough packing sows (200 lb. up)	5.50@ 6.25	5.75@ 6.25	4.50@ 6.00	5.50@ 5.75
Medium to choice pigs (130 lb. down)	6.25@ 7.25	8.50@ 8.75	8.75@ 9.00	
Stock pigs		8.25@ 8.50	8.75@ 9.15	5.50@ 6.00
SHEEP AND LAMBS.				
Medium to prime lambs (84 lb. down)	11.25@14.25	9.50@12.00	9.00@11.00	9.50@11.50
Culls and common lambs	7.50@11.50	7.00@ 9.50	6.00@ 9.00	7.00@ 9.50
Medium to prime yearling wethers	7.75@12.00	8.00@ 9.00	6.00@ 8.00	7.00@ 8.00
Medium to prime wethers	4.75@ 8.50	4.50@ 8.00	4.00@ 6.50	5.00@ 6.00
Common to choice ewes	3.50@ 7.00	2.75@ 4.50	3.00@ 5.50	2.75@ 5.00
Canner and cull ewes	1.00@ 3.50	2.00@ 3.00	1.50@ 3.00	1.50@ 3.00
Feeder lambs	10.75@13.00			

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Your Health

By Royal S. Copeland, M. D., F. A. C. S.

Have you ever noted the loss of amiability, the crankiness, the quick temper and the lassitude of a friend who has violated the rules of right living by staying up half the night, dancing a dozen miles and eating a big meal of unnecessary food? The morning after such foolish indulgence is marked by a charged atmosphere and the danger of a social "blowup." One should never have a night like this without bearing in mind the morrow.

Dr. Copeland.

Let me make clear at once that I would frown upon a life of austerity and foolish neglect of entertainment and recreation. "All work and no play make Jack a dull boy," but there must be temperate indulgence in social pleasures or their otherwise beneficial effect is lost in the curse of over-indulgence.

Too much of anything is a crime against nature, no matter what practice is under consideration. Too much food, too much of one kind of food, too much sleep, too much exercise, too much bathing, too much loafing, too much work—too much of anything will do harm.

One reason why country people think city folks lead abnormal lives is because the latter go to bed so late. The country is dull to the city dweller because going to bed at 9 o'clock seems terrible. In hours of sleep there is little actual difference. To bed at 9 and up at 5 strikes the city man as "unearthly." To bed at midnight and up at 8, or to bed at 1 and rising at 9—wicked hours to many a country-bred friend—is a practice which gives exactly the same period of repose the farm dweller has.

After all, then, it is not the number of hours, but the regularity of the life, the following of long-established custom, taking the usual hours and time for sleep—this is the thing which determines the well-being of the individual.

If you are in the habit of retiring at a certain time, you can not delay the matter three or four hours without suffering the effects of breaking a rule. Nothing is worse for your health than irregularity. There must be a regular time for all necessary acts, or trouble is on the way.

Choose your recreation and your social companions with the same care with which you would select your doctor or your lawyer or the stock for your farm. Don't take everything that comes along, and, above all else, don't meekly yield to the invitations of friends to do those things which are obviously bad for your health and efficiency.

Bits of Fun for Everyone

Young husband—Did you make those biscuits, my dear?

His wife—Yes, darling.

Her husband—Well, I'd rather you would not make any more, sweetheart.

His wife—Why, not, my love?

Her husband—Because, angel mine, you are too light for such heavy work.—Front Rank.

One Advantage.

"Which is the way to Ottawa, my lad?

"I—I don't know."

"Which is the way to Topeka, then?"

"I—I don't know."

"Well, can you tell me how to get back to Wichita, then?"

"I—I—I don't know."

By this time the drummer was quite impatient and said to the boy: "Say, you don't know very much, do you?" to which the lad retorted:

"No! But—but I ain't lost!"—Judge.

Getting Even.

Father (spanking Tommy)—Tommy, this hurts me more than it does you.

Tommy (silently)—I thought that board in my trousers wouldn't do you any good!—Answers.

Gave Him a Hoarse Voice.

"Say, Frank, you knew I was in the army, didn't you?"

"Yes, I did, George."

"Well, do you know we had horse meat?"

"How did you know it was horse meat?"

"Well, one day we were all eating at the table, some one said, 'Whoa,' and a piece of that meat stopped right in the middle of my throat."—Boys' Life.

A Fond Farewell.

Tom and Bill were late for school and were called to account for it. "What made you late, Bill?" asked the teacher.

"Please, sir, I was dreaming I was going to California, and I thought the schoolbell was the steamboat I was going on," exclaimed Bill.

"You did, eh!" said the teacher. "And now, sir," turning to the second boy, "what have you to say for yourself?"

"Please, sir, I—I was just waiting to see Tom off."—Onward.

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4166-4175. Ladies' Costume. Waist 4166, cut in six sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. Skirt 4175, cut in seven sizes: 25, 27, 29, 31, 33, 35 and 37 inches waist measure. The width at the foot is 2 1-4 yards. To make this dress with sleeves for a 38-inch size requires 6 3-4 yards of 40-inch material. Two separate patterns, 10 cents for each pattern.

4421. Misses' dress. Cut in three sizes: 16, 18 and 20 years. A 16-year size requires four yards of 32-inch material. The width of the dress at the foot is 2 1-4 yards. Price 10 cents.

4422. Ladies' dress. Cut in seven sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. A 38-inch size requires five yards of 40-inch material. The width at the foot is 2 3-8 yards. Price 10 cents.

4442. Juniors' dress. Cut in three sizes: 12, 14 and 16 years. A 14-year size requires 4 1-4 yards of 40-inch material. Price 10 cents.

4426. Ladies' house dress. Cut in seven sizes: 36, 38, 40, 42, 44, 46 and 48 inches bust measure. A 38-inch size requires five yards of 32-inch material. The width of the skirt at the foot is 2 1-8 yards. Price 10 cents.

4425. An attractive negligee. Cut in four sizes: Small, 34-36; medium, 38-40; large, 42-44; extra large, 46-48 inches bust measure. A medium size requires 4 1-4 yards of 40-inch material. The width at the foot is 2 5-8 yards. Price 10 cents.

3861. Girls' dress. Cut in four sizes: 2, 4, 6 and 8 years. A 4-year size requires 2 1-4 yards of 36-inch material. Price 10 cents.

4130. Ladies' apron. Cut in four sizes: Small, medium, large and extra large. A medium size requires 3 1-8 yards of 36-inch material. Price 10 cents.

4440. Girls' dress. Cut in four sizes: 8, 10, 12 and 14 years. A 12-year size requires 4 3-4 yards of one material 32 inches wide. Price 10 cents.

4228. Child's overalls. Cut in four sizes: 4, 6, 8 and 10 years. It requires 2 1-8 yards of 36-inch material for a 6-year size. Price 10 cents.

4433. A popular style. Cut in seven sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. A 38-inch size requires 2 1-8 yards of 32-inch material. Price 10 cents.

4434. Corset substitute. Cut in four sizes: Small, 34-36; medium, 38-40; large, 42-44; extra large, 46-48 inches bust measure. A medium size requires 1 1-2 yards of 36-inch material. For gussets of elastic or webbing three-eighths yard nine inches wide or wider is required. Price 10 cents.

Send 12 cents in silver or stamps for our up-to-date spring and summer 1923 book of fashions.

Please fill in this order and mail with remittance to:

PATTERN DEPT., PACIFIC NORTHWEST FARM TRIO, Spokane, Wash.

Enclosed find ..... cents for which send me the following:

Pattern No..... Size..... Pattern No..... Size.....

Pattern No..... Size..... Pattern No..... Size.....

Name .....

Postoffice..... State.....

R.F.D..... Box No..... St. No.....

Be sure to give the pattern number and the correct size.

"Come on and sit down. Kellogg's are all ready to eat"

Kellogg's Corn Flakes are all ready to serve. No trouble for little hands or mother's hands to prepare a meal where Kellogg's have won their way! No bothersome cooking, no pots to soak and scrape!

Make your breakfast of Kellogg's Corn Flakes instead of heavy, greasy foods and mark down how much better you feel; how much better you work or play. Kellogg's are satisfying and sustaining, but they give the stomach a chance to get going right!

Over a million packages of Kellogg's are made and sold every day. This means the daily use of more raw corn than a 450-acre farm can produce in a whole season.

As a special treat serve Kellogg's Corn Flakes with your favorite stewed fruit, or with bananas or other fresh fruit in season. Just great!

Kellogg's Corn Flakes are sold only in the RED and GREEN package that bears the signature of W. K. Kellogg. None are genuine without it.

Kellogg's CORN FLAKES

Also makers of Kellogg's KRUMBLES and Kellogg's BRAN

Mary Fassett's home is in the country in Whatcom county, Wash. She is 11 years old. Her birthday is August 16. Mary says she has five brothers. Their pets are eight cats and a dog.

Genevieve Gooley doesn't want the cousins and Aunt Nellie to think that she has forgotten us, and we don't think that, do we? Genevieve is 11. She will be 12 September 3. She says she likes to go to school very much and next term she will be in the sixth grade.

Aunt Nellie was happy to hear from Jesse Henderson of Yakima valley, southern Washington. Jesse is 7. He says he helps daddy with the hay. His birthday is November 27. (Aunt Nellie is going to give the penny to the Salvation Army, Jesse. Is that all right?)

Winona Evans plans to spend part of her vacation picking berries and camping at Jupiter beach, in western Washington, with her sister and her sister's friend. Winona's school closed May 18 and she went to the school picnic on the 19th. She likes to go to the pasture when it is feeding time for the little turkeys and help feed them. There are over 100 little turkeys on the Evans farm and also some little ducks. Winona is 7 years old. She has just completed the first grade. We shall expect to get another letter from her soon.

Mildred Anderson writes: "I have a nice garden. I planted beets, carrots and beans in it. When the vegetables grow large I am going to sell them. I had a nice trip to Long Beach. I am home now. Grace and I found a lot of shells on the beach. Some of the shells had barnacles on them." Mildred's home is in Wahkiakum county, Wash.

Radishes, carrots, beans, cucumbers, beets, lettuce and potatoes are all growing in Elsie Reifenberger's garden. The radishes and lettuce are big enough to use. Elsie, who is a Washington girl, is 11 years old. Her birthday is January 25. She thinks The Junior Farmer is a fine paper for children and little sister likes to read it, too.

This is our second letter from Percy Lawrence, an eastern Washington cousin. Percy passed her grade with a good general average and is ready for sixth grade work at school this fall. For pets she has four cats and a bantam hen that will soon be off with a flock of baby chicks. Percy has a garden with peas, lettuce, radishes, corn, beans and strawberries growing in it. She sends this joke: "Mamma, I want a dark breakfast," said Jimmie. "A dark breakfast! What do you mean, child?" "Why, last night you told Mary to give me a light supper, and I didn't like it," replied Jimmie.

Birthday Greetings

FRIDAY, August 3—Marguerite A. Campbell, 11 years old.

SATURDAY, August 4—Martha Ylonen, 8 years old.

SUNDAY, August 5—Lempi Lakko, 9 years old.

MONDAY, August 6—Camella Gertrude Nelson, 11 years old; Gertrude Betschart, 8.

TUESDAY, August 7—Irene Bernece Beardslee, 9 years old; Gertrude Thoni, 10.

WEDNESDAY, August 8—Magdalene Lindh, 10 years old; Anna Mantey, 11.

LETTERS WELCOMED BY AUNT NELLIE.

Among recent letters received by Aunt Nellie are those from cousins whose names follow. A few of these will be published each week in the regular edition of THE FARMER and others will appear from time to time in The Junior Farmer:

Lucile Downing, Milda Holmes, Leora Jobe, Gertrude Thoni, Alfred Miller, Arthur Olsen, Bessie Moon, Sulo Laine, Charles Pendergrast, Ellen Groonroos, Esther Miller, Jewel Field, Louise Roberta Scheel, Sue Eunice Mayberry, Eleanor H. Bemis, Elma Henson, Ethel Lucille Boawn, Mildred Eaton, Esther Walter, Vina Kimm, Alma Butorac, Ruth Davis, Antoinette Davis, Alma Marie Schneider, Ruth Pearson, Bernice Jones, Marguerite Hamilton, Linnie Gammon, Helen Smith, Randall Meyer.

BEDTIME STORIES

By THORNTON W. BURGESS.

CHATTERER DOES SOME SPYING.

Chatterer, the red squirrel, watched Jenny Wren out of sight, and all the time he appeared to be in a brown study over something. You know, Jenny had been gossiping. And Jenny had said that there were six of them! He shut his eyes and tried to picture six eggs in his mind.

"I must have a look at this bully and his wife," thought Chatterer.

Later in the morning Chatterer visited the old orchard quite as if he had nothing in particular on his mind. He jumped from one old apple tree to another, and every time he came near a nest he came in for a round scolding. But he didn't mind this. He was used to it. He scolded back, and to have heard the noise you would have thought that a dreadful quarrel was in progress, when really it didn't mean anything at all.

But Bully the English sparrow and his wife, who had moved out from the city, didn't know this, and they promptly bustled out to see what was going on. Bully noticed right away that Chatterer didn't offer to go very near any of the nests, so right away he made up his mind that Chatterer was a coward.

"If he comes over here I'll show him what is what!" boasted Bully, and strutted up and down for Mrs. Bully to admire his bravery.

Now, Chatterer was far too sly to get into needless trouble. When he saw the size of Bully he grinned in contempt. He wasn't afraid of a little fellow like that. Not much! It was going to be easier to get those six eggs than he had thought. Still, it was foolish to make more trouble than was necessary. Even a little bird could hurt sometimes when thoroughly angry, and then, again, birds had such an uncomfortable way of helping each other. Somehow he had a feeling from what Jenny Wren had said that the other birds

"If he comes over here I'll show him what is what!" boasted Bully.

would not help Bully if he got into trouble, but they might, and it was a great deal better to wait until the coast was clear.

So Chattered kept away from the house of Bully the English sparrow, but all the time he was watching all that Bully and Mrs. Bully did. You see, he was planning in that cunning brain of his to try for those eggs when Bully was away from home, and so he was learning by watching just how Bully spent his time.

That night Chatterer chuckled as he curled up in his snug bed. "Tomorrow," he said, "I will dine on eggs—six eggs! Um-m-m, I can almost taste them now!"

(Copyright by J. G. Lloyd)

Cattle Ranch to College

(Continued from page ten.)

dug in the early morning through the snow that had drifted during the night, and this work was added to the boys' regular tasks. The drawing of water had now become more difficult, for a hole had to be cut in the ice every time. Gathering wood, too, was not easy, since it was necessary to burrow for it through the white blanket of snow.

One of the men of the camp was a Swede called "Yumping Yim," because of his racial inability to pronounce the letter "J." He showed the boys how to make snowshoes or skis, long strips of wood curved up at the front, the bottom slightly concave to give a purchase on the crust and prevent them from slipping sideways, the top convex and rising slightly from toe and heel to the center, where the foot rested. The boys soon became proficient in the use of these and sometimes traveled considerable distances on them.

Exhilarating trips they were, over the crusted snow, when swift, breathless slides were taken down the hills, and skimming jumps from one level to another. It was on one of these trips that John and Ben saw for the first time a herd of buffalo, their great, brown, closely-packed bodies looking like an undulating sea of fresh earth against the whiteness of the snow. With them were large numbers of the antelope, these weaker animals profiting by the ability of the powerful buffalo to break into the drifts and uncover the scanty herbage.

The boys skimmed back to camp, and soon all the men formed themselves into a hunting party. Luck was with them. The whole party crept softly up, using every bit of cover that could be found. Then there was a whispered consultation, rifles were leveled, Mr. Worth kicked a lump of snow as a signal, and five guns barked out together. John and Ben dashed forward in wild excitement to find three antelope lying dead. Without stopping, the hunters pressed on after the flying animals, and by nightfall a row of antelope hung high up against the log portion of the dug-out. Since the boys had no rifles of their own and the family Winchester was in use, they had to be content with long shots with revolvers.

During the excitement following one of the volleys, Ben, who had lingered behind, saw what he thought was a wounded animal. He quickly raised his pistol and fired. As he did so, the figure rose and stood upright. It was Charley Green. His winter clothing, like that of the boys, was made of2 deepskin, his cap of the pelt of the muskrat—even his hands and feet were covered with deerskin, soled with buffalo hide. The deception had been complete, all too complete, Charley thought, when he heard what a narrow escape he had had. Ben shivered when he realized what might have happened, and registered a mental vow to let any future deer get away rather than run the risk of its being deer only in hide and man beneath.

The boys had learned to cut out and make their own winter deerhide clothing, caps, shirts, mittens and "packs," or boots, soled with buffalo hide, hair side in; so they always had plenty to do when indoors. Most of the days were spent on their skis. They learned many new things and many ways of getting along under their new conditions. For instance, a snow house had been dug in a big drift which extended out over the ice-covered creek, and a fire was built inside which speedily melted a hole through to the water. It was so much warmer under the blanket of snow that this did not freeze over. Through it the boys drew the supply of water and caught many a fine string of fish.

The long winter evenings were spent around the big fireplace, where the men made or patched clothes, told stories, played cards and smoked. The camp was cut off from the world by the miles and miles of deep white snow which overspread the land in every direction. There was no danger from Indians, for even they could not move under difficulties so insurmountable. Wolves nightly came down from the hills and left their footprints on the snow about the house, and especially under the row of frozen deer which swung on a high support—the winter supply of meat killed after freezing weather set in. Both night and dag the coyotes howled and answered each other from the high points round about, with their wuh, wuh, wuh-aou-u-u-u-u-wuh-wuh. On moonlight nights the scene from the front door was entrancing. The wide, white valley stretched up and down as far as the eye could see, and the reaching white ridges of snow and utter silence suggested illimitable distance. When the wind blew, the fine snow slid along the encrusted surface, making a noise like hissing water on a pebbly beach, while the finer particles, rising in the air, created lunar rainbows of surpassing beauty. Here indeed was loneliness, loveliness and solemn immensity.

(To be continued.)

Spokane Valley

(Continued from page three.)

so, but these two were large growers and were largely responsible for the break in the local market.

"The pool has handled 61,000 crates, 41,000 shipped out and 20,000 on the local market. As near as we can estimate, there were 20,000 other crates from the valley marketed here and these berries caused the price to break from $2.50 to $1.50 and $1.35 and even as low as $1.25. Had the remaining 20,000 been in the pool, the market would have remained at $1.75 and $2.

"If this pool is continued to handle tomatoes and other vegetables it will mean practically the operation of a jobbing house in Spokane by the growers. The Spokane county farm bureau is considering the same idea, and there is hardly room for two such organizations, I would think."

A. A. Kelly, a member of the farm bureau committee in charge of the work of organizing the cooperative marketing company mentioned by Mr. Peirce, explained the necessity felt by the members of the farm bureau for an organization to market farm products at a better return to the grower.

He said it was the idea of the committee that iron-clad contracts should bind the producer to market all his produce through the cooperative company. The idea of such a contract apparently did not make a hit with his auditors, though his speech was liberally applauded.

Finally a motion was made by N. Samish that the Spokane Valley Growers' union be requested to conduct the same sort of a pool for tomatoes and other vegetables as it conducted for strawberries under the management of Mr. Peirce.

"I have no authority for saying that the board of directors of the union will consent to this," said Mr. Peirce before putting the motion. "In fact, I know some of the members are opposed to it. But we can see what they say and you can meet here again prepared to make an estimate of what crops you will put into the pool. Then we can also have some sort of an agreement drawn up by that time and if the directors don't want the union to handle it, you can go in with the farm bureau."

C. J. Newar stressed the necessity of farmers having some sort of marketing organization, for he said it was rare for a man to be both a successful producer and a successful salesman of produce.

Poor Economy

To Push Raw Products on Market

"It is poor economy to sell crops from a farm in the form of raw products," according to G. H. Covey, of Toppenish, Yakima county. "It is wiser to furnish the products as near as possible on the farm instead of pushing the raw product on the market. Beef cattle, dairy cows, sheep, hogs and poultry are all used to work out my idea of selling the products of the soil, and I aim to have the increase on the place instead of selling the crops off the farm."

Feeding beef cattle in winter is a part of the scheme. Last winter he fed 70 head. Hogs are kept and at present there are 100 head of purebred Poland Chinas on the place. These are run in the orchard of his son, W. H. Covey, the tract being divided into 10-acre pastures.

"I believe in feeding on the place the grain that is grown on the farm," said Mr. Covey. "We are therefore keeping hogs and it pays to feed them out at 8 cents a pound and even at 7 cents a pound."

Chickens, Turkeys, Geese.

There are 600 head of chickens, turkeys and geese on the place. Four hundred purebred Rhode Island Reds are kept and the stock is the finest in the country. This has proved a good investment and Mrs. Covey has found that class of stock in demand.

Mr. Covey's ideas of utilizing sheep on the farm are interesting. He figures on getting range ewes in the fall and keeping them over winter. In the spring, the ewes, the wool and the lambs will all be for sale. In that way crops will be fed on the place in winter and the sheep go off the place in spring, as he does not regard it practical to keep sheep in any large numbers on the farm during the growing season.

Mr. Covey has secured 20 head of purebred Hampshire sheep and these with their lambs he is keeping on the farm. Each fall he figures to have some rams to sell and the ewe lambs will, of course, be kept in the home flock. The range ewes, which he will purchase in the fall, will be bred to purebred Hampshire rams, thus insuring good quality in the crop of lambs which go to market in the spring.

Grade Dairy Cows.

He is keeping a few head of grade dairy cows and does not figure, in his operations, to keep purebred dairy cattle as he does not care to develop the dairy line especially. He, however, said he believes that it pays to keep purebreds and on his own place is applying that idea to hogs, sheep and poultry.

As nearly as possible Mr. Covey plans to feed on the farm the hay and grain grown. "There will, of course, be some years when there will be some surplusage of hay or grain," said Mr. Covey. "There is no money in selling $1 wheat. Last year I retained 175 bushels of wheat and have fed that out to the poultry and other stock. I found that I did not retain enough, and am now having to buy. I think that even wheat can be fed to hogs and yield a profit, and it is better to do that than to sell it at the price offered.

Quick pasture is something which is needed, Mr. Covey said, and he thinks well of sweet clover and may use it to some extent in the future.

Would Eliminate Small Apples

"Ship no C grades during a car shortage" is the first step proposed by John R. Peters, orchardist of the Wenatchee district, toward elimination of small-sized and inferior apples.

Mr. Peters became noted three years ago through his persistent advocacy of radical thinning by Washington orchardists to reduce the proportion of small and inferior apples and to secure better shape and color. He has conducted demonstrations along this line all over his district and has spoken at two state horticultural meetings.

He now proposes the absolute elimination of the C grade apple altogether and claims he can prove that the grower would make more money on his crop if he raised nothing but the better grades. As the start toward the culmination of this objective, he suggests that shipment of C grades be barred by all shippers and marketing organizations during the season when cars are scarce.

Poultry and Egg

To Perfect Marketing Association

For the purpose of perfecting the organization of the Farmers' Union Poultry and Egg association, the organization committee will meet on the fifth floor of the New Madison hotel building, Spokane, Saturday afternoon, August 4, at 2 o'clock. At 8 o'clock that evening a general membership meeting will be held, with any other poultrymen interested in poultry marketing problems invited to be present.

The Farmers' Union Poultry and Egg association was formed some two months ago under the leadership of the Farmers' Union of Washington and northern Idaho, with J. Q. Adams, president of the union, serving as president of the organization committee. This organization committee, formed with a representative for each of the districts in the territory embraced by the farmers' union, consists of the following: A. W. Hoyle of Wenatchee, O. O. Groh of Clarkston, W. E. Hinshaw, Opportunity; D. F. Mitchell, Spokane; Fred Boyd, Garfield; Arthur Cox, Hay; L. S. Crossland, Grandview, and D. J. W. Murdock, Waterville.

It is the intention of this board to incorporate the association as early as possible after Saturday's meeting with a view to putting it in readiness to market the eggs and poultry of its members as soon as the contracts now being signed become effective. Contracts between the association and the individual producers become effective when the membership represents a total of 50,000 hens. There are at the present time between 30,000 and 35,000 hens represented in the contracts already signed and members of the board express confidence that the 50,000-mark will be reached in the near future.

As soon as the incorporation of the association takes place the organization board above mentioned becomes the board of directors of the association.

The state cooperative marketing law, however, requires that after incorporation a popular election by the members of the association must be held to elect members of the board. It is planned that this election of the poultry association will be held within 60 days after incorporation takes place. Under this provision the poultrymen themselves who belong to the association will have complete control of its operation and affairs.

The Farmers' Union Poultry and Egg association contemplates affiliation with the Pacific Egg and Poultry association, which is the marketing body for the cooperative poultry associations of Washington, Oregon and California, including the Washington Cooperative Egg and Poultry association, which operates on the west side of this state. S. D. Sanders, president of the association in western Washington, in a recent issue of the weekly publication of that association, calls attention of its members to the fact that the Pacific Egg and Poultry marketing organization has ceased to operate on the regular exchanges in New York and other eastern marketing centers, owing to what it considers unreasonable marketing charges. It has adopted the practice of marketing independently on what is known as the auction system, the eggs of the west being sufficient in quantity and of a quality to warrant the calling for independent bids by wholesalers.

Owing to the new system practiced by the Pacific Egg and Poultry agency, rumors have become current in the northwest that it has failed to meet the test in marketing the products of the producers of the Pacific coast states. Mr. Sanders' letter, however, and the figures cited therein, apparently deny this rumor, which certain leaders in the Pacific northwest feel to have been inspired by the speculators in poultry products in the eastern centers.

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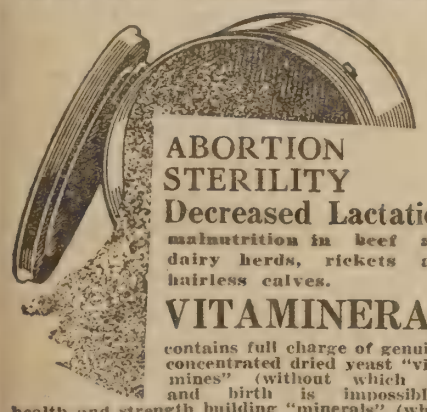

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News for Breeders

RECORD OF 422 POUNDS FAT.

A good example in Washington of the longevity of the Guernsey cow is found in Neetius, one of the foundation lot of seven females and one bull that Albion L. Gile of Chinook brought out from Wisconsin in 1907. Although 20 years old, she has been producing calves regularly (and a good majority of them heifers) ever since she arrived on the farm until last winter. Now her usefulness is thought to be about over. She has an A. R. record of 422 pounds of fat.

COMPLETES SILVER MEDAL RECORD.

St. Mawes Lad's Roxie, a 3-year-old, owned by Shortley Brothers of Orcas, Wash., has recently completed a silver medal record of 597.48 pounds of fat from 8672 pounds of milk. In this herd is a senior yearling which holds a state record for the Jerseys, and there is good possibilities for other creditable records to be made in a course of time at Channel View farm.

There are three other silver medal cows in Washington that completed their record last month. They are: Gwendola Rosaires Gertie, owned by John H. Taylor of Montesano; Cicely's Golden Dawn, owned by Midfields Dairy farm of Winlock, and Glen Tana Morocco Lois, owned by Mr. T. S. Griffith of Spokane.

Wheat Growers' Board

(Continued from page two.)

tional bank, Portland; J. K. McCornack, president Union Securities company, Spokane; Governor L. F. Hart, Washington; J. G. Kelly, Walla Walla; I. M. Hunt, vice president Ladd and Tilton bank, Portland; George Phillips, expresident Retail Merchants' association, Spokane; H. F. Samuels, Wallace, Idaho; J. Q. Adams, president farmers' union, Spokane; Soren Sorenson, president of farm bureau, Ellensburg, Wash.; Paul Weyerauch, president Blalock Fruit company, Walla Walla; John W. Langdon, vice president Baker Boyer bank, Walla Walla; Ben C. Holt, Holt Manufacturing company, Spokane; William Short, president State Federation of Labor, Spokane, and Nathan Eckstein, Schwabacher Brothers & Co., Seattle.

This committee will act in an advisory capacity to the grain growers. Each man has been chosen, according to Mr. Brown, because of his sympathy for the wheat men in carrying out their cooperative marketing plans.

Wheat Conference

The call has just been sent out by J. Q. Adams, president of the Washington and Northern Idaho Farmers' union, and other officers of that organization for a conference of wheat growers and others interested in the wheat marketing situation to be held in Spokane, beginning at 10 o'clock Monday morning, August 6. The purpose of the conference is to consider the present market situation in the hope of exercising some influence in bringing about congressional legislation or other government action designed to meet the present crisis among wheat growers.

Special invitations have been sent to Senators McNary of Oregon, Brookhart of Iowa, Borah of Idaho, Wheeler of Montana, Dill and Jones of Washington, Governors Hart of Washington, Pierce of Oregon, Moore of Idaho and Dixon of Montana, Congressman Summers of Washington, French of Idaho and others particularly interested in legislation affecting the farmers of the Pacific northwest.

Both Senators McNary and Dill have gone on record as favoring a special session of congress with a view to enacting emergency legislation.

While the call to wheat growers has been sent officially to members of the farmers' union throughout the wheat-growing counties of Washington and northern Idaho, the call extends an urgent invitation to all wheat growers regardless of their membership or nonmembership in the farmers' organization.

Farmers' Market Agency

"A government marketing agency, which is possible by speedy and drastic action at a special session of congress, is necessary to save agriculture from the impending calamity," Senator Smith W. Brookhart said here in addressing the farmers' union picnic in Iowa.

"This government marketing agency will offer only temporary relief," Senator Brookhart said. "A complete remedy is found in cooperative control of production, processing, credit and marketing by the farmers themselves.

Senator Brookhart said that in 1912 the farmer received $6,000,000,000 for his products, but that the consumer paid $13,000,000,000 for them.

"I visited 15 countries in Europe and found crops everywhere better than last year and very much better in Russia. I also found the purchasing power of the people of Europe is reduced because of the Ruhr invasion and the consequent unemployment in England and Germany.

"The speculators know of these facts and have beaten the price down accordingly, but have concealed them from the farmers as much as possible, fearing from them a demand for an extra session of congress. As soon as I return to make such a demand and broadcast it over the country the press says it will not be heeded by the president."

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Jersey Bulls ready for service. World's highest producing strains. St. Mawes Lad and Rinda Lad blood lines. Priced for quick sale.
SHORTLEY BROS., Orcas, Wash.

Jerseys Register of merit bull calf, dropped this month, for sale at $25. Golden Glow and St. Mawes blood.
ALLANDALE JERSEY FARM, Freewater, Ore.

Linn County Holsteins Cows, heifers, bulls and calves. Send for list. LINN CO. HOLSTEIN ASS'N.
GEO. A. McCART, Sec., Harrisburg, Ore.

Hollywood Holsteins A well-marked, fine individual heifer calf, reasonably priced.
HOLLYWOOD FARMS, Hollywood, Wash.

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For sale, at farmers' prices.
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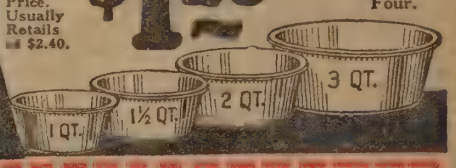

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THE WASHINGTON FARMER

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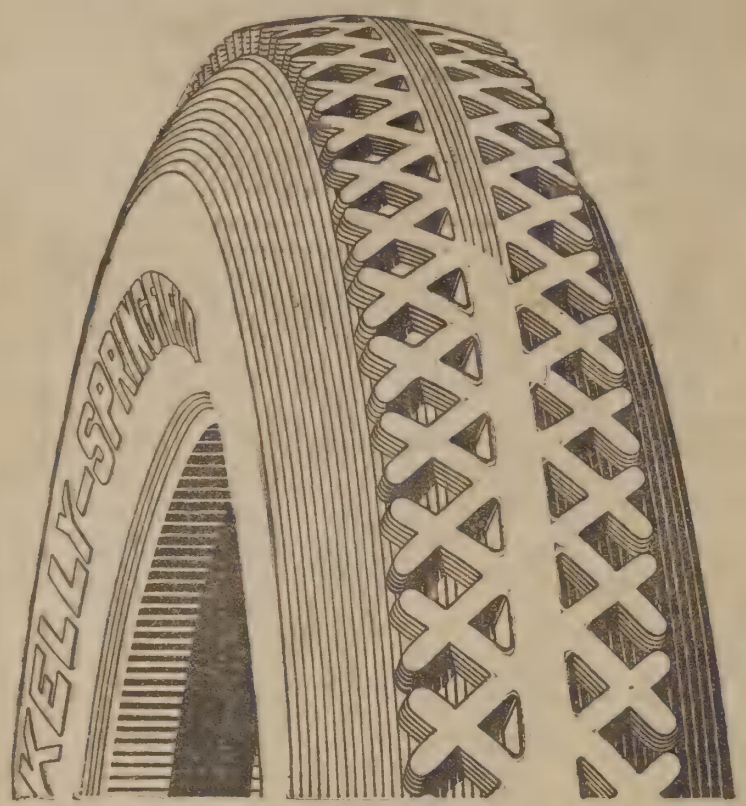
CALVIN COOLIDGE of Massachusetts
-30th President of the United States-

Cooperation Paves Way for Progress Among Berry Growers---Page 3

KELLY SPRINGFIELD TIRES



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Barreling Berries Saves Barrels of Cash

Cooperation Paves the Way for Progress Among the Fruit Growers in and Tributary to Lewis County

By GEORGE N. ANGELL

Fifteen carloads of pre-cooled fresh strawberries shipped to various eastern markets which had never before heard of Lewis county fruit; 1000 barrels of strawberries put up and awaiting shipment; a cannery which had been idle for two years in operation and employing from 80 to 100 people—with a list of accomplishments like this in one month to its credit, there is little wonder that the local branch of the North Pacific Cooperative Berry Growers intrigues the interest and commands the respect of the people of Lewis county and Chehalis. They give it an undoubted air of success.

It was about two years ago—August 21, 1921, to be exact—that the big cooperative was born at Seattle in the midst of the most disastrous berry season that the growers had ever seen, and following a series of meetings to discsus the situation, from Skagit county to Portland, Ore. G. N. Worden, Kitsap county agent, had spent considerable time with the growers of the district on the subject, and it was largely as a result of his activity that the organization meeting was called. By reason of its late start, the association accomplished nothing epochal the first season, and last year it took merely first steps by opening barreling plants at Seattle and Bellingham. This season, choosing central locations for separate units, it operates plants at Seattle, Burlington, Everett and Chehalis, and expects also to operate a cannery at Sequim, to handle the large volume of loganberries now being produced on the peninsula. In general, the success or failure of this association is expected to determine whether or not the bush and cane fruit grower of western Washington is to survive, and this story is of one branch of it which appears to be answering that question in the affirmative.

Southwest Washington Organizes.

The organization of a local in southwest Washington arose purely out of the need of growers in that district, L. G. Colyn, its president, member of the board of 24 directors of the North Pacific and one of five making up the executive committee, was heavily interested in growing berries at Onalaska, 16 miles east of Chehalis. There he and a brother, scions of a sturdy Dutch family that is still growing bulbs in Holland, had 20 acres in strawberries and were compelled last season practically to give away the fruit or let it spoil. They had milked cows for eight years, but quit, discouraged, just before the cooperative plant opened in Chehalis. The small fruit game looked good to them, as it did to others, but fields blood red with rotting berries soon greeted their sight.

"My personal experience with strawberries was such," said Colyn, "that I decided last fall it was a question either of plowing them up or of organizing an association and joining it. I don't need to give details, but wherever a grower has to market his berries independently he is sure to be held up by the retail dealer. The character of the product forces him to sell it every day, and it seems but human nature to take advantage of his helplessness and to offer just as little as conscience will allow.

Feeling thus, naturally Colyn took the stand, when the question of organization came up locally and meetings were being held, that the thing to do was to organize, and after organizing to investigate and decide whether to affiliate with the Growers, which then had no members in Lewis county, or to stand on their own feet. He was chairman of the committee appointed for the purpose, and upon investigation found that the Growers had a larger number of members in southwest Washington and that it would be almost impossible for a local association to thrive, with the North Pacific organized in its territory and competing for membership. Accordingly he went to Seattle for information regarding the "big brother," obtained it, and in January and February got the president, Dr. E. S. Barnes of Port Townsend, and the organizing manager, Carl J. Kallgren, to Chehalis for two meetings. Growers present practically all signed up; Colyn was made a director to represent the local; and since then the Lewis county local has organized further, with Colyn as president, Dr. D. T. Coleman as vice president, Mrs. T. P. Snively as secretary-treasurer and Henry Olson and T. P. Snively as directors, all from the vicinity of Chehalis.

Plant Is Leased.

Pesently the Washington Berry Growers' association of Centralia, which was a fruit and vegetable marketing organization of limited influence, disbanded for the purpose of giving its members a chance to join the North Pacific. This strengthened the latter materially, and after careful consideration it was decided to make Chehalis the center for southwest Washington business. For that purpose the plant of the Lewis County Canning association, a private corporation which had allowed its property to stand idle for two years after eight years of use, was leased for five years and a cold storage plant built for freezing barreled berries and for pre-cooling fresh ones for carload shipment. This began operation June 1, and, as previously stated, in one month 15 carloads of fresh berries were shipped to various markets, including El Paso, Omaha and Chicago, and 1000 barrels of the finest quality of frozen berries were put up. The first shipment of barreled stock went to New York city early in July, and barreling continued until July 15, with a total of about 12,000. It would have been larger had not the growers from Chehalis south in previous years found themselves without a market, and consequently held back their plantings.

Mostly Marshals, of large size, high quality and superior flavor, the strawberries of southwest Washington are particularly well adapted to barreling, and the strategic position of Chehalis points to the conclusion that it will one day be the center of an enormous business along this line. The prairie berry comes in three weeks ahead of the one grown south of Chehalis, hence with three big cold storage rooms, each 20x70 feet in size, the association can handle a tremendous tonnage from the one shipping point. Without casting any reflection on the municipal cold storage plant in Seattle, either, it may be said that the one in Chehalis has it by the heels for effectiveness of operation. Popping 20 or 30 barrels of strawberries and sugar into its arctic interior at night never sends its temperature above zero, and next morning regularly it reports back to 6 below. This matter of time required in cooling is of great importance, for berries and sugar ferment very quickly, and if fermentation even starts in the center of the barrel, freezing is thereupon rendered impossible. An interesting illustration of how the plant is designed to save the growers' money is contained in the fact that at first it was planned to barrel at Chehalis and ship to Seattle for storage. The cost there, however, would have been as much or more than in Chehalis, and in addition there would be freight charges of $2 per barrel, totaling $20,000 in five years on the estimated output of 2000 barrels annually. Freight rates east are the same from Chehalis as from Seattle, and extra handling charges are avoided, hence it may be said that one of the first things the new plant saved was a barrel of cash.

The quantity of strawberries canned was small, but a large pack of raspberries and loganberries was in contemplation, and as many Evergreen blackberries will be put up as can be marketed. The plant is well constructed and its position is advantageous for handling a large pack of this berry economically. Practically all the gooseberries grown in southwest Washington were handled here, and, while the acreage is not large, the industry is of growing importance. The association may or may not attempt apples. Under its organization plan and the state marketing act it can handle only fruit grown by members, but arrangements are being made to handle next year some kinds of vegetables, in order to spread out the "overhead" over a larger part of the year.

Market Is Strengthened.

Probably it is too early to make any predictions as to what ultimate effect the existence and operation of the North Pacific association will have on the berry business, but certain it is, from the testimony both of its officers and of disinterested, competent Lewis county observers that with around 60 per cent of the 700 acres of strawberries in southwest Washington under one control this season, the general tone of the local market has been noticeably strengthened. And by what if not by such existence and operation? President Colyn cites one illustration particularly in point. The Oregon Packing company of Vancouver bought strawberries from independent growers of the district this season, assembling in Winlock and Chehalis and shipping from Kalama. At the latter point its price was 5 1-2 cents, while at Winlock and Chehalis, within the sphere of the association's influence, it paid 6 1-2 cents and assumed transportation charges to Kalama. There is no reason to expect anything else, according to Colyn, who adds that "there is no reason, either, why this Chehalis plant should not develop into a great institution, for southwest Washington has the soil, the climate and all other requirements for raising wonderful fruit. The thing that development of the industry has been waiting upon is for farmers to find a suitable market for their product."

"Are the members pretty well satisfied?" was the question put to D. N. Wehrn, who has general supervision of all the association plants, and who was formerly in the employ of one of the biggest packing concerns in the country. "They are satisfied of this," he came back, "that if it had not been for the association they would have been selling their berries for less than the cost of crating them. I know the canning game from both sides, and I know that the farmer hasn't a chance of the cooperative association."

Example of Dairymen.

"What would the price of milk be in Lewis county now if the dairymen were not together in their big organization that is capable of manufacturing first-class dairy products, advertising them and putting them on the market? It is the same with the strawberry growers," asserts J. C. Bush of the Bee-Nugget. "A year ago, with a much smaller crop of strawberries than we have this season, the market was 'shot to pieces' and many berries were left on the vines. This year the North Pacific Berry Growers are operating the cannery, barreling and selling fresh berries by the carload, and there will be a market for every berry. The association has found markets for the farmers' berries that no individual farmer could find."

"Yes, the Growers are doing an invaluable work here, in my estimation," says T. J. O'Connor, secretary of the Citizens' club of Chehalis. "Independently the farmer can not reach broad markets, and the result is a local glut which returns him no profit at all. I consider cooperatives a necessity if satisfactory returns are to be obtained from farming."

County Agent R. G. Fowler acquiesces and Theodore Albert, district horticultural inspector, says that, while December 31 will be a much better time to answer the question of what he thinks of the Berry Growers than now, still there is no doubt that through their existence and operation this season's market has been stabilized. "One has only to recall the chaotic conditions of last season to be sure of that," he affirms.

Better Homes Lead to Better Community Privileges

By M. MINERVA LAWRENCE
Home Management Extension Specialist, W. S. C.

Community interest is only the result of the development of home interest. A splendid example of this development may be found among the women of Chewelah.

The women of this northeastern community in Washington were anxious to do something for their town, so they met and formed the Women's Civic Improvement club, the first step toward community work.

Through the assistance of the extension service of the state college the members of the club were given help in improving their own homes and later received the inspiration of improving conditions in the community.

A city library had been started, but lacked a permanent abode. Near the center of the town was a two-room house and two lots which had reverted to the city because of failure to pay taxes. It was an old place and had become somewhat of an eyesore to the people.

The idea developed among the members of the improvement club that the house and lots could be fixed up attractively and made into an ideal place for a library and park. The city authorities were approached, with the result that the property and $100 in cash were turned over for library purposes.

Plans were made for repairing the house, finishing the interior and making it into a suitable library building. A color scheme was worked out, using gray paper for the walls, ivory for the woodwork and furniture and the curtains of a light tan, figured with blue and old rose. Linoleum was used to cover the floors. One unique furnishing was the window shades made from wall paper of the same pattern used on the walls.

As the house had only two rooms, a front room and kitchen, all that was necessary was the taking out of the partition between them, leaving a room 16x20 feet for the library.

All the work of repairing and furnishing was done by the women except the taking out of the partition between the two rooms and the building of the bookcases. A local carpenter made the cases of plain finished lumber, using wall board for doors. Different women gave suitable furniture, such as chairs, library table, settee and reading table.

Chewelah city library.

The children of the community were not forgotten in the enterprise, for the women purchased a gate-leg table, cut it down, secured unpainted children's chairs and finished all in ivory to match the woodwork. This equipment is located in one corner of the library room especially for a children's nook.

Paint, floor covering, wall paper and draperies cost the club $34. As mentioned before, the city gave $100, which was added to by the Young Women's Business club to the amount of $10, while the proceeds of the open house tea held at the formal opening of the library brought in $40 more.

A schedule has been worked out among the women to care for the library during the week, so as not to burden any one of the 45 women who are members of the club. Mondays, Wednesdays and Fridays from 1 to 5 o'clock the library is open for adults, while Saturday from 1 to 5 is given over especially for the children. On children's day some one in the club prepares and gives a story hour.

The story of the Chewelah library would not be complete without mentioning the names of Mrs. Van Bennett and Mrs. F. L. Reinoehl, who have held the position of chairman and associate chairman of this community enterprise.

Not satisfied with their efforts in library building, the club women are now fitting up the grounds around the building for a park. Lumber, secured from the old outbuildings, is being made into seats and tables for picnic purposes.

What these Chewelah women have done for their community may be duplicated in many of the rural sections of Washington.

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Successor to
THE RANCH, PACIFIC DAIRYMAN, HORN AND HOOF.
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Busy Bees

Eighty pounds of honey in 10 days is the record announced by M. J. Leak of the Yakima valley for one of his hives. The bees were provided with complete but empty frames.

Mr. Leak reports better success with his bees than for several years. Last year he lost 50 stands of bees from spray poison, but this year he has not lost any.

Community Building for Entiat

Entiat is busy on a community building project, according to E. J. Murphy of the Times newspaper. The American legion post owns two lots and it is now thought probable that a hall will be erected on these lots which can be used as a gymnasium, auditorium and club room for the legion, Boy Scouts and any other organization which wishes to use it.

It is expected much of the work on the building will be contributed by the citizens.

Fruit growing, live stock and other farming interests of that section of the state doubtless will wish to avail themselves of some of the privileges of this community building.

Community spirit generally grows into a community building.

Prove Out the Market

The gooseberry is attracting the attention of the Clallam county growers. P. B. Gedelman of Blyn reports that pickers gathered 2159 pounds of berries from 475 plants on a half-acre tract and that the berries found a ready market at an Everett cannery. J. A. Thompson of Dungeness also reports that he got a total of 2410 pounds of berries from his 570 bushes on his half acre.

Just now the growers are enthusiastic over the returns, the two-year-old plants netting the owners more than $100 to the half acre. In their enthusiasm over the gooseberries, some are estimating a return of $800 an acre from the matured gooseberry plants.

Conservative berry growers in Clallam county will go into gooseberry growing on a rather small scale until they prove out the market.

Hobbies and Hobbies

Men possess all sorts of hobbies. There are hobbies that do no special good to the possessor or the community, like the miser's hobby of counting and recounting his store of gold and bonds. Other hobbies give variety and interest to community life.

There is Charles D. Tuttle of Clarkston, just across the Snake river from Lewiston, in Asotin county, who is an enthusiastic dahlia grower. On his lot of 75-foot frontage he has a collection of 125 plants that he is growing from tubers and 275 plants grown from seed. His neighbors report that he is doing wonderful work in originating splendid new varieties. Others enjoy his plants in the garden, and a throng of visitors exclaim over them at the shows.

It is not related whether Mr. Tuttle is making money out of his hobby. That he is giving much innocent pleasure to others as well as himself goes without the saying.

Tourist Crops as Well

While the Yakima valley enjoys receiving its tens of millions of dollars for its agricultural crops, it should not ignore the beginnings of its tourist crop. According to estimates made of the number of tourists that have been stopping at the Fraternal park in Yakima and at the two privately owned camps on the road to Selah this season, at least $100,000 will be left in the valley.

The government estimates that the average expenditure for each tourist per day is $5. About 15,000 persons, it is expected, will stay at the camp during the season, which would amount to $150,000, since they stay, on an average, two days each.

Tourist travel through Yakima this year is expected to be one-third more than the total for last year.

Sentiment Dominates Life

Sentiment dominates when it gets a good hold on a man's life. Here is the case of James H. Adams, the Ritzville pioneer, whose death occurred the other day.

Over half a century ago Mr. Adams took off his old gray Confederate uniform and religiously saved it for his shroud. During his life he often took out the uniform and looked at it, thinking of the time when he should put it on again for the great campaign, and at last the day arrived. Clothed in the full glory of his old habiliments, he was laid away to his final rest.

Mr. Adams was born in Pennsylvania county, Virginia, 78 years ago and served in the Confederate army throughout the Civil war. He loved the south with an intense passion and was proud that he had fought for its cause.

We are far enough away from that terrible conflict to appreciate the loyalty and the fealty to an idea which dominate men sincerely on both sides.

"Words" in Fruit Marketing

If you are a fruit grower and have not done so already, write to the horticultural division of the state department of agriculture, Olympia, Wash., for the 1923 edition of the grade and pack rules. You will be interested in the definitions given to certain words.

For instance, "mature" means having reached a stage of maturity which will insure proper completion of the ripening process; "clean" means reasonably free from dust or dirt and free from excessive visible spray residue; "well formed" means having the shape characteristic of the variety in the locality where grown.

It is well to be posted on many other words and terms in the grade and pack rules.

Lopsided Clubs

The surest way of building up a community is build up one home after another in a community. That seems to be the method chosen by Miss Lawrence in prosecuting her work as home management extension specialist of the state college, as brought out in her article found elsewhere in this issue of The Washington Farmer.

There is altogether too much attempt these days to make homes better through various homeless social institutions, such as men's clubs, women's clubs, and young folks' societies. These are makeshifts in social progress, waste much effort and produce many misbegotten results.

The home club is the basic club and a federation of home clubs can do things in community welfare.

The home club includes the man, the woman, the child and the youth. Take away any one of these constituent members of the home club and you have a lopsided club.

Present day society is simply overrun with lopsided clubs.

A county agent leader, not in Washington state, said not long ago that he was abandoning the hurrah method of interesting farmers in better farming; that meetings even with big speakers did not give satisfactory results. He was using a different method. Under his direction the county agent was making it his aim to visit as many of the homes in the county as possible, and in the home atmosphere talk over individual farm problems. This apparently much slower method was getting far better results; that the farther way around was proving the shortest way home.

Have we failed to build as we should upon the enduring rock of the family as an institution rather than erecting more showy social structures upon the sands of segregated humanity, segregated by sex, age, politics and what not of classes and conditions among men?

"Oversubscribed"

Probably the requisition made by the United States department of agriculture has been "oversubscribed" many times for 1200 bedbugs at 1 cent each for good, choice specimens delivered at an experiment station in Virginia.

The news item does not state for what particular purpose the specimens are desired.

Alfalfa as a Hay Crop

A. N. Taylor of Jamestown, Clallam county, harvested 42 tons of fine alfalfa last year from seven acres of land and sold the third crop in the field for $60. The production of alfalfa is an advantage in any dairy community, especially in western Washington, since as a hay crop it comes at different seasons from the common hay crops, and often misses the early summer rains.

Washington State Gleanings

Nearly 725 carloads will be shipped out of the Walla Walla valley, according to C. B. Auker of the Walla Walla Gardeners' association. John W. Langdon estimates the receipts at $500,000. Growers are getting 300 to 500 sacks an acre and returns will be about 2 cents a pound

BUYS 800 ACRES OF TIMBER.

The Edwards-Bradford Lumber company, Elk, has purchased 840 acres of timber east of Tweedie and Blanchard. The tract is part of the holdings of the Fidelity Lumber company, bought by A. F. Horton a few weeks ago.

The Elk company's railroad and logging operations are being extended to the headwaters of Blanchard creek to holdings in the vicinity of their recent purchases.

ACQUIRES BIG STOCK RANCH.

The 2760-acre stock ranch of P. R. Bevis and Bevis Brothers of Lewiston, located 12 miles from Anatone, in the Grande Ronde district, has been acquired by R. J. Hilton of Spokane in exchange for a third interest in 320 acres of land, 70 of it in orchard, west of Yakima.

The ranch, which three years ago was valued at $60,000, has five complete sets of farm buildings. A quantity of farm machinery and 140 head of Herefords goes with the property. The land west of Yakima is owned by the Cascade Orchard company, one-third of the stock of which is being transferred to P. R. Bevis and Bevis Brothers.

ESTIMATE CROP YIELD.

The Yakima reservation will set a new high figure for production, according to an estimate being prepared by Lester M. Holt, supervising engineer, for transmission to the federal agricultural department, notwithstanding the general decline in prices for farm produce. There are about 88,000 acres under cultivation, and the average return an acre at present prices is, according to this estimate, $80.

That this is a high average is conceded, when it is known that much of the reservation crop consists of hay, grain and other low-priced produce. Alfalfa is planted on nearly 40,000 acres, this being in excess over last year of 5000 acres, which in turn about equals the difference in potato plantings between last year and this. Last year's potato acreage was 9500, while this year there are but 5570 acres planted.

Wheat, running from 15 to probably 45 bushels an acre, claims 12,250 acres, as against 15,659 last year. There are 2500 acres planted to corn and 20 to hops. The total value of produce is placed at more than $7,000,000 by Mr. Holt, against $6,000,000 last year.

CLEANING UP POTATO BEETLE.

W. E. Johns, deputy horticultural inspector of the state, objects to the publication in The Washington Farmer of a statement that the Colorado beetle is very prevalent on the Pasco side of the Columbia river and that there are enough beetles on the Kennewick side to infest the entire district by next year; that the menace is not so much in the large fields, as the growers there are spraying and keeping the fields clean; but it is in the small patches grown for home use and in the back yards in the towns that there is neglect. In his letter protesting against this publication, Mr. Johns writes: "I gave an interview to the Kennewick Courier, it is true, but I did not intend this article to be published broadcast. As a matter of fact, that article was intended as a warning to the growers of what might happen, rather than a statement of what had already happened, as the article would lead people to believe. Now I would like you to publish an article in your next issue stating the facts in regard to the situation here. The state department of horticulture has put on a cleanup campaign in both Kennewick and Pasco districts and the situation is now well in hand. The department intends to put on a follow-up program next spring and by another year should have the pest entirely eradicated."

Economic Cooperation

Invented by the 23 Flannel Weavers of Rochdale

United States Senator Smith W. Brookhart of Iowa was the chief speaker at the annual picnic of the Trades and Labor assembly at Minneapolis last Sunday. We find much in his address, as reported by the Associated Press, to commend and approve, but also something to question. Particularly we liked that part that urges the farmers to organize and engage more extensively in economic cooperation.

The history of mankind shows that nothing can quite take the place of self-help. As Senator Brookhart said, "This is not a wild and untried theory; it is the oldest, soundest, most enterprising and most successful business venture that has ever been promulgated in this world. It is as aggressive as the spirit of the crusader and it is as gentle as the Sermon on the Mount. It is known as economic cooperation, and was invented by 23 flannel weavers, the equitable pioneers of Rochdale."

What we questioned in the Iowa senator's address was the practicability of his proposed political alliance between organized labor and the farmers. Take the wheat growers, for example. Wheat is selling in the Inland Empire at from 80 to 90 cents a bushel. Before the World war had run up the cost of living and the prices of all the commodities that the farmer must buy, this would have been a profitable price at which to grow wheat in this region. But it is not profitable now, for one plain reason—the cost of growing wheat has increased for the farmer, and also his cost of living has grown. The farmer has had to fall back on the pre-war level of prices of agricultural products; but transportation and manufacturing have not fallen back with him, and the chief reason that they have not fallen back is higher wages, shorter working hours and easier working conditions in the factories and at other places where labor is employed.

It is plain that the farmer must sell his exportable surplus at prices that can be paid by the cheaper labor of other countries. And with wheat, at least, the exportable surplus fixes the price for the American market.

The government has protected the American manufacturers with the tariff, and that also protects the wage earners employed in the factories. It has further protected labor by restricting immigration, the effect of restriction being to help the American Federation of Labor to corner the labor market. We are not saying that restriction of immigration is undesirable; on the contrary, we believe it is necessary. But we are talking about economic facts and the effects of this restrictive legislation.

Nor are we saying that protection has not been a help to the farmers. The emergency tariff law was a great help to American agriculture. But the tariff protects the manufacturers and organized labor more than it protects the farmers.

Now, there is no possible way by which legislation in this country could raise the general price levels of agricultural commodities throughout the world. We have to carry on agriculture in the United States substantially on the basis of the world's price levels, and that is where the farmer is pinched. American labor is not brought down to the level of world wages; it is high above that level. And for that condition, which of course is good for labor, the farmers and all other consumers must pay.

What Others Say

Wallace's Farmer: Our point is that married men and women who are educating their children and accumulating a moderate amount of property to leave to them, should rightfully assume a more direct leadership in national affairs.

Rural Neew Yorker: Much ridicule has been in the past heaped upon the goat, but she is living it down and making good. Continued selection and breeding will increase her milk yield. It may seem a ridiculous statement to some of our people, but as population increases and the cost becomes more thickly settled the goat will play a large part in dairy production. She is what you may call a "comer," and it will not do for us to make any mistake about it.

Orange Judd Farmer: There is also much opportunity for profit awaiting those persons who readjust their hatching schedule, so that pullets will mature in early fall, and the bulk of eggs are laid at the time of highest prices in November, December and January.

National Stockman and Farmer: Anybody notice boys being ruined by companionship with parents in work and play? Is the boy who goes fishing with dad unwilling to work with him? Is the boy who gets a fair deal in his little business ventures anxious to leave home or sorry to return? Is the boy who is taught that things and responsibilities are "ours," not merely dad's, any worse for it?

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Wheat Selling Problem

President Brown Says Growers Must Fix Their Own Price.

After a trip through eastern Washington, W. J. Brown of Minneapolis, president of the American Wheat Growers' association, discussed the wheat growers' problem with frankness, understanding and courage. "Even if the special session of congress were called, it is doubtful if the states that produce wheat could muster strength to meet the states that consume wheat," said President Brown.

President Brown concludes that "the only solution lies in cooperative marketing, the growers themselves controlling 75 per cent of the national production and fixing their own price on their own product." He believes that the farmer will be best served by self-help, and that no great reliance can be put on governmental action or the sort of friendship that the wheat growers are offered by self-seeking politicians.

There is the further fact to be considered in this connection, that farmers who grow wheat are but a small minority of the agricultural producers of the United States. One obtains a clearer realization of that fact from a recent statement of the United States department of agriculture, forecasting the production and value of 12 of the principal crops this year. If marketed at the prices ruling on July 1, the department estimates that these 12 crops would bring the growers at the farm a little more than $7,000,000,000. The department's estimates and calculations are tabulated as follows:

Corn	$2,488,605,000
Cotton	1,493,400,000
Hay	1,159,516,000
Wheat	780,771,000
Apples	346,169,000
White potatoes	317,442,000
Barley	110,286,000
Sweet potatoes	106,818,000
Peaches	86,462,400
Oats	54,570,000
Flaxseed	43,506,000
Rye	39,983,400
Total	$7,027,522,800

In round numbers the corn crop exceeds the wheat crop in value by nearly three times; the cotton crop will bring the growers nearly twice as much, and the hay crop about 50 per cent more. Even the value of the apple production will be nearly half that of the wheat crop.

It is well to keep these facts in mind in order that the subject may be considered in its broad national bearings. The wheat growers are but a fraction of the agricultural producers, and a still

(Continued on page twelve.)

FARM BUSINESS AND MARKETS OUTLOOK

URBAN prosperity appears likely to continue for the rest of the year at least. Manufacturing communities are still operating at close to capacity, wages remain at the peak, in most lines goods have not accumulated, and the seasonal expansion of buying during the fall will probably keep the wheels of industry humming and the channels of trade flowing freely. This spurt should help to maintain broad domestic consumption of most farm products, but it promises but little real improvement in the farmer's position.

Beyond this fall and early winter, conditions do not look so favorable. Another wave of demands for increased wages is starting. If granted, these will mean either higher prices to consumers, who already show some signs of balking, or a lack of profit for the employer who will take the alternative in some cases of closing down. In either case some unemployment appears to be in prospect.

A great deal of pessimism over European affairs has been generated in the last few days. German finances are deplorable. Her thirty trillions of marks have depreciated until they are worth only about twenty-five millions American dollars, providing her a circulating medium equivalent to less than 50 cents per capita. French exchange is selling at the lowest point reached in 1923. Other European countries are not making much real progress toward normal industrial output.

Whether these indications of future business prove true or not, it is up to all sensible folk, whether they live in town or on the farm, to husband their resources, to reduce expenses wherever possible, to make every cent count, waiting hopefully for the clouds to roll by.

Prime Steers at $11.75.

Prime heavy steers reached $11.75 at Chicago last week, registering a new high mark since January. Such cattle are becoming scarcer practically every week and are demanding a notable premium over yearlings. Steers not grading better than good took "the low road" during the week and declined 25 cents. The few corn-fed cows and heifers arriving held their own, but undergrade she stock lost ground. Bulls had a sharp setback of 75 cents at Chicago, probably because of the usual early cleanup by the range.

Stocker and feeder prices declined 25 to 50 cents during the week.

Hog Market a See-Saw Affair.

The hog market keeps working up and down rapidly without getting far in either direction.

Low prices for hog products are stimulating enormous domestic consumption and packers continue to report a moderate increase in export business.

Slump in Lambs Halted.

About 15 per cent fewer lambs arrived at the leading markets in the last 10 days and the slump in prices, which has been under way for several weeks, was halted.

Breeding ewes and feeder lambs were slightly higher. Choice thin lambs are selling practically as high as fat ones. Breeding ewes are bringing $6.50 to $11 per 100 pounds at Chicago.

Improved Tone in Wool Persists.

The wool market continued to show an improved tone last week.

In the bright wool states wool is gradually changing hands at a range of 45 to 50 cents, with some delaine clips held at 55 cents. Consignment is the order of the day in the west, although a few sales at 40 to 48 cents are reported. Eight months Texas wools have sold at 39 to 46 cents.

Wheat Prices Cover Narrow Range.

Wheat prices have not been particularly stable in the last two weeks, but the range covered by fluctuations has been relatively narrow. Further declines are unlikely to be severe, but conditions do not seem to favor material advance in the immediate future.

The world's wheat crop in 1923, counting the last harvests in the southern hemisphere, is placed at 3,318,000,000 bushels, or 214,000,000 bushels over last year, according to a compilation by the International Institute of Agriculture. The European crop, exclusive of Russia, is 155,000,000 bushels more than last year and only 33,000,000 bushels short of the record crop of 1921. Broomhall reports an increase of 10 to 12 1-2 per cent in the acreage for the next Argentine crop. On the other hand, a sharp reduction in the area to be planted in the southwest is indicated by official returns.

Corn and Oats.

The corn crop is at the most critical stage of growth when an ample supply of moisture is necessary.

The oats harvest is well advanced and primary receipts are increasing, although low prices are curtailing the movement to some extent.

Cash Grain Markets.

The range of cash grain prices for the week ended August 1 was:

CHICAGO—Wheat—No. 2 red, 96 3-4@99 1-4c; No. 3, 96 1-2@99c; No, 2 hard, 96 1-2@99 1-2c; No. 3, 96 1-2@98 1-2c. Corn—No. 2 mixed, 86@90 1-4c; No. 2 yellow, 86 1-4@90 3-4c; No. 2 white, 86 1-4@90 1-2c. Oats—No. 2 white, 39 1-4@44 1-2c; No. 3, 38@41 1-2c; No. 4, 36@38c. Barley—56@69c.

Seed and Feed.

Prices for red clover seed advanced sharply last week as a result of dry weather and impaired prospects for the new crop.

TOLEDO, per bushel—Prime red clover, $10.80; prime alsike, $10.15; prime timothy, $3.20.

A slight advance in feed prices occurred last week.

Hay Market Steady.

Receipts of new hay are increasing at western markets and prices have weakned at these points.

Eggs, Butter and Cheese.

Good eggs are gradually becoming scarce and are widening their premium over ordinary grades.

Buoyed by a sharp advance in the make, due to unfavorable weather conditions in the principal producing sections, with subsequent defects in receipts, a shortage of more than 5,000,000 pounds in holdings at the four leading cities, as compared with last year, and higher foreign markets, butter prices advanced sharply last week.

Fruit and Vegetables.

The long decline in potato prices came to a halt last week.

Shipments of peaches have increased sharply and prices have been declining.

(Continued on page sixteen.)

President Harding's Legacy to His Country

While Warren G. Harding's father was a country physician, his son was essentially a farmer boy. His boyhood and early man hood were lived in a farm environment. He was a country boy, going to ■ country school, doing the chores that go with country life, and earning his first dollars at odd jobs of farm work.

The new president, Calvin S. Coolidge, also was a farm boy, brought up amid farm surroundings and getting the fine inspiration of wholesome rural life. His father, though running a country store, also had a farm, and the Coolidges were farmers for generations. When President Coolidge took the oath of office last week and the nation's interest turned to the new family that is to occupy the White House, the interesting news came out that Calvin Jr., a youngster of 15, had left several days before for the Coolidge home at Northampton, Mass., planning to earn spending money during his vacation by working on a farm.

Harding and Coolidge, like most other presidents, started life as poor boys and carved their own way to eminence and success by industry, self-denial and thrift. With the constant aid of Mrs. Harding, Mr. Harding had amassed a moderate competence through his newspaper property before he was elected to the United States senate, but the Coolidges can not be said to be possessed of even a moderate competence. When Mr. Coolidge was governor of Massachuseits he had no automobile, and when the family were called to Washington upon his election as vice president, they could not afford to rent ■ house in that city of high rentals and have been living in a boarding house.

We speak of these circumstances in the lives of the president called by death and his successor because they show the fine benefits of the simple rural life and are proofs that we have not drifted from the moorings of the fathers of the republic as some alarmists would have us believe. The farm and its influence still are potent in our national life, in the government of the republic and the states. Wealth can not buy the presidency, and the careers of Harding and Coolidge stand as an inspiration and an encouragement to country boys to follow their shining example.

It is as true now as it was in the days of Andrew Jackson and Abraham Lincoln that the poor boy who has the right qualities can lift his eyes to the shining heights and aspire to the greatest prizes in the gift of the American people.

Facts About Harding.

Facts about Warren G. Harding:

Birthplace—Corsica, Morrow county, Ohio; born November 2, 1865; was therefore, 58 years old.

Education—Attended Ohio Central college; graduated Iberia college, 1882.

Occupation—Newspaper man since 1884.

Business—Ex-president of Harding Publishing company, publishers of the Marion Star at Marion, Ohio.

Church—Baptist.

Family—Married to Florence Kling of Marion, Ohio, July 8, 1891.

Career—Member Ohio state senate 1900-1904; lieutenant governor of Ohio 1904-1906; United States senate from Ohio 1915-1921; republican nominee for president June 12, 1920; elected president November 2, 1920.

Harding Administration.

Here are the constituted high points in the events of the Harding administration:

Reestablishment of peace with Germany and Austria.

The calling of the arms conference which approved the naval limitation treaty and the four-power pact.

Ratification of the treaty with Columbia resulting from partition of Panama.

Revision of the tax and tariff laws.

Restriction of immigration.

Farmer aid legislation with particular reference to easier credits on more liberal terms.

Establishment of the budget bureau.

Veto of the soldiers' bonus bill.

Extension of the program of aid for wounded, sick and disabled veterans of the World war.

Advocacy of American participation in the world court.

Mother and Wife.

For 15 years before she died, Warren Harding's mother never failed to receive from her son his regular Sunday gift of flowers. The Harding family was one in which mother and father did not, in their old age, lost close attachment with their children. George T. Harding, the president's father, was complimented on his influence in raising a son who became the leader of his country. "It was not my influence that governed Warren," he said, "but his mother's. Through all his life he has thought of her in connection with everything he has done."

Phoebe Dickerson Harding was an intensely religious woman, who found her greatest opportunity for service in her skill as a midwife, a skill sorely needed by prospective mothers on the farms of half ■ century ago. She gave religion to her children, and she gave them also the beginnings of their education.

Of the many thousands of people who flocked to see and hear the late president on his trip to the Pacific coast, none will be able to think of him without at the same time thinking of the bright-eyed, eager woman, who was constantly at his side and whose friendly smile and warm handclasp she was glad to bestow on all who came. Florence Kling Harding married a struggling Ohio country editor in 1891, eight years before he entered politics, and with him suffered many tribulations before there were triumphs to enjoy.

Florence Harding threw her energies into the task of helping her husband make the Marion Star a success. She early saw that he had a future in politics, and encouraged him to undertake the hard work that political success in Ohio necessitates. As the Star had prospered, so Warren Harding's political career continued constantly upward, but there were, of course, moments of doubt and discouragement, when her presence at his side was invaluable in giving him confidence to go ahead.

It is a pity that President Harding was called by death before the American people had come to a full realization of his greatness and the beauty of his strong, patient, kind character. The able addresses he gave upon the western tour that brought him to his death by the shores of the Pacific were awakening the country to a clearer understanding that it had shown good judgment when it elected Warren G. Harding in 1920. We say that without partisan bias, because the qualities that made Mr. Harding a fine, dependable president are just as valuable and just as entitled to respect and support when they are found in ■ democratic aspirant.

Warren G. Harding.

The speeches made by President Harding upon his western tour show the depth of his sincerity and his high regard for the home and the institutions and influences that better the home. Believing that his own words reveal more clearly than any that we could utter the fine character, high purpose and devotion to duty of the man who spoke them, we have gone painstakingly through his western addresses and give herewith a worthwhile collection of golden nuggets:

We want the west to be a land of homes.

The use of the streams for power is inevitably tied in with reclamation.

There can be no issue in this land paramount to that of enforcement of the law.

The common weal transcends every other interest and puts aside every obstacle.

One of the troubles with the world today is that it is torn with suspicion and hate.

I believe the destiny of this new world republic was written by an infinite hand in the consciousness of divine intent.

It is doubtful if there is in the world such a region of varied opportunity and universal wealth as this mountain empire of yours.

I may say, in passing, I have come to a new realization of the importance of the study of geography in public schools.

We must have a policy of reforestation that will preserve the national interests, and at the same time permit use of the timber as it is needed.

It is not desirable that the west should fall into the hands of some bonana corporations, seeking to exploit it for the profit of stockholders who live somewhere else.

I tell you, my countrymen, you can prosper no one section of our country and make it a permanent good without its being of equal value to the people of the entire United States of America.

The longer I live and the more I see of communities and human beings, the more firmly is my belief established that the sweetest thing in the world is the friendship of a few dependable friends. This is the happiness that makes a life of contentment.

I should like more of fraternity among ourselves in the United States; I should like more of fraternity among the nations of the world, and if we apply the Golden Rule, about which none of you will dispute, for we all believe in it and admire it— and the only trouble is we do not practice it as we believe it—if we could bring the Golden Rule into every phase of American life, we would be the happiest people in the world.

With all good intention the majority sentiment of the United States has sought by law to remove strong drink as a curse upon the American citizen, but ours is a larger problem now to remove lawless drinking as a menace to the republic itself.

I should like to have America a little more earnest and thoroughly committed in its religious devotion. We were more religious 100 years ago, or even 50 years ago, than we are today. We have been getting too far away from the spiritual and too much absorbed in our material existence. It tends to make us a sordid people.

You people of the Inland Empire might well remind your critics that during the uncounted centuries when the greatest civilizations had their seat on the Euphrates and the Nile, they were nurtured by an agriculture which depended on irrigation; on conserving and utilizing the waters of a few great streams.

No habit is so easy to form, none so hard to break, as that of reckless spending. And on the other side, none is more certain to contribute to security and happiness, than the habit of thrift, of savings, of careful management in all business concerns, of balanced budgets and living within incomes.

If I could urge upon the American people a single rule applicable to every one of them as individuals, and to every political or corporate unit among them, it would be to learn to spend somewhat less than your income all the time. If you have debts, reduce them as rapidly as you can; if you are one of the fortunate few who have no debts, make it a rule to save something every year.

Service is both the inspiration and the accomplishment of quite everything worth while which impels us onward and upward. With service which the Nazarene would approve are associated all our ideals and our finer aspirations. We accept the doctrine for ourselves, as we ought, because we must be firmly established and healthfully and hopefully strong ourselves before we can be effectively helpful to others.

But for the spirit of cooperation, the willingness to be mutually helpfull, the determination to give first place to the interests of the community you could not have made your west what it is. Working cooperations on a great scale, practical in operation and adequate to cope with our problems, can never be possible except where there is this spirit, determination and purpose.

Keep your eye everlasting on those who administer your governmental units for you; your town, your county, your state, your national government. Make them understand that you are applying the rule of thrift and savings in your personal affairs and require them to apply it in their management of your public affairs. If they fail, find other public servants who will succeed. If they succeed, give them such encouragement and inspiration as will be represented by a full measure of hearty appreciation for their efforts.

Because I am holding temporarily a position of official prominence, I have been privileged in being invited into association with many of our so-called secret fraternal societies. I find that each of them has as its foundation and the reason for its existence the furtherance of brotherhood and the Christian virtues of charity, mercy, justice and brotherly love. Moreover, the practice of these virtues has been suggested by the ways of happiness in the daily lives of men. For example—and I am sure it will be no breach of faith to relate it—I was admitted into a fraternity of Alaskan Pioneers and I was obligated never to kick a dog, or to work a horse with a sore back or shoulder

Now that was a simple thing that Christ himself would have urged; it was an expression of mercy and affection by these pioneers for the brutes who could not speak a protest, of considerate concern for a life of service. On the whole, I am well persuaded that many tenders of fellowship have come to me because men wish to have practiced in official life the teachings of brotherhood and friendship and sympathy which have sweeted their own pathways.

Stop getting repair bills for your roofs!

Whether or not *you* keep up your shingle roofs —or *have* it done—you'll be glad to know that Oronite Shingle Oil saves you money and labor in the care of your buildings.

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Bee and Honey Exhibits at Fair

By GEORGE W. YORK

I think all will agree that the usual, as well as the unusual, interstate, state and county fairs afford the very best possible opportunities to interest the public in the sweet product of the beehive.

Of all the many insects in this world, there probably is not another that is so entertaining and profitable to study and work with as the little honey bee. Surely there is no other whose main product is so valuable as a food for mankind.

I have yet to see the man or woman who is not interested in becoming better acquainted with the life and history of honey bees. They are an ever fascinating subject of conversation as well as study and investigation.

Attractive Displays.

Bee culture lends itself in so many ways to the possibilities of making very attractive as well as educational displays. What with the live bees under glass, their wonderfully and delicately constructed combs filled with liquid sweetness, and the healthful qualities of their honey, all placed before the amazed view of the public, we have a combination for exhibition that is seldom equaled.

In attempting to give some directions for the preparation of exhibits of bees, honey and beeswax for fairs, it will not be necessary to follow them invariably, for often the suggestions I may make can be greatly improved upon, and will be by the beekeeper who adopts, as well as adapts, them for his own use.

First, I would show bees both in full hives and nuclei. The sides of both boxes (we will call them) should be glass, so that the bees and broodcombs can easily be seen.

The nucleus box should be made to hold one, two or three broodframes, with the queen, worker-bees and comb. Several of these boxes should be with each individual exhibit.

Comb Honey.

Next as to the honey: It should be shown in the comb and in the extracted forms. The comb honey in the usual 4 1-4x4 1-4 square boxes or sections will appear to better advantage if it, too, could be shown back of glass in some way. Artistic designs can be made by piling up the little boxes of honey in various forms. No matter how they are arranged, the result is bound to attract attention, and be admired.

As to showing extracted honey (that removed from the comb), I would suggest that it be put into small glass jars of various sizes, holding from possibly one-half pound to three pounds each. It is also well to have some nicely labeled tin cans and pails of retail size filled with liquid honey. The three sizes of 2 1-2, 5 and 10 pounds are just right.

It will make a more impressive display to omit all labels from the glass jars.

Several completed extracting frames of honey also add to the display. These can be hung on the wall or stood up on a table.

The arrangement of both the comb and extracted honey on shelves rising one above the other on a receding incline is perhaps the best plan. Then if a row of electric lights can be placed back of the shelves it will help to show off the honey to better advantage. Covering the shelves and the space between them with white cheesecloth, starting from the top shelf and going down, helps to give a cleaner and neater appearance to the whole display.

Beeswax Display.

Now as to beeswax: Usually there are two awards offered,—one on a quantity of beeswax (say, 20 pounds) and the other for "designs in beeswax." The quantity may be in molded cakes of various shapes and weights, the whole totaling the required 20 pounds or whatever the amount may be.

As to special beeswax designs, some use home-made molds, such as ears of corn, fluted caketins, or anything else that will make a unique formation of beeswax. I once saw an exhibit of beeswax made into a long chain of large, heavy beeswax links. Another, by the same exhibitor, was a miniature reproduction of the Lincoln monument located at Springfield, Ill., all made of beeswax. This was really a work of art and must have required much time and labor to construct it.

The live bees in hives and nucleus boxes, as well as the beeswax exhibit, may as well be placed on a large table where they can be viewed by the public.

Perhaps from the foregoing the reader, if he desires, will prepare a rather original exhibit, as he will vary the suggested plans by adding his own good ideas.

Of course, there should always be in addition to the bees, honey and beeswax a complete exhibit of the implements or physical equipment used in a modern apiary, such as hives, supers, sections, comb foundation (made of sheeted beeswax), bee smoker, bee veil, honey extractor, etc.

Just Folks

The promisor qualifies the promise.

The biggest thanks are for escapes.

Borrowed clothes promote strutting.

What you can not do may save you.

A dash of carelessness appetizes action.

Memory accommodates the trickster. Memory even plays many pranks with the innocent.

Seventy-five years worthily lived shown out of the kindly eyes of a New Hampshire farmer. I was directed to his home and farm on the top of the hill as the man who could tell me of the folks and happenings of 40 years ago. I found him near the house harvesting hay in company with even an older man. He at once left his work and with an unmistakable fellowship, gave his time and thought and heart to my inquiries. He was born and all his life had lived on that hill. He was sincerely attached to his home and to his church. The world might wag as it would and the world did wag, as tourists traversed this section, but they left no impression on his simple life. "Mother" had just been through a serious illness and his kindness and consideration pervaded the household. I repeat, his farm, his family and his church made up the full complement of his life.

This father in Israel had a sense of humor withal, which had evidently enlightened the years of toil. I asked him about Sam Blackie, the stage driver, his old neighbor across the way. Sam was reputed to be the outstanding driver of coach and six in his day. He was a kindly man, full of nerve as well, but somewhat free of language on occasions. He had been dead some years and his kindly deeds were gathering as moss over the memories of his free speech. "Yes," said the old farmer. "Sam had his good points. Our minister used to say that he would have hope for Sam's future if he should happen to die at a prayer meeting."

The half hour's visit with the old New Englander added something inexpressibly tender to my recollections of his home and I hope I may never forget the benediction of his presence and of his farewell. E.A.S.

HOME SUFFICIENCY.

The home should be self-supporting.

Prizes for 1923 Fairs

Offers of prize money for the fairs of 1923 by the Holstein-Friesian Association of America, conditional upon the awards being made by official judges named, cover northwest fairs as follows: Idaho State fair, Boise, 30 per cent cash to be paid on general classification; Oregon State fair, Salem, 20 per cent cash; Pacific International Live Stock show, Portland, $2000, to be paid as special prizes and $750 as state herd prizes; Washington State fair, Yakima; Southwest Washington fair, Chehalis, and Spokane Interstate fair, Spokane, 25 per cent cash, each. No other dairy show in the country, not even excepting the national, to be held at Syracuse this year, receives more money from this association than does the Pacific International.

The list of official judges contains the names of George S. Bulkley, secretary of Carnation Stock farms, and of John L. Smith, Spokane. That of H. H. Kildee of Iowa State college, who will judge Holsteins at the Pacific International this fall, is in the list also.

SHALLOW, CLEAN LITTER.

Shallow, clean litter is better than deep, dirty litter, but it is far better when both deep and clean.

Keep Silo Profits on the farm

PROFITS from the use of a silo should be kept on the farm—not spent for the repair of decay caused by rain and sun. Silos should be protected from the deteriorating action of the elements by "*Fuller Film.*"

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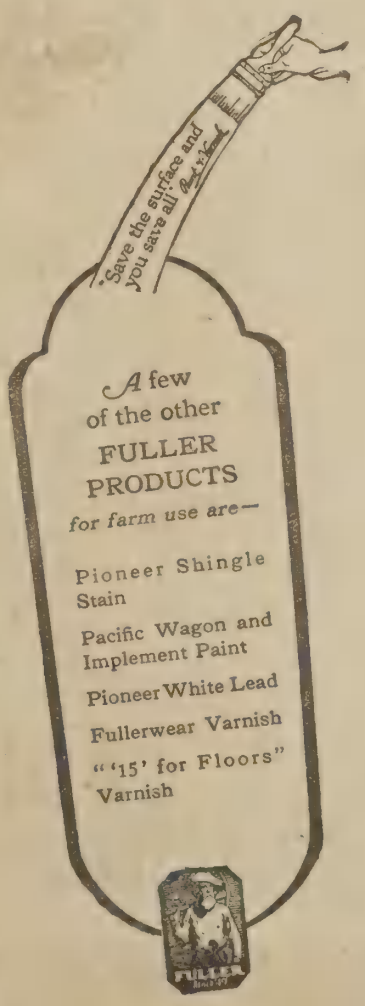

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LIVESTOCK AND DAIRY

Milk Goats

In Their Prime From Four to Six Years of Age

By E. V. ELLINGTON, Head of Department of Dairy Husbandry, State College of Washington.

How much milk should a good goat give? Not an expensive goat, but a good grade. How old should she live and give milk? How do you judge a milk goat by points? How do goats compare in price with cows? F. R.
Tacoma, Wash.

The production of milk, of course, depends upon breed and age, but a good milk goat should produce two quarts of milk daily over a period from seven to 10 months. A doe that produces three pints a day is considered only a fair milker. It is more accurate to say that a good doe should produce from eight to 15 times its weight in milk in a lactation period. A doe weighing 120 pounds would produce 1200 pounds of milk.

Goats are in their prime from four to six years of age, but individuals of good producing ability may be kept to good advantage for several years longer. In selecting a milch goat much the same points are to be considered as those found in a good dairy cow. She should have a feminine head, thin neck, sharp withers, well defined spine and hips, thin thighs and rather small bone. The skin should be soft and pliable. She should have large digestion capacity as shown by a well sprung rib and like the dairy cow should clearly show the wedge shape which is indicative of a good animal. Strong constitution is shown by depth and width of chest. The udder should be of good size but should not be meaty and the teats should be large enough to make milking easy. In other words select does of dairy conformation and avoid those that seem to be fleshy.

We have a cow that gives lumpy milk. Sometimes she goes a long time without giving lumpy milk. We give one-half gallon millfeed night and morning and she is on a good pasture. She was fresh last November. MRS. G. C.
Chelan, Wash.

The cow has apparently slight attacks of garget. These attacks may come on when she is in heat or when subject to sudden change. All such light attacks may come from a variety of causes. It is generally believed that certain bacteria of the streptococus group are responsible for udder troubles, but if the animal is in good condition it will resist such attacks. Any condition of the animal that lessens the power of resistance makes it possible for the trouble to start. Such a condition of the animal may be brought about by slight injury to the udder as a bruise, exposure to severe weather, lying with the udder on a cold floor, etc. In many cases, however, no special cause can be assigned.

Whenever this trouble appears the cow should be milked with great gentleness and preferably three or four times a day. A physic should be given at once to keep the bowels open and a tablespoon of saltpeter night and morning for two or three days. Prompt action is always advisable lest the condition become chronic. In such cases it is always well to consult a qualified veterinarian.

Would like information on making cheese from skim milk or separated milk.
Ione, Ore. MRS. E. T.

CHEESE FROM SKIM MILK.

Much the same directions may be followed in making cheese from skim milk as is used in making cheese from whole milk. Use rennet and set the milk at 86 degrees F. A dairy thermometer should be available to regulate the temperature. The amount of rennet used is adjusted so the milk "sets" in 35 to 40 minutes. The ordinary amount is about two teaspoons for each 100 pounds of milk. The rennet should first be mixed with a pint of cold water, then added to the milk. Stir the rennet thoroughly and let the milk stand undisturbed until curdled. If there is even the slightest motion of the milk while curdling the curd will not be firm. The container should be covered to keep the surface of the milk from cooling.

When the curd is firm it is cut with a cheese knife. It is first cut lengthwise of the vat with a horizontal curd knife and then crosswise with a vertical knife.

As soon as the curd is cut it should be stirred to keep the cubes from sticking together. About 15 minutes after the curd has been cut, start to heat the whey. Whole milk curd is heated to about 100 degrees Fahrenheit. Skim milk whey is heated to 90 to 92 degrees. The whey should be heated sowly and raised about two degrees every five minutes. The reason for heating the skim milk whey to a lower temperature than the whole milk whey is that heating expells water, and in skim milk cheese we need more moisture than in whole milk cheese. Skim milk cheese tends to become too dry unless we leave a lot of water in the curd. The stirring of the curd while it is being "cooked" should be done carefully so as not to break up the cubes. They should remain clear.

From four to six hours are required to firm the curd in the whey. The whey is drawn off gradually as the curd firms. The curd cubes are usually about half as large when firm as they were when first cut. A way to test the curd is to take a mass of it and press it between the hands. Then if the pieces fall apart at once when the pressure is released the curd is of the proper firmness.

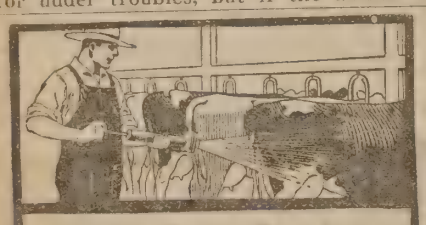
After the whey is drained off salt is added. About three ounces of salt to ten pounds of curd is used. If you like carraway seeds a small amount may be added at the same time as the salt. The curd is now ready to go into hoops or such other forms as you may wish to use. Some precaution is necessary to avoid wrinkles in the cheese, caused from unevenness in the cheesecloth wound around the curd. The cheese is put under light pressure for a couple of hours and then put under high pressure for 12 to 20 hours.

The cheese may be put in a brine bath for one to three days and is then ready to put in the cheese curing room. It should be allowed to cure for two or three months at least before it is ready to use.

Very little skim milk cheese is made in America. People in various countries in Europe use some. But even in Europe the cheese makers say no one has the right to expect them to make a skim milk cheese that is really good. They recommend using from one-third to one-half whole milk. This makes the cheese a fair quality. Skim milk cheese becomes dry and hard and then folks do not want to use it. The rind therefore should not be allowed to crack or get too dry.

SKAGIT COUNTY RECORDS.

Some of the outstanding records made by Skagit county cows for the month of April are: Skagit Susa Pontiac, senior 4-year-old, owned by Lee Brothers, in the Holstein seven-day test produced 488.4 pounds of milk and 27.586 pounds of butterfat. Bluster's Lad's Lily, a junior 2-year-old, owned by H. S. Ruley, in the Jersey AA tests produced 7671 pounds of milk and 440.41 pounds of butterfat.



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to civilization? Yes. And the live stock industry is dependent upon the Veterinary Profession. You may be well qualified to take up the study of this essential profession. Live stock production depends upon it. Write to E. E. WEGNER, Dean, College of Veterinary Medicine, State College of Wash., Pullman, Wash.

LOOK AT THE GOOD FARM BARGAINS THAT ARE OFFERED ON THE FARMERS' "WANT AD" PAGE THIS WEEK.

Fruit Boxes

Will Cost Wenatchee Growers $2,400,000 This Year

The record-breaking apple crop of the Wenatchee district, estimated at between 16,000 and 17,000 carloads, will require no less than 12,000,000 boxes, costing the grower 20 cents each, or $2,400,000, that must be spent for this one itme alone. The 1200 cars of summer fruit will require over 1,000,000 boxes, costing over $100,000 more, a total of $2,500,000, that must be expended for containers. If all these boxes were shipped in by freight care they would fill over 2000 ordinary box cars, making 20 solid trains of 50 cars each. Most of them are made in the district, however, and only have to be shipped a short distance, either by train or truck.

No less than 200 carloads of wrapping paper must be shipped into the district to be used in packing the apple crop, and this paper will cost the growers about $1,000,000 more, or $3,500,000 for boxes and paper combined. Ordinary paper will sell this season for 10 cents a pound, 1 cent less than last year, a saving of about $100,000 to the growers of the district. About one-third of the crop, however, will probably be packed in oiled paper, which will cost about 14 cents a pound.

Another item of expense that is usually given scant consideration is that of nails to be used in making up the shooks into boxes, and in bulkheading the cars when they are loaded. No less than 17,000 kegs of nails will be used for these purposes, filling 17 cars to utmost capacity when shipped in. The total cost of these nails will add another $100,000 to the grower's costs, making $3,600,000 that must be expended for boxes, paper and nails before the 1923 apple crop is ready for market. And these materials would fill 2117 box cars, more than one-eighth as many as the whole crop of apples would require when ready for market.

Grain Meet Delayed

On account of the death of President Harding, the meeting of wheat growers and public officials called for August 6 by the Farmers' union, to be held in Spokane, was postponed until Monday, August 13. On that date it is expected that a large number of persons, both farmers and others interested in the stabilization of the wheat market and the establishment of a fair price to the producers, will be present. The question will be taken up of ways and means to secure a price for the 1923 crop that will pay cost of production, which it is claimed by growers and others familiar with the facts that present market quotations will not do. The matter of a special session of congress to enact relief legislation along this line will be taken up.

Applies Super-Phosphate

Super phosphate is showing outstanding results on hay and other crops in almost all parts of western Washington. Zeno Blank of Sedro Woolley has a field of hay on his farm and he applied super phosphate on a strip running through the center of the field, making about one-fourth of an acre plot. It was applied at the rate of 250 pounds per acre and the crops yielded from one-third to one-half more hay than any other portion of like size in this field. The super phosphate was applied last spring and harrowed in at the suggestion of H. C. Bergstrom, the county agent. According to Mr. Bergstrom this result as reported by Mr. Blank bears out the fact that phosphate is very often lacking in soils and that its application is a profitable practice.

CLUB MEMBERS AT GRANGE PICNIC.

Members of the Othello Pig club exhibited their pigs and took part in a judging contest at the Bruce grange picnic. Clarence Wilson won first in the judging, with Edith Ruckert second and Paul Fox third. Prizes were provided by the grange. Instructions in club work have been given by County Agent N. C. Donaldson.

Prepare for Crowd

At Southwest Washington Fair

Secretary George R. Walker, Chehalis, is making great preparations for the Southwest Washington fair. He hopes to have the largest entry of cattle ever seen in western Washington. The added 20 acres that the Lewis county commissioners bought last year gives the fair a chance to spread out and cover more ground. There will be plenty of room for parking cars within the grounds, and camping places will be furnished those who want to come for the week. Centralia and Chehalis are both blessed with lots of hotel room and the two towns are making every preparation for the crowds that are coming.

The poultry department will be under the management of Thomas N. Horn, who has handled that department for years. He will be assisted by Fred A. Johnson, the well-known superintendent of the Puyallup fair. Judge W. M. Coats will place the awards.

The amusement features of the fair this year will be the best ever seen on the grounds. H. C. Browne, Portland, Ore., will be in charge of the races.

The pavement from Everett to the fairgrounds has all been finished, and the main highway between these cities and the fairgrounds is in fine shape. Three railroads pass the fairgrounds. Great Northern, Northern Pacific and Oregon & Washington railroads all pass the grounds and they will give a special excursion rate.

TOO MUCH COVER.

There is such a thing as too much cover crop in the orchard. A year or so of clean cultivation may somewhat regulate the supply and availability of nitrogen in the soil.

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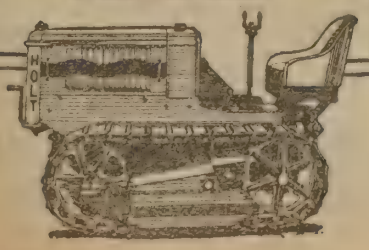

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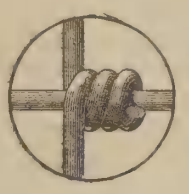

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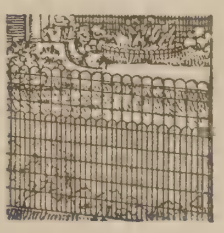

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POULTRY AND RABBITS

Poultry Problems

By W. D. Buchanan, Poultry Extension Specialist, Washington State College.

What is wrong with my young geese? They seem to weaken in their legs and have a sort of droopy look about the head. Milk, when given to them seems to help a little but I would like to know if there is anything to prevent these attacks and what causes them. Mrs. A. D.
Endicott, Wash.

Regarding your young geese, that are weak in the legs, would say, it may be due to overfeeding, or to a lack of something in the feed. Probably the latter. Bread and milk is an excellent feed to start with. They may be fed a mash made by mixing 10 pounds of millrun, 10 pounds of ground corn, one pound meat meal, or sifted beef scrap, and one pound fine sand. This may be moistened with milk or water; but if milk is used the meat scraps may be left out. They should have plenty of pasture, or green feed, and water at all times.

I have 25 hens, mixed breeds. They are laying fine but going blind. There is nothing wrong with them and they still sing until they are so blind that they can't eat. Some of them get lame or stiff legged. Will small chicks contract this disease? They are not with the hens very much. Are the eggs unfit for use from these hens? They are on range now and do not want much to eat. They have had mostly wheat and bran mashes and table scraps. Mrs. E. C.
Cusick, Wash.

In reply to your inquiry regarding your hens going blind, would say, blindness in chickens might be due to disease; but the chances are that it is due to a lack of nutrition. Your flock was probably short of green feed during the winter months. Also an exclusive diet of wheat and wheat byproducts is not good. Add a little corn to the wheat for scratch, and mix a little ground oats and ground corn in the mash. In winter they should have about 20 pounds of meat scrap in each 100 pounds of mash.

If this is due to malnutrition, as I suspect, the chicks have no disease to catch, though they will undoubtedly be weaker than chicks from strong stock. The eggs should be all right to eat.

What is the matter with my young turkeys? They grow fine until between a week and three weeks old. They become stupid of a sudden, refuse to eat, and have a diarrhoea of a brownish color. Some die within a few hours, others live a day. When they first hatch, I give them grit, oyster shell and warm water and on the third day I feed them a chick mash and chick feed. I keep shells before them all the time. I keep the mother hen in a coop until the little ones are able to follow, after that they have free range. Mrs. A. W. Z.
Okanogan, Wash.

This is a case of improper feed, and probably of overfeeding. Young turkeys should not be fed till they are 48 hours old, and then very lightly. On the first feeding day, give them a little grit (but no shell), and sour milk to drink. On the second day, add a little good wholesome chick starter of some kind. Feed very little at any time, and I would give the sick poults, or the whole flock, if you care to, a teaspoonful of powdered Ipecac to each 20 turkeys. Mix this in what mash they will eat in five minutes, and moisten to crumby state.

The yolks of our eggs are dark green. I feed the hens wheat, buttermilk, bran and shorts, and they are running at large. Mrs. F. T.
Elk, Wash.

Regarding the yolks of eggs being dark green, would suggest that you feed the hens a mixture of two parts wheat and one corn in litter, or sowed thinly on the ground. Add a little ground corn to the mash. Give them plenty of buttermilk, in vessels that are washed and scalded daily, and without any patent medicine, your egg yolks will be of proper color. It will be necessary, of course, to give them all the grain they will eat before they go to roost.

I had 530 little chicks and lost 20 of them. I gave them growing feed that was moldy. Their feathers get rough and the droppings streaked with blood. They have a run in a raspberry patch. Am feeding them sour milk, water, charcoal, shells, mash, fish meal and growing feed. Is there anything I can do? Mrs. G. W.
Lynden, Wash.

Moldy feed will cause sickness, and even kill chicks; but it is not likely to produce the condition which you describe.

Bloody droppings are an indication of coccidiosis. There is only one thing to do. Get them on new soil at once, and thoroughly clean and disinfect the brooder house. A good plan is to have a small patch of new soil each day for two weeks, obtained by a portable fence, or by daily scraping off the top soil and replacing it with new. Clean and disinfect brooder house every other day. Then give them two-thirds of an ounce of crude catechu in each 30 gallons of water.

Some of our hens have large swellings on the balls of their feet. On opening it seems to be full of a hard pus. I have also noticed two hens with similar conditions on the sides of their heads. They are all fed wheat two-thirds, and one-third corn, lettuce, alfalfa, egg mash and buttermilk. They all seem to eat well. What can I do for them? Mrs. J. C. W.
Spokane, Wash.

The first condition is bumblefoot, due to bruises from flying onto or off from a high roost, or by thorns or slivers, Remove the cause, if found. Remove the pus as you are doing and paint the wound with tincture of iodine. The swellings on the heads are probably due to colds or roup.

New Birds in the Flock

"When more birds are to be introduced into a laying house there arises the difficulty of getting the new ones accustomed to the house," says George R. Shoup, poultryman of the western Washington experiment station. "The best plan we have found at the station is to make a temporary partition of wire across one end of the house, and keep the new birds in here for four days. This is about the cycle of a chicken's memory, and by the end of that time they feel that this is their home, and they are ready to fight for it. The door is opened and they are allowed to mix gradually, and as a rule no fighting will take place.

"When new birds are simply placed into a new house, the others will fight them, keep them away from the feed hoppers, and not allow them to roost. The new ones realize that this is not their home and they will not fight back. By means of a partition they become accustomed to the new quarters gradually and no trouble of this kind is experienced."

Bald-Headed Hens

"Hens with bald heads are often the source of annoyance to their owner, who in many cases does not know why the feathers should come off. Very often these are the best layers in the flock. It is claimed that these are caused by depluming mites, but examinations of many birds at the western Washington experiment station have shown no signs of such pests," says George R. Shoup, poultryman.

"The nearest we can come to the solution is to keep the floors entirely dry. Damp litter is thought to cause such trouble, which results in itching of the head where the plumage has been removed. We can give no reason for damp straw causing bald heads, but we do know that if the straw is dry the trouble will not occur. It is just possible that we will find some further solution of the trouble in the future."

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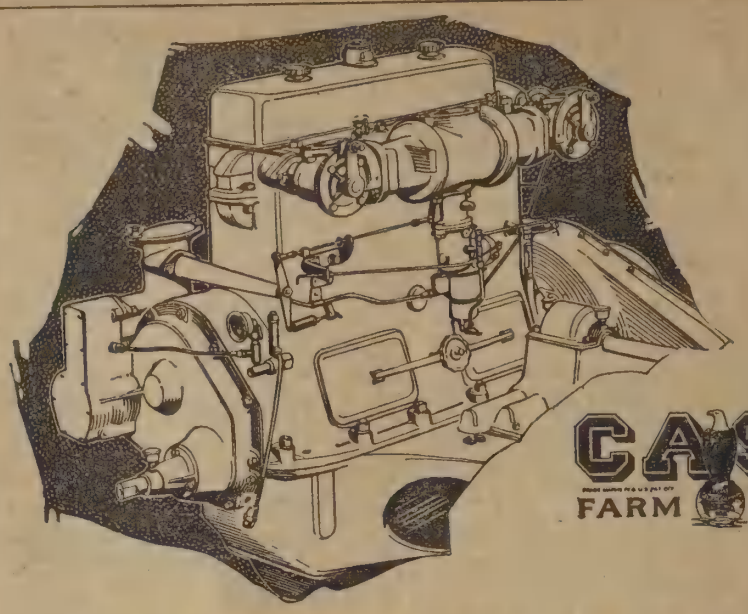

CASE FARM TRACTOR

more years of better work

EVERY Case tractor owner soon discovers that he can place absolute confidence in his machine. Years later he again discovers that his tractor has outlasted and outworked many others. These valuable advantages are largely due to the efficiency and durability of the Case built engine. This engine is really remarkable for its power and fuel economy. No other tractor engine has such an enviable reputation for durability.

Reserve power increases durability by preventing overloading of the engine. All Case engines have 20 per cent or more reserve over rated power.

Durability is the result of many Case features. All moving parts are well balanced. All bearing surfaces are large. Lubrication is positive and largely automatic. All working parts are fully enclosed and protected from dust and dirt, including the cylinder barrels and pistons, which are protected by an effective, patented, Case air washer. All parts are easily accessible for adjustment, and all can be readily renewed. The material used is carefully chosen to insure durability, and is tested to uniformly high standards.

For two good reasons, the Case engine is mounted crosswise on the rigid frame. The belt pulley is on the engine crankshaft where no power is lost through gears—a simple spur gear transmission is used, more efficient than any other type of drive.

For these and many other reasons Case Tractors are dependable, efficient and highly durable. An interesting booklet, "Better Farming with Better Tractors", tells the whole story. Write for it.

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(Established 1842)
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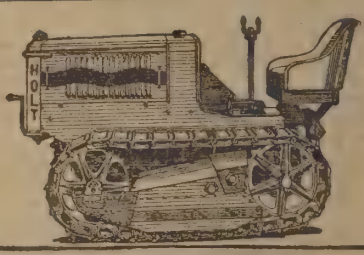
CARBOLA
The Cleaning Disinfecting White Paint

It takes less than five minutes to mix the Carbola powder with water and have it ready to use as a white paint and powerful disinfectant. No waiting or straining; no clogging of sprayer. Does not spoil. Does not peel or flake. Disinfectant is right in the paint powder—one operation instead of two. Gives better results, costs less. Used for years by leading farms.

Your hardware, paint, seed or drug dealer has Carbola, or can get it. If not, order direct. Satisfaction or money back. 10 lbs. (10 gals.) $1.50; 20 lbs. (20 gals.) $3.00; 50 lbs. (50 gals.) $6.25; 200 lbs. (200 gals.) $22.50; trial package and booklet 35c..

SEATTLE HARDWARE CO., Seattle.



In the 2-Ton (T35) as in the larger sizes of the "Caterpillar" Tractor, purchasers find that Holt high standards of design, material and workmanship result in superior tractor performance.

The Holt Mfg. Co.

SPOKANE, WASH.
STOCKTON, CALIF.

The department editors of this paper are anxious to be of service to you. Do not fail to write to us if they can be of help to you.

ORCHARD AND GARDEN

Pruning Trees

Orchardists Adopt Long System

It is interesting to note that some of the fruit growers in western Washington, as well as in other parts of the state, are adopting the long system of pruning in their orchards. R. B. Miller of Startup has come to the conclusion that severe heading back, such as he has practiced in former years on his pear orchard, is not best for the trees. It produces too much water sprout growth, and does not allow for the trees to form a perfect head.

During the last few years he has done practically no severe heading back except on trees under 3 years old. He has only thinned out such limbs as were necessary to allow plenty of light for all parts of the tree and to prevent limbs from rubbing. He is well pleased with the results so far, and expects to have a better growth of fruit spurs and a more even production of fruit on all of the trees.

Miller has over 320 acres on his entire farm, a large part of which is planted to Anjou and Bosc pears. Most of the trees are set 20 feet apart each way, and Bartlett trees have been set at intervals for pollinizers. The entire orchard has been allowed to grow a cover crop, but was disked during July in order to prevent too rank a growth and also to put the feeder roots of the trees lower down into the ground. He finds that a heavy cover crop has a tendency to bring the feeders closer to the surface and there is danger from severe cultivation, if done after the roots have become well established. For this reason the disking is done somewhat early in the season.

Bees are very essential for pollinizers, and Mr. Miller finds that he has best results from taking the hives out into the orchard and placing them at convenient intervals, so that they are not required to go too far for the nectar. He has 29 colonies, and expects to use them all next season in his own orchard. After the blooming season they are brought back to convenient stands near the barn, where they are kept during the remainder of the year. They have all been supplied with Italian queens in order to strengthen the colonies, and make them more disease resistant.

Another reason for moving the colonies about the orchard is that the bees seem to prefer working on one or two varieties of fruit in preference to others. All pears in this orchard bloom at the same time and in a short blooming season it is often difficult to get enough bees to pollinize all of the blossoms. Mr. Miller believes that this can be accomplished by having a sufficient number of bees to cover the entire orchard during blooming season, and there will be enough flora in the woods during the remainder of the year to afford a good supply of honey.

The crop of pears this year will be lighter than usual, which he belives is due to the extreme dry weather last year. It seemed to have a marked effect on the growth of fruit buds for this year's crop. The fact that the dry weather has produced this effect is proven by the appearance of fruit on the trees that are located in spots which are supplied with spring water from underground seepage. Such trees have a different growth of foliage and fruit spurs, and there is a noticeable difference in the set of fruit. The growth this year seems to be normal, and there is little doubt that there will be a normal crop of fruit set on next year.

"I believe in spraying my orchard very thoroughly and have found it very convenient to use my own spray tank for mixing my own lime sulphur," said Mr. Miller. "I can make 300 gallons in a day with one man, and can produce it for one-third less than what it would cost to buy it already made up. The outfit consists of two large tanks, one just above the level of the other. The lower has a fire under it, but it is so arranged that the flame and smoke must pass under the upper tank after leaving the lower one. This plan allows for the heating of the water in the upper tank, which is used in the lower tank as soon as the solution has been thoroughly cooked."

Thinning Fruits

Thinning fruit is profitable in western Washington, according to H. D. Locklin, horticulturist at the Puyallup experiment station. The object of thinning is to remove part of the crop so that the fruit remaining because of improved quality will sell for more than all the fruit that was originally on the tree and at the same time leave the tree in a better condition for the production of subsequent crops.

Mr. Locklin further points out that seed production is a much heavier drain on the strength of the plant than is the development of the fleshy or edible part of the fruit. This being true, if we can cut down the number of seeds developed by the plant, there will be much more food to go towards the development of the edible part of the fruit.

If you are in doubt as to the practical value, select a few trees of the same variety of apples, pears, plums, or any such fruit. All the trees should have about the same crop set. Thin half of the trees as suggested above. At harvest time grade and determine comparative commercial value of fruit from thinned and unthinned trees. If the thinning is charged against the fruit the saving in picking and sorting should be credited to it, to say nothing of the better condition of the trees. Give thinning a fair trial and then decide for yourself.

Plan Orchard Excursions

Four orchard excursions during the week of August 21 to 25 are planned by Chelan County Agent Roy Larsen, instead of one, which has been the rule in the past. Different subjects will be studied on each excursion, such as stationary spray plants; necessity of removal of trees set too closely; pruning and thinning; fertilization and soil management, etc.

The first excursion Tuesday, August 21, will take in orchards around Peshastin, Dryden, Cashmere and Monitor. The next day will be devoted to points near Wenatchee, East Wenatchee, Sunnyslope and Malaga. Following will come Entiat, Chelan, Manson and Orondo, and the final day, Friday, August 24, will include Okanogan and Grant counties.

Professor O. M. Morris will be present from the state college to talk on stationary spray plants, and R. N. Miller, also of the state college, will have as his subject farm and soil management.

FEED THEM TOBACCO.

Nicotine spray is death to aphis.

One good test—

—of the purity and stability of a motor oil is the amount of carbon it forms.

Zerolene forms, on an average, 30% less carbon than other oils. The carbon is soft and fluffy and most of it blows out with the exhaust. For this reason the Zerolene-lubricated automobile may be driven from 25% to 50% farther without having the valves ground or the cylinders rebored.

Zerolene forms less carbon than any other motor oil known to us.

Insist on Zerolene—even if it does cost less. Ask for it by name—Zerolene.

STANDARD OIL COMPANY
(California)

30% less CARBON
5% more gasoline mileage

The Standard Oil ZEROLENE For Motor Cars

In writing advertisers, be sure to say you saw their advertisement in The Washington Farmer.

You need never sacrifice reliability to price when you buy tires.

In the Fisk line—a standard product with a reputation for quality from the earliest days of motor cars—there is a tire to fit your car, your pocket-book and your road requirements.

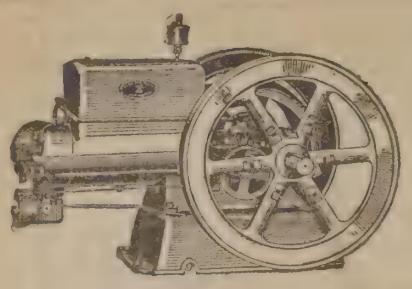
THE FISK PREMIER CORD is a tire low in cost to you that is yet good enough to be made a part of the Fisk line and to be offered with pride by the makers and the Fisk dealers because the value is so unusual at the price.

It will meet every reasonable demand and give long service at a low mileage rate.

If you need a 30 x 3½ tire to meet the most exacting possible conditions, one that heavy loads and bad roads make no impression on and that defies comparison of any kind, you will buy a FISK RED-TOP.

There's a Fisk Tire of extra value for every car, truck or speed wagon

FISK
CORD TIRES



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f. o. b. factory
Add freight to your town

Says F. N. Blank, Prairie Home, Mo. . . . "I have used this 'Z' Engine six years and now am giving it harder work than ever before." Says the Shaffer Oil & Refining Co., Omaha, Nebr. . . . "We have about 30 'Z' Engines in use, giving excellent service. Most of them are three or four years old, but they still require very little attention."

Over 350,000 have approved the "Z" Engine. No matter what your power requirements, there is a "Z" Engine to exactly suit your needs. Over 5,000 dealers carry these engines in stock and will save you money on freight.

FAIRBANKS, MORSE & CO.
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Western Branches: San Francisco; Seattle; Los Angeles; Portland

Prevent
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by using
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Scientifically Prepared and Tested
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Write for free booklet on blackleg. No. 351.

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WRITING ADVERTISERS PAYS

The majority of our advertisers will send you, upon application, attractive catalogs, booklets and folders containing ideas and information of value to you. Why not act upon such offers in the issue which you are now reading? When you write please say, "I saw your ad in THE WASHINGTON FARMER."

Your Health

By Royal S. Copeland, M. D., F. A. C. S.

When somebody has been poisoned the first and most important thing to do is to calm the fears of the victim. There have been almost as many deaths from fright as from poison. To reassure the sufferer and to gain his confidence is half the battle.

Dr. Copeland.

Even when the poison has been taken for suicidal purposes, the temporary aberration of mind that made such a foolish deed possible has disappeared, and the would-be suicide begs for life. So he needs calming, just as does the poor chap who has taken poison by mistake.

Poisons differ in their nature. Some are corrosive. They may be acids or like acid in their effects. They burn their way into the tissues and act instantly. There are poisons which act slowly but surely upon the tissues and organs of the body, producing gradual destruction.

Then there are poisons which paralyze or derange the nervous system, rendering the victim unconscious or else throwing his body into spasms.

Sometimes a badly-poisoned person is found with an empty and unlabeled bottle beside him. The nature of the poison is then, of course, unknown. In such a case no antidote can be given, because nobody knows what should be counteracted.

Under these circumstances you must act on general principles. The best thing to do is to give an emetic. If the stomach can be emptied, the poison not already absorbed will be removed from the system.

Mustard is to be found in every house. To a cupful of warm water add two tablespoonfuls of mustard. Make the patient drink this, and repeat the dose every 10 minutes till he vomits.

If the mustard can not be had, use ordinary table salt in the same way. Sometimes the person can be made to throw up by running your finger down his throat. Be careful about this, because you may injure the tissues if you are rough.

If you know the poison is an acid, give strong soda solution. Follow this with milk and white of eggs.

In mercury poisoning white of eggs is the best antidote. One egg for every four grains of the poison is the rule.

Iodine poisoning is rather common. For this, starch, if it can be had, or flour, should be given. Make into a paste and feed a lot of it. Then try to induce vomiting.

Opium poisoning calls for black coffee and artificial respiration.

Food poisoning, from cheese, ice cream, fish, mushrooms or olives, calls for an emetic.

In every case of poisoning send for the nearest doctor, explaining the nature of the accident, so he will be prepared. He will come with stomach tube, antidotes and stimulants.

Keep the patient warm, using hot water bottles or blankets. Needless to say, where the corrosive poisons have been taken there must be wise after-care. Soft foods and fluids must be given, but your doctor will direct you what to feed the patient.

Wheat Selling Problem

(Continued from page five.)

smaller fraction of the population of the United States. Unfortunately, they have not the political influence in the nation at large that they have in the wheat-growing states of the west.

Suppose that a special session of congress should be called. In the light of the foregoing facts, where could the needed majority in the house or the senate be found to pass a law to stabilize wheat prices in any of the ways that have thus far been considered — a guaranteed price by the government of $1.75 a bushel, government financing to withhold 200,000,000 bushels from the market, or a government subsidy on exported wheat?

These and other facts convince President Brown of the American Wheat Growers' association that governmental intervention this year in the interest of the wheat growers is improbable. In his judgment there is no likelihood of emergency legislation, and he is opposed to any government stabilization plan as a permanent policy, believing that it "is almost certain to increase production."

OFFER SHORTHORN MONEY.

The American Shorthorn Breeders' association has announced the offer of over $25,000 to be divided among breeders of Shorthorns and milking Shorthorns at the three big middle western live stock shows during the coming season. The International at Chicago gets $11,205, the American Royal $8600 and the Western Live Stock show at Denver, in January, $5660.

Avoid Motor Oils containing paraffin, asphalt or any other non-lubricating substance. Aristo oil is refined by the most advanced processes, designed to remove everything in the crude which has no lubricating value.

More Than Merely
Lubrication
—Seek This Also in Your Motor Oil

Aristo is as near perfection purely as a **lubricating film** as science can produce today.

All the facilities, all the expert chemists, all the latest and acknowledged best equipment that the Union Oil Company can gather together are employed in the production of **Aristo.**

Great research laboratories at our plants are constantly testing all methods and all oils to be sure that none is better. **Aristo** forms a durable, fine film which penetrates to and **lubricates** all the motor's moving parts in any weather and at every motor heat.

But you should look for more than this in motor oils.

"Carbons" Are Important

All oils deposit some carbonaceous residue in use, as all refiners know.

But some deposit one kind, some another.

One is flinty—**hard.** It attaches to pistons, cylinders, spark plugs and valves. It has a tendency to cling. And it acts as an abrasive, causing wear.

It becomes incandescent and pre-ignites the gas.

It coats spark plugs, short-circuiting the spark.

Its frequent accumulation around valves impairs compression.

Four motor troubles, familiar to all motorists at one time or another, follow.

The Other Kind

The little residue—a half to a third as much—that comes from **Aristo** Motor Oil is of a different kind.

It is soft and fluffy. Its tendency is not to cling, so most of it blows out with the exhaust.

Being softer than the motor's metals it can't cause wear.

Motor cars travel thousands of miles farther and tractors months longer without cleaning. Spark plugs practically never "foul."

Such oil used regularly means a more satisfactory, smoother-running, longer-lasting, less expensive car. This is most apparent after several thousand miles. For sale at all first-class garages and service stations.

Union Oil Company
of California

Aristo Motor Oil

Recommends Fall Calves

Under most conditions on the dairy farm, says the department of agriculture, fall calving is desirable. The calf receives milk for the first few months of its life, and when it is ready to be weaned from this food good succulent pasture is available. During the winter it has learned to eat grain and roughage while it has been getting whole milk, skim milk, or milk substitutes, and when grass comes it can make the change without getting a setback. There is another advantage in fall calving, as the cow gives the largest flow of milk at the season when prices are usually the highest. Also calves are at the right age so that if well developed they may be bred to calve in the fall.

MONUMENTS F

COMPLETE STOCK. WRITE FOR DESIGNS and prices. Inland Monument Co., N1001 Monroe, Spokane.

PERSONALS 1

BACHELOR, 39, OWNS FARM; SOME MEANS; wishes correspondence with sensible farm woman; object, matrimony. X, Oregon Farmer, Portland, Ore.

HELP WANTED—Female 1

GIRLS DESIRING WORK FOR HALF BOARD and room, while attending school, write Gooding College, Gooding, Idaho, today.

HELP WANTED—Male 3

MEN WANTED—TURN YOUR SPARE TIME into cash or devote your whole time to a highly paid, congenial business; good money year around; cash weekly. Middle-aged men find this attractive. Many of our men receiving $4000 to $5000 yearly under our plan. Experience not required. Washington Nursery Company, Toppenish, Wash.

LOCAL SALESMEN FOR OUR COMPLETE line "Trees That Please," all or part time contracts. Write Capital City Nursery company, Salem, Ore.

AGENTS WANTED 9

AGENTS—C. T. A. PRICES LOWER THAN ever. Suits, $18, made to order; any size or style. Orders easy to get. Big profits. Agent's outfit free. Sample suit at cost. Write Chicago Tailors' Ass'n, Dept. 417, Sta. C, Chicago.

SALESMEN WANTED 12

WHOLESALE HOUSE SELLING SPECIALTY lines of groceries and dry goods direct to consumers needs several local salesmen with cars; excellent proposition. Consumers' Wholesale Company, Spokane, Wash.

SCHOOLS AND COLLEGES 26

EARN $110 TO $250 MONTHLY, EXPENSES paid, as railway traffic inspector; position guaranteed after 3 months' spare time study or money refunded; excellent opportunities. Write for free booklet G-157, Stand. Business Training Inst., Buffalo, N. Y.

FRESH FOOD PRODUCTS 51-3

FISH—4 LBS. SMOKED SALMON, $1; 4 LBS. Alaska salmon bellies, $1; 4 lbs. black cod, $1; 3 lbs. best codfish, $1; delivered by mail. Coffin Fish Co., Seattle, Wash.

BEES AND HONEY 53

ALFALFA-SWEET CLOVER HONEY—2 60-LB. cans, $9.75; one can, $5, f. o. b. Rigby; one 40-lb. can, prepaid to fourth zone, $5.75; quality guaranteed. Heckman & Larsen Honey Co., Rigby, Idaho.

FAMOUS KITTITAS VALLEY ALFALFA HONey, extracted; postpaid 2d and 3d zones: 10 lb. pail, $1.85; 3 10s, $5; 3 5s, $2.75; 60-lb., $8. Kittitas Valley Apiaries, Ellensburg, Wash.

EXTRACTED HONEY — ONE 60-LB. CAN, $6.50; two 60-lb. cans, $12.75, collect; three No. 10 pails, prepaid, third zone, $5. Wells D. Rose, Sunnyside, Wash.

QUEEN BEES—BUY THE BEST. UNSURpassed Italian queens, 1, $1; 6, $5.75; 12, $11; 50, $45; 100, $85. Circular free. J. D. Harrah, Freewater, Ore.

HAPPY HOME HONEY—ALFALFA AND clover; 60-lb. can, $6.50; two cans, $12.75; case six 10-lb. pails, $7.75. H. N. Paul, Mabton, Wash.

BEST QUALITY EXTRACTED ALFALFA AND clover honey; 60-lb. can, $5; 2 cans, $9.50. Meyer Bros. Honey Co., Rigby, Idaho.

VALLEY BLOSSOM HONEY; QUALITY GUARanteed; 1 60-lb. can, $7.50; 2, $14.40. Ernest Sires, Route 7, Yakima, Wash.

PURE, WATER-WHITE SWEET CLOVER honey; 60-lb. can, $5; two, $9.75. H. R. Bowen, Roberts, Idaho.

NEW CROP EXTRACTED HONEY; FINEST ever; one 60-lb. can, $6.50; two, $12. Geo. O. Gould, Buhl, Idaho.

MISCELLANEOUS—FOR SALE 60

SASH AND DOORS—O. B. WILLIAMS CO., 1943 First ave. So., Seattle. Chicken house sash, 20" wide by 25" high, 80c; a dozen different sizes in stock for immediate shipment. Skylights for chicken houses, 36"x40"; price, glazed, $2. This is the size recommended by the Western Washington experiment station. We carry them in stock for immediate shipment. Sash and doors for all purposes at lowest prices. All orders receive prompt attention. Our large illustrated catalog No. 35, showing full line of building material and built-in fixtures for the home, free on request. O. B. Williams Co. Established 1899.

CORN HARVESTER, CUTS AND PILES ON harvester or windrows; man and horse cuts and shocks equal corn binder; sold in every state. Only $25 with fodder tying attachment. Testimonials and catalog free showing picture of harvester. Process Harvester Co., Salina, Kansas.

PURE CANE SUGAR, 8 CENTS PER POUND; 10-lb., 25-lb., 50-lb., 100-lb. sacks, when purchased with other food products. Also corn sugar. Write for bargain price list. Guaranteed Products Supply Co., 2108 First ave., Seattle.

SPECIAL—ONE-POUND TIN "SATISFACTION tobacco" and pipe for $1. Smoking, chewing tobacco, cigars, cigarettes and complete line of pipes. Wholesale and retail. Peter M. Jacoy, 3 Washington st., Spokane.

WALL BOARD—WRITE FOR SAMPLE OF Washington plaster wall board; won't warp, won't burn. Manufactured by Washington Building Products company, 6851 E. Marginal Way, Seattle, Wash.

NATURAL LEAF TOBACCO—CHEWING, 5 lbs., $1.25; 10 lbs., $2.50; smoking, 5 lbs., $1.25; 10 lbs., $2; 20 lbs., $3.50. Farmers' Union, Mayfield, Ky.

TOBACCO — FINE, YELLOW MAMMOTH chewing, 10 lbs., $3; smoking, 10 lbs., $2; 20 lbs., $3.50. Farmers' Club, Mayfield, Ky.

FARMERS' WANT ADS

This is the farmers' "want," "sale" and "exchange" department for small advertisements of farmers, including live stock and poultry.

Advertising rates for ads running 1 to 3 times, 10c per word per insertion, with a special rate to Farmer subscribers, as follows: Ads running 4 to 12 times, 9c per word per insertion; ads running 13 times or more, 8c per word per insertion.

All commercial and land advertising, 10 cents per word per insertion. Open also to nonsubscribers.

In using these columns advertisers must observe (1) No advertisement will be inserted for less than $1.00. (2) Every word, number and initial, including name and address, must be paid for. (3) New advertisements, changes of copy or cancellations must reach general office, Spokane, Wash., 10 days in advance of publication date. (4) Cash must accompany order.

Above rates include insertion in The Washington Farmer, The Idaho Farmer and The Oregon Farmer, which constitute the Pacific Northwest Farm Trio, 46 Review building, Spokane, Wash.

MISCELLANEOUS—FOR SALE (Continued) 60

PIPE—GET PARTICULARS ON OUR SPEcial flue pipe, 1¼, 1½ and 2 inch. Big saving on it. We also have all sizes second-hand and new standard pipe at low prices. We also save you on roofing, belting, pumps, engines, cables, etc. Alaska Junk Co., S120 Adams, Spokane, Wash.

NATURAL LEAF TOBACCO—CHEWING, 5 lbs., $1.75; 10 lbs., $3; smoking, 5 lbs., $1.25; 10 lbs., $2. Pay when received. Pipe and recipe free. Farmers' Cooperative Tobacco Union, Paducah, Ky.

GRAIN BINS AND TANKS 90

METAL GRAIN BINS SAVE YOU MONEY. Write for circular T and prices. Spokane Culvert & Tank Co., Spokane, Wash.

MACHINERY—For Sale 93

FOR SALE—ONE OREGON SPECIAL, 20-FOOT cut, Holt combine; equipped for bulk and sacks; 26-horse hitch; $250 cash, balance two payments. Price $2000. George Myers, Connell, Wash.

POWER HAY PRESS, WITH POWER mounted; good condition; big capacity; good buy. D. W. Glasgow, S211 Washington st., Spokane.

GANG PLOWS, NEW AND USED TRACTORS, small gas and steam engines, sawmills. Fallquist Bros., W20 Riverside ave., Spokane, Wn.

THRESHERS, STEAM ENGINES, TRACTORS, trucks; all kinds of machinery. Exchange Machinery Co., W20 Riverside, Spokane.

EMERSON STANDARD MOWER REPAIRS. Spokane Farm Machinery Co., N812 Monroe, Spokane, Wash.

AUTOMOBILES—FOR SALE 112

SEE CHEVROLET FIRST—NEW AND USED cars at prices that will surprise you; stop in or write Inland Empire Chevrolet Sales Corp., 916 2d ave., Spokane. Open evenings. Open Sunday.

AUTO ACCESSORIES AND PARTS 119

INTERNAL GEAR TRUCK PARTS; WIRE and disc wheels; sales and service. Pacific Gear & Auto Parts Co., 1022 First, Spokane.

STOVE REPAIRING 128

WRITE MYER RUBENS, SPOKANE, ABOUT stove repairs, welding broken parts, nickel plating.

FUR-BEARING ANIMALS 170

SILVER AND CROSS FOXES FOR SALE. William Rambo, 407 Sprague, Spokane.

PETS—Dogs, Birds, Etc. 171

FOR SALE—BOBTAIL SHEPHERDS, $10 each; 2 females, 8 mo. old; good drivers; very snappy, $15 each. Hentges, Valley, Wn.

CLOVERLAND AIREDALES—THE PERFECT farm dog; puppies for immediate delivery. Cloverland Kennels, Gooding, Idaho.

AIREDALE PUPPIES, BOTH SEXES, $15 AND $25. Luther Jones, Route 2, Boise.

POULTRY 174

WHITE LEGHORN PULLETS — MARCH, April and May hatches. From thoroughbred, mature hens, mated with cockerels of 225 to 265 egg record, Hollywood, Tancred or Gilbert strains; 8 weeks old, $1.20 each; 12 weeks old, $1.40 each; shipped with a guarantee of being satisfactory or any undesirable ones may be returned within three days and refund will be promptly made. Send 25 per cent with order; balance C. O. D. Mention this special offer when ordering. Queen Hatchery, 1430 First ave., Seattle, Wash.

CERTIFIED WHITE LEGHORN QUALITY chicks for summer and fall months, from selected free range, high egg producing breeding flocks, inspected and accredited by the Sonoma county farm bureau. Send for catalog and attractive prices. Safe delivery and full count guaranteed. Must Hatch Incubator Co., Inc., 445 Seventh st., Petaluma, Calif.

250,000 ACCREDITED BABY CHICKS FOR sale during May and June. Send in your order early. "A" grade, $6 for fifty; $11.50 per hundred; $110 per thousand. "AA" grade, $8.50 per fifty; $16 per hundred; $155 per thousand, f. o. b. Petaluma. Member of the Sonoma county farm bureau accredited hatchery list. White Hatchery, Petaluma, Calif.

WHITE LEGHORN BABY CHIX FROM flocks mated to males having sire's dam record of 240 to 297 eggs per year. Full particulars and interesting literature on request. We are accredited by Sonoma county farm bureau. The Pioneer Hatchery, 422 Sixth street, Petaluma, Cal.

SUMMER SALE "HENACRES" PULLETS; best for fall and winter eggs, $1.25 to $2 each. Hens for breeders, $1 to $1.50 each. High grade stock at reasonable prices. Booking orders now for 1924 baby chicks. Free catalog and price list. "Henacres," Box A, Prosser, Wash.

WHITE LEGHORN COCKERELS, WORLD record ancestors; pedigree with each bird; sired by son of Lady Wonderful. Special price on five or more. Prof. Frank Shepherd, Corvallis, Ore.

DOLLARS FOR YOUR EGGS—WE PAY THE top market prices for your eggs and poultry. Daily cash remittances. McClintock-Trunkey Co., produce department, Spokane.

O. A. C. BARRED ROCK COCKERELS, APRIL-May hatched, $1.50, $2. Mrs. Faulconer, Skamania, Wash.

LIVE STOCK 177

FOR SALE—A FEW REGISTERED CHESTER White brood sows at $40 and $50. A number choice gilts, weighing 80 lbs., at $20 each, 2 for $35; 40 to 60 lbs., $15. All from prize-winning stock. Will register them free. R. J. Horne, Farmington, Wash.

REGISTERED SHROPSHIRES—FIFTY EWES, two years and up; fifteen yearling ewes, twelve rams, 68 ewe and ram lambs. Some show rams. Eight registered Oxford ewes. J. W. Cook, Brownsville, Ore.

TOP PRICES PAID FOR CREAM, EGGS, poultry, pork, veal, also fruits, berries and vegetables in season. Inland Products company, Second at Cedar, Department E, Spokane, Wash.

FRESH MILCH GOATS AND KIDS. MAMIE Rand, E1024 Decatur, Spokane.

LIVE STOCK (Continued) 177

WE GUARANTEE TO PAY THE HIGHEST market price for your poultry and live stock. Veal market growing stronger. Owing to the constant changes in the market we are unable to quote prices in this paper from week to week. We will furnish tags and prices when you are ready to ship. Write us what you have to sell. Prompt returns. John Lewis & Co., Spokane, Wn.

WE PAY TOP PRICES FOR YOUR LIVE OR dressed veal, hogs, and poultry. Your check by return mail. Shipping tags on request. M. & J. Packing Co., Spokane.

WE PAY THE HIGHEST CASH PRICE AND remit every day for strictly fat dressed veal and pork and live poultry. Address Dept. T, Welch's, Spokane, Wash.

DUROC-JERSEY PIGS, THOROUGHBRED; eligible for registration; $12 and $15. W. L. Livingston, Bridgeport, Wash.

REGISTERED HOLSTEINS—BULLS, HEIFers and cows for sale; accredited herd. Oscar Dunlap, Junction City, Oregon.

REGISTERED JERSEY COWS AND HEIFers; real production type. Allen Sutliff, Eugene View Farm, Eugene, Ore.

REGISTERED BERKSHIRE BREEDING pigs, $16; big type, champion blood. Chas. O. Churchill, Shelton, Wash.

REGISTERED GRADE AND PUREBRED Toggenburg goats. Mrs. I. L. Hemingway, Box 196, St. Maries, Idaho.

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REGISTERED SHROPSHIRE RAMS, FROM prize-winning stock. G. H. & J. J. Thompson, Macleay, Ore.

BIG BONE SPOTTED POLAND CHINA gilts for sale. Harve Davis, Dayton, Wash.

FOR SALE—FIVE PUREBRED FEMALE JERseys and one bull. T. E. Bradley, Daisy, Wn.

REGISTERED SHROPSHIRE RAMS AND ewes. Write McK. Edwards, Valley, Wash.

FOSHAY FARM, HUBBARD, ORE., OFFERS registered Hampshire pigs, both sexes.

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SEND FOR FREE HARNESS AND SADDLE catalog today; cut out the middleman, buy direct from the manufacturer. Lowest prices in the west; satisfaction guaranteed. Established 1881. Write Pierce Harness Co., Dept. T, Spokane, Wash.

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FARM LOANS, 6 PER CENT, ANYWHERE. Box 103, Walla Walla, Wash.

FAIRS 370

HARVEST FESTIVAL, NAMPA, IDAHO, SEPtember 18 to 21. Southwestern Idaho's great fair and livestock show. Premium list free. Write P. W. Duffes, secretary, Nampa, Idaho.

JACKSON COUNTY FAIR—SOUTHERN OREgon's great farm and livestock show. September 12 to 15. Premium list free. Write H. O. Frohbach, secretary, Medford, Ore.

TWIN FALLS COUNTY FAIR—SOUTHERN Idaho's great fair and livestock show, September 11 to 14. Premium list free. Write J. M. Markel, secretary, Filer, Idaho.

GRAYS HARBOR COUNTY FAIR—BIG FARM and livestock show, at Elma, Wash. August 29 to Sept. 2; premium list free. Write C. H. Palmer, secretary, Elma, Wash.

WESTERN WASHINGTON FAIR, PUYALLUP, October 1-7, both inclusive. 133,000 in attendance last year. You are invited to participate. W. H. Paulhamus, Manager.

WASHINGTON STATE FAIR—THE GREAT fair and livestock show of Washington, Sept. 17 to 22. Premium list free. Write H. P. Vermilye, secretary, Yakima, Wash.

JOB PRINTING 372

WEDDING ANNOUNCEMENTS AND INVItations, catalogs, booklets, high school annuals, letter heads, envelopes, cards, butter wrappers, etc. Union Printing Co., 412 First ave., Spokane, Wash.

$1.50 POSTPAID—YOUR NAME AND ADdress on 200 sheets and 100 envelopes, Hammermill bond writing paper, neatly boxed. Parker Printing Co., 405 Pacific blk., Seattle, Wash.

CLEANING, DYEING, Etc. 420

FRENCH DRY CLEANING BY PARCEL post. Ladies' and gents' suits, furs, hats, etc., prompt service. Address City Dye Works (Dept. A), E422 Sprague ave., Spokane, Wash.

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KODAK FILM DEVELOPING 472

FREE ENLARGEMENT WITH 75C ORDER high gloss print. Spokane Film Co.

FILMS DEVELOPED FREE—KODO, THE PICture King, S15 Stevens, Spokane.

MATERNITY HOMES 497

MATERNITY HOSPITAL; STRICTLY PRIvate; doctor in attendance; prices reasonable. Mrs. Elizabeth Peel, matron, W1324 Broadway, Spokane.

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TO PATCH A HOLE OR BUILD A HOME use Perfection Plaster Wallboard. Easily handled with hammer and saw; fireproof, waterproof. Western Wallboard Co., Seattle, Wash.

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HUNGARIAN VETCH SEED, POSITIVELY aphis proof. Good forage crop. Write for circular describing same. We have common vetch, red and alsike clover. Corvallis Feed & Seed Co., Corvallis, Ore.

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TREES—NOW BOOKING MAIL ORDERS AT reduced prices for limited time only. Apples, pears, peaches, nut trees, prunes, cherry, small fruits, etc. Live agents wanted. Lafayette Nursery Co., Lafayette, Ore.

FARM LANDS FOR SALE 651

CUTOVER LANDS, EASY TO CLEAR; $8 TO $20 per acre; 25 miles north of Spokane; on hard surfaced highway; Great Northern and Milwaukee railways; excellent opportunity for dairying and stock raising with Spokane markets and creamery near at hand. Will help the man who will live upon this land and agree to clear a part each year by giving lumber to help start his buildings, and a purebred Jersey bull to groups of farmers. Interest and payments low. Write Milan Farms Development company, Dept. T, Old National Bank bldg., Spokane, Wash.

POTATO, POULTRY, BERRIES. ALL cleared and in meadow. A few feet from paved highway; located a half mile from railroad station, good store and sawmill; excellent neighbors, fine schools, close to several good towns. Priced at only $100 an acre. Sold in 5, 10 or 20 acre parcels. Small payment down, balance in 10 years at 6 per cent. This is the best land at the price that we know of. Write or call for full information. Carter, MacDonald & Miller, 208 Columbia st., Seattle, Wash.

HIGHEST TYPE FARM LAND, WHERE SETtlers get steady and permanent employment and live at home. Level bench and river valley land; all good soil; an already well developed farm district; school, markets, roads, etc. Around Onalaska, Washington, and near Pacific highway (15 miles southeast Chehalis); 20 acres or more, $15 to $50; long, easy terms. A clean cut and fair proposition. Go to Onalaska or write Graham Land Company, American Bank bldg., Seattle.

62 ACRES, SNOHOMISH COUNTY: 25 IN crops; 22 fine timber; 15 river bottom, balance pasture, orchard; 7-room house, large barn, big poultry house, milk and pump house, garage, other buildings. Cows, horses, 100 chickens, farm machinery and tools; about 50 tons hay. All goes. Mile store, school, sawmill, mail route, phone. On main road; steady income for you. $9000. Some cash, balance terms. Write G 2, Washington Farmer, 617 Central bldg., Seattle.

ALFALFA LANDS — IN SUNNY SOUTHERN Alberta, in the famous Lethbridge northern irrigation district; at low prices and on easy terms. Will also grow big crops of wheat, oats, barley, corn, vegetables, small fruits, etc. Ample moisture means sure returns. Near town, markets, railways, good schools. Write for full information to the Irrigation Council, 12 Provincial bldg., Lethbridge, Alberta.

DO YOU WANT A HOME IN A RICH VALLEY near Spokane, on three transcontinental railroads? Where soil is perfect, rainfall ample, Summers cool, winters moderate? The kind of stump land that pays to clear? Timothy and clover green eight months in year; natural stock country. Land cheap, 10 yearly payments at 6 per cent. Humbird Lumber Company, Box 00, Sandpoint, Idaho.

LOGGED-OFF LAND IN STEVENS COUNTY, Washington, at greatly reduced prices. Most of land sells at from $5 to $20 per acre. Thickly settled community. Good schools. Hard surfaced and paved road to Spokane. Best county in state for dairy and stock raising. In most places water can be found at shallow depths. Write for folder. Phoenix Lumber Co., Dept. T, Spokane, Wash.

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40 OR 80 ACRES; BEST BUY IN SPOKANE county for the price; plenty of hay, wood, water, fruit, garden truck; all good land; small amount stock, machinery; ready to move in; some terms. Lee Zachary, R. 1, Elk, Wash.

160 ACRES; 60 UNDER CULTIVATION; house, barn, family orchard; fenced; water; good road; school one mile; good location; $2000 cash, balance $500 each year; bargain. Dr. J. Finney, Harrison, Idaho.

1000-ACRE SHEEP RANCH; 150 ACRES CULtivated; two barns; fine house; water; seven miles sheep-tight fence. Price $22,000. Fred Markham, Hunters, Wash., owner.

SELL YOUR PROPERTY QUICKLY FOR cash; no matter where located. Particulars free. Real Estate Salesman company, 501 Brownell, Lincoln, Neb.

160 ACRES; CENTRAL MONTANA; GOOD wheat land; unimproved; $15 acre. H. R. McEneaney, E1307 Walton, Spokane.

320 ACRES LAND; 25 CLEARED; SPRING house, barn. Particulars, write Box 381, Cashmere, Wash.

FARM LANDS—Wanted 651

NO COMMISSION — SELL YOUR FARM through Washington Farm Bureau Exchange, represented in 45 states. Lists of farms for sale by owner mailed free. 312½ Lindelle, Spokane.

I HAVE INQUIRIES FOR FARMS IN NORTHwest. Describe fully and state price. R. A. McNown, 310 Wilkinson bldg., Omaha, Neb.

FARM LANDS FOR RENT 657

FARMS FOR RENT—IN THE FERTILE Flathead valley of Montana. We have a large acreage of first-class, nonirrigated farm land for rent to practical farmers. Land adjoining raising 25 to 40 bushels wheat this season. Also adapted to diversified crop raising. Write, giving references. Flathead County State Bank, Polson, Mont.

IRRIGATED LANDS—For Sale 663

CORBIN ADDITION TO GREENACRES—IN the beautiful Spokane valley; 30 minutes from Spokane; paved road; 40 inches of water for irrigation; gravity flow. Ask for booklet with all information.

Return coupon—The Fred B. Grinnell company, Spokane, Wash. I am interested in the Spokane valley. **Please send booklet** and all information to

Name .....

Address .....

FOR SALE OR EXCHANGE 702

160 ACRES; SIX SLASHED; GOOD ROAD; running water; good timber, some cedar; comfortable buildings; team and tools; close to school. Box 124, Northport, Wash.

SALE OR TRADE FOR SMALLER RANCH—480 acres; 405 under cultivation; 7 miles town. Write Otto Limell, Broadview, Mont.

FOR SALE OR TRADE—DAIRY RANCH; IN southern Idaho; irrigated and improved. Allan Roberts, Route 1, Rupert, Idaho.

Cattle Ranch To College

By Russell Doubleday Copyright by Doubleday & McClure Co

The first time we met John Worth, the leading character in this story, he was taking an active part in preparing the little frontier village of Bismarck, N. D., to withstand an Indian attack. We next saw him playing the part of a man, although he was only 12 years old, in defending the village when the warriors appeared.

After the Indians were repulsed by the frontiersmen under the leadership of Jim McKenzie, the sheriff, and order was restored, Mr. Worth, John's father, set out for the north to search for outcroppings of coal, he being a miner as well as a freighter. During his absence, Mrs. Worth felt many misgivings owing to the dangers that confronted the wilderness traveler, but bravely assumed responsibility for John, his brother Ben, aged 10, and the baby. Mr. Worth had not been gone many days when he returned, clothed only in an Indian blanket and a pair of worn-out moccasins. He had been the victim of a thieving party of redskins who had taken all his clothing, leaving him naked on the prairie, where early winter winds would have brought certain death but for the friendliness of an old Indian whom he had once befriended. This old warrior's blanket and moccasins saved him.

It was not long, however, before he was on the trail again and when he came back in the spring he reported that the Indians were becoming more and more hostile toward the whites, and that it would not be safe for any mining expedition to venture away from the village for some time yet.

It was over a year before Mr. Worth was able to lead the mining party to a mine that he had discovered. It was a great day for the boys when the wagon train started across the wild prairie, but the first few hours out brought an experience that they long remembered. They rode away from the party for a swim in the river, and when they came back to where they had tied their horses they found them gone. Afoot they started after the outfit, now miles ahead and it was late at night when they wearily dragged themselves into camp and went to bed after a suppor of cold beans and coffee.

After considerable traveling the party reached its destination, and the boys looked with some dismay upon the dug-out that was to be their new home.

But it was to be a happy home. The boys soon discovered places to fish, trapped beaver, avoided rattlesnakes and hunted wolves. Later when winter set in they led the men of the outfit on an antelope hunt that supplied the camp with meat for the long, cold winter when all communication with the outside world was cut off.

CHAPTER VI.

A Snowshoe Race.

"I tell you what," said Ben, one day when the boys were off on their skees, "if we only had a sled, what fun we'd have down these hills!"

"Well, what's the matter with making one?" answered John, the ever-ready. "It would be great; this crust is smooth as glass; we'd just fly."

At once they turned in their tracks and sped for home to carry out their plan.

"I'll beat you in," said Ben.

"I'll bet you won't."

They started off evenly at the top of a slope. A few long, half-stepping, half sliding strokes gave them impetus enough to slide. Both crouched now in order to lessen the wind resistance and to avoid the chance of losing their balance. They were very evenly matched; for while John was the stronger, his brother was light and not so apt to break through the crust. Down they rushed with ever-increasing speed, the particles of snow rising like spray before them. The swishing, crunching noise grew into a hum as they sped faster and faster. At first Ben forged ahead—he had got a better start—then John's weight began to tell and he gained inch by inch. Ben crouched down still lower, making his body in a compact little ball, but in spite of all he could do his brother gained on him. Now he was even, now a little ahead, and now only his back could be seen by the younger. The end of his scarf was standing out behind him like a painted stick. The distance gradually increased until perhaps 20 yards of glistening snow lay between them. Ben was watching intently for any slight grade of which he might take advantage. All at once he noticed that John had disappeared.

Almost at the same moment he too began to drop. The racers had been watching each other so closely that neither had noticed that they were approaching the edge of a great drift. John had sailed over first and landed right side up some eight feet below, but so solidly that he broke through the crust and stopped short, falling forward on his face. The instant of warning that Ben had, had put him on his guard; he landed lightly and sped on, hardly checked.

"You will beat me, eh!" he shouted derisively to his discomfited brother, as he shot past.

John scrambled up and started again, but the incline was now very short, and by the time he reached the level Ben was far in advance and going well. It was a long, stern chase. However, the older boy's strength and weight were great advantages now, and within half a mile the two were on even terms again. For a time they raced side by side, arms swinging in unison, legs going like piston rods. Their feet were kept absolutely straight, and so the long skates ran exactly parallel, for if either foot should be turned in or out ever so lightly, one skate would cross the other and the skater would be tangled up so quickly that he would not know what was the matter.

The brothers were now sliding along side by side, each straining every nerve to pass the other; breath came in short puffs and showed on the frosty air like the exhaust steam of a locomotive; perspiration began to appear, and the effort they were putting forth was evidenced in the strained look on their faces.

Faster and faster they went, skimming along the level like a pair of swallows. They were going too fast to be careful of their steps, and Ben turned his right foot a little in. Instantly the skates crossed in front, tripped him, and down he went head foremost into the snow. His left ski slipped off, flew towards John, caught between his legs, and threw him over backwards. For a moment there was the utmost confusion. The boys were stretched out, heads almost buried in the snow, feet kicking wildly, and the long skis beating the air like flails. Finally these were kicked off, and the crestfallen racers managed to get right side up. After much floundering they got their skis on again and continued their journey, this time at a more deliberate pace. They disputed all the way home as to which was the faster, and finally agreed that the momentous question could only be settled satisfactorily by another match.

When they reached camp a couple of boards, a saw, a hatchet and some nails were secured. They sawed and chopped out the sides, nailed on a couple of cross-pieces for the seat and a diagonal strip to brace the whole thing. This much was easy, but both were at a loss to find anything for runners until Ben remembered that strips of flat steel had been used on some of the canned meat boxes. These were stripped off, hammered flat, and nailed at each end to the sides of what really began to look like a conventional sled; the seat board was fastened on and holes were bored for the leading rope.

The boys looked at their handiwork with no little pride and pronounced it as fine a cutter as the eastern variety. To be sure it was not beautiful to look at, and did not bear any highly flourished name like "Flyaway" or "P. D. Q.," but it did not lack decoration altogether, for on one side was branded "Use Higgins' Soap," while the other commemorated "Ruby Brand Tomatoes."

In spite of its roughness and clumsiness it was possessed of good speed and strength enough to withstand all the ill-usage the boys gave it. When the snow was soft they used broad runners made of barrel staves, which they made fast to each side, and thus turned their sled into a toboggan.

If John and Ben wanted anything they had to make it or earn enough to buy it—money was not so plentiful that it could be spent on toys and mere amusements, and so they frequently had to devise ways of getting the things they longed for. John had made up his mind that he must have a saddle, bridle, spurs and quirt (a short, flexible, braided whip) of his own; and when he found that none of these things would be given him he determined to earn enough money to buy them. Ben, too, had set his heart on owning a repeating rifle (a style of arm that was rather rare in those days) and so the brothers agreed to work together at trapping, mining, or turning a penny in any way that offered. The sum total was to be divided in the spring, when each would buy the long-desired articles.

As spring drew near Mr. Worth decided to move along and open another mine to the westward, the first one being now in good working order.

Again the family packed up their household goods, abandoned the dugout that had sheltered them during the long winter months, and started off on a pilgrimage. The spring was well advanced and the verdure of the prairie was in its prime. Wild flowers were plentiful and the air was filled with the melody of the song birds, that of the meadow lark being sweetest and most sustained. Robins, thrushes, plover and curlews—all did their share to make spring beautiful.

Many prarie-dog villages were passed. The queer little beasts sat on the mounds of earth beside the holes that served for homes, their curiosity drawing them out. The travelers took snap shots at them, but they were quick as lightning and never stayed above ground long enough to allow of careful aim.

John's industry had made him the proud possessor of a new saddle, whose creaking was music in his ears, and even old Baldy seemed to be pleased with his finery, for he pranced around like a two-year-old and arched his neck in a way that seemed to say, "I'm about the finest thing a-top of this earth." Ben had achieved his aim also, and was the owner of a brand-new repeating Spencer rifle, the result of the sale of the winter's catch.

As the train went further westward the trail grew more and more indistinct, and it became the duty of the boys to go ahead and trace it out. Later, when even the barely discernible wheel tracks had disappeared, it was necessary for them to pick the best route and also to find the camp sites.

This duty was a delightful one, for new country was continually opening before them, and adventures of all kinds might offer at any moment.

"Ain't those antelopes over there by that little hill?" said John one day, pointing to one side.

"That's right," answered Ben. "What's the matter with chasing them?" He spoke with the authority of the hunter. Possessing the rifle, no opportunity to exploit it was ever allowed to slip; nor, if the truth be told, was John slow in calling attention to his saddle, spurs and fringed leather chaps.

"All right," said John. "We've never been on an antelope hunt alone."

The boys went off at right angles from the direction they had been taking and rode down a shallow ravine or coulee in order to keep out of sight of the game. They rode slowly along till they reached the end of the depression; here they dismounted and each tied the forelegs of his horse with the rope he carried on his saddle horn; they were not going to travel afoot again if they could help it. It was now necessary to cross the open prairie in plain view of the animals they sought. Advantage was taken of a well-known characteristic of antelopes—their curiosity. John pulled the handkerchief from his neck and began to wave it slowly to and fro over his head as he walked. Ben followed in his brother's tracks, making himself as inconspicuous as possible and fingering the lock of his repeater to be sure that it was in good working order.

The boys drew nearer and nearer, and the flagging was kept up persistently; but it did not seem to have any effect, for the animals were all looking the other way. Still they drew nearer; their eyes were fixed on their quarry, the rifle held ready, every nerve tense, each heart beating furiously with excitement.

Then it was seen that the antelopes were attracted by the white tops of the wagons, which were moving slowly along over the plain. The wagon train was "flagging" them. Now if the hunters could get within range before the spell of curiosity had been satisfied, all would be well.

The boys moved cautiously along till they came to a sunken "buffalo wallow," a muddy place frequented by the bison for the sake of the moisture. This afforded the shelter that was needed. Attracted by the flapping canvas wagon-tops, the unsuspecting animals drew slowly near the hiding place.

"Oh! if they would only come just a little closer," said Ben under his breath, "I'd have them sure.

Once they stopped and sniffed the air, but just as Ben was about to chance a long-distance shot, they moved on again.

"Now, Ben!" said John excitedly.

For an instant the stock of the rifle rested closely against the boy's cheek—then the shot rang out. Almost simultaneously the biggest of the herd leaped into the air, then fell flat to the ground. The others stood still, bewildered.

"Good! Now for another one," whispered John. Again the rifle was raised and again its deadly crack sounded forth. Another antelope bounded up, ran frantically a few yards, and dropped. At this the rest of the herd made off like the wind, and in a few minutes were mere specks on the horizon.

"Well, I must say," said Ben, exultingly, "I thought once that I would rather have your saddle and outfit, but now—" he slapped the stock of his rifle affectionately—"I wouldn't swap if you gave me Baldy to boot."

"Baldy to boot, eh? Why, I wouldn't slap that horse for a whole stack of rifles." And John moved off in indignation to get the horses, while Ben went over to the spot where the game lay.

The carcasses were packed on Ben's horse, both boys mounting Baldy. They were welcomed heartily at the camp, for fresh meat was at a premium, and any change of diet was an event of prime importance.

"That gun of yours must be chained lightning," said Ted. "I didn't suppose you could hit the side of a hill at 50 yards."

Many days of traveling followed over country that had apparently never been covered by a wagon before.

During this long journey the boys came to know the men of the party very well. They were apt to be sharply divided into good and bad, for in those rough times people showed their real character without reserve.

Charley Green still continued with the company, and he was the boys' greatest friend; but Tom Malloy, who joined the expedition just before it started out for the new camp, soon got into John's good graces. He was a man of varied talents; a gambler and saloon keeper when times were good; a miner, cow-puncher, or hunter when his money ran out. Rough, quick-tempered, and as ready with his fists as with his "gun," he was nevertheless possessed of a great heart and a loyalty to his friends that nothing could shake. Like many of his race he loved a fight and delighted to have a lively "argument" with a man. John's boldness and aggressiveness pleased him greatly, and he looked the boy over, enumerating his good points over to himself; his broad chest, sturdy legs and arms, his clear eyes and fearless look all showed to Malloy's experienced eye that he would make a first-rate boxer.

"I'll show that youngster how to put up his hands sure," he said to himself.

It was a tiresome journey, long and monotonous, but enlivened now and then by a hunt or an excursion. The train was to go by way of the Hart River road, and it seemed to the younger members of the expedition as if it would never be reached. But find it at last they did, a few wagon ruts not very clear nor strongly marked.

The boys' task was now much easier, for the way was marked plainly before them and it was comparatively smooth traveling. Many wide excursions were made on either side of the trail, and many hunting expeditions were indulged in. Ben became a very good shot, and the constant supply of fresh meat gave evidence of his skill.

After many days' journey, the "Bad Lands" were reached. That desolate country, scarred and pitted, was void of vegetation except on the bottoms and near the infrequent water courses. Here the wagon road disappeared altogether, and the pioneers found it necessary in many cases practically to build one, to level some places and make inclines down steep

(Continued on page fifteen.)

All at once he noticed that John had disappeared.

Experience Letters

Dear Mrs. Barland: I am 16 years old and do nearly all the washing, ironing, scrubbing, cooking and baking. I can do all the outside chores, but I can not run any of the farm machinery and can scarcely drive one horse, let alone three or four, though I have lived on a farm all my life. Winnie has me beat there.

I wish some of the club girls and boys would write and I will start the topic by telling about my canning. I joined a canning club the middle of May, 1922. Mamma said I had no chance to win because we had no up-to-date labor-saving devices.

I had a good range, one wash boiler (with false bottom), one 17-quart preserving kettle, one 12-quart kettle, two smaller kettles, one roaster, one large bread pan and one dishpan.

I used the wash boiler to process things that took over 30 minutes and the roaster for things that took less time. The boiler held 14 quart jars and the roaster seven. With these articles and whatever measuring utensils were necessary I canned 202 quarts of fruit, 48 quarts of vegetables, 48 1-2 quarts of pickles and catsups, 19 quarts of meat, 41 1-2 quarts of soup, 90 1-2 quarts of jam and marmalade and four pounds of candied citron.

I had 35 different varieties of products. We bought one box of peaches at $1.10 and one box of apples at $1, all the rest was either home-grown or wild. It cost $18.65 for sugar, the total cost being $20.75. If I had bought all the raw products, plus the sugar, they would have cost $78.95. Had I sold all my canned products at the market price I would have received $213.41, making a profit of $134.46.

I did 89 1-2 per cent of the family's canning and won first place in county and state. I received a one-year scholarship for winning first place in the county and a four-year scholarship for winning first place in the state.

Montana. A CIRCLE READER.

I am certainly very glad to give you this letter from this 16-year-old girl. This is the sort of girls that grow into women who keep our good old Ship of State sailing serenely on with the Stars and Stripes flying. In contrast read the following letter by a girl of the same age, one of the very few "smoking girls" who write and she didn't sign her name. Here it is:

"Dear Mrs. Barland: I have been a reader of the Circle for quite a while and find it very interesting. I have a number of personal friends who smoke and I do also. My first smoke was taken from my best boy friend and I think girls have as good a right to smoke as boys.

"In a recent issue of THE FARMER it was said that the girls are to be the women of tomorrow and will have a lot of influence. What about the boys as the men of tomorrow? They will have as much influence and responsibility as the girls, won't they?

"I am a girl 16 years old and have smoked since I began to go with the 'gang,' which was three years ago. There are a few girls who are too proud to be seen with us and consequently we are a set by ourselves and are bent on having a good time.

"As to public dancing, I think girls should have some recreation, and dancing is the best exercise I know of. I have gone to public dances since I was 13 and shall probably continue to do so, as my folks do not object.

"I agree with Mrs. Barland that it isn't right to smoke, but it is no worse for girls than boys, physically or morally.

"Washington. L. B."

My Dear L. B.: If you had given me your address I would have written you a kind, motherly letter, for you certainly need guidance and supervision. You write well and you are evidently a thoughtful girl and it is a great pity that you allow the "gang," as you call your group of associates, to lead you on at such a pace along the road which, as sure as the sun rises, will end in disappointment and wasted lives or worse. I imagine the 16-year-old girl who won two scholarships by canning 450 quarts of various things got exercise enough so that she didn't feel the need of a dance, either public or private.

This poor little girl, who is only 16 and has had so much experience, says she "has gone to public dances since I was 13 and shall probably continue to go, as my people do not object."

Mothers who read this, don't permit your 13-year-old girls to attend the public dances. Don't do it. You can keep them happy without it. I know, for I raised a girl and a boy; both are grown into useful citizens and neither ever wanted to go inside a public dance hall. There is much learned there beside dancing and it would be better for the young people if most of the present-day dances were never learned.

Not all who attend the public dances smoke, I know that, but those who indulge in the night auto rides, the "petting parties," the paint, the rouge and lipstick, the cigarettes, are always to be found in the public dance halls. It is a part of the regular program in the pursuit of a "good time."

Dear L. B., some girls see the folly of this wild life in time and change their whole course. Listen to these letters:

Dear Mrs. Barland: I have read the Family Circle for some time and I like it very much.

I was once a "flapper," as they are called. I smoked at parties and at dances, I wore unsuitable dresses and I danced and painted my face in the most extreme manner. Now I wouldn't think of doing such things. I am respected by my mother and others. I spend my time now on educational entertainments and am superintendent of our little union Sunday school.

I am 18 years old with light brown hair and fair complexion. I agree with other girls who have written that I wouldn't like to be an old maid, but would rather be one than to marry one of these "fresh guys" that are hanging around corners.

You may print this letter, Mrs. Barland, as it may help some other girls to change their ways. "BOB."

Here is another:

Dear Mrs. Barland: My father has taken THE FARMER for several years and, although I live in Minnesota now, I expect soon to live in Washington. I am very much interested in the subject of women smokers. I am a senior in high school, though I am not yet 16, and I have discussed the smoking question both in school and in church.

I used to smoke, dance and go on midnight rides and I thought it much fun. As I grew older I saw the utter foolishness of it and "turned a new leaf." I intend to attend a seminary and become a missionary after I graduate from high school and I am very sure I shall never regret giving up these wild, worldly things to lead a true, useful Christian life. Many think good times are over if one becomes a Christian and that he must sit with hands folded, but I know it isn't true, because I have had a better time since I joined the church and have been leading a decent life, than I ever had when running with the "hard bunch."

JEANNE.

Here is still another:

Dear Mrs. Barland: I get terribly lonesome very often and I am in one of those moods now and am going to the Circle and tell my ideas and troubles. I am 18 years old and am not married. When I was in high school I had many acquaintances of the "flapper" type of girls and boys, too, and I do not approve of the way they conduct themselves, but I do think they are pretty well matched.

An ideal girl is a self-respecting girl, clean and wholesome, one who likes company and fun; some are jolly and some are not.

Any girl who will allow a boy to persuade her into doing things that are not right (as I have done) should not be classed as very high. I went to dances when I was but 13 years old and I kissed and made a regular fool of myself and all the time I thought I was "being sporty." I became so common that I would as soon kiss one boy as another. I hope girls as young as I was then are reading my letter. I was a fickle sort of girl and liked attention from the boys.

I was generally at the head of my class and was a leader of clubs and other school "doings." I had a jolly time during my school days and graduated from high school at 17.

The people of my community thought that I was a very clean-minded girl, but I wasn't, and was at the very bottom and the lowest girl in school except my chum, and she was on the same level.

I thought then that life meant "just to have fun," but now I realize how I wasted it in kissing boys and smoking their cigarettes. I never asked for the smokes, but always took one when offered.

I do hope I can conquer myself and live up to what I know is right before I enter college next year. I have always been popular with both boys and girls, but I have not been true to the rules of decency and the laws of my country. I hope some of the boys of the Circle will read this and understand how I feel and never have a part in causing any girl to make such mistakes as I have made.

I don't want to give the impression that I have "got religion," because I haven't. I am afraid the "flapper" girls and boys will not be reading this letter because when I was a flapper I was reading novels and wouldn't spend any time whatsoever reading a letter like this; I called it "the bunk."

My mother never knew what I did nor when or where I did it and now I am afraid to confess it. I will have to go through life with this hateful memory of how I spent my life during my high school years.

"The "nonflapper" boys like a jolly girl, clean and fresh like a rose. Of course they think they are roses, anyway, when they are in love.

When two young people are going together they each should consider they have certain duties to perform to keep the social relations on a becoming and dignified basis. They should practice good manners and it is not mannerly for a girl to powder her face in the presence of a young man or for either one to pull up his socks. And it is certainly very ill bred for a girl to give a young man her pretty garters for sleeve holders. (Let me say here that the common use that a young man makes of souvenirs of this kind is to display them in his room and call the attention of his men friends to them with very unsavory comment about the giver.—A. W. B.)

I would say to the boys, life is too short

(Continued on page eighteen.)

Cattle Ranch to College

(Continued from page fourteen.)

banks at others. Often all the teams had to be hitched to one wagon in order to drag it up a sharp ascent or through a miry place.

In many spots the ground was very treacherous, especially at the edge of a cut. The soil was loose, pliable stuff, liable to give way under the weight of a horse. Badger and gopher holes added to the danger of undermining the banks in unexpected places.

One morning John was sent out on Baldy (his constant companion and faithful friend) to pick out, if possible, an easier way. Boy and horse started out on a smart trot, each having full confidence in the other—as was necessary, for almost as much depended on the sagacity of the steed in the matter of picking a way on dangerous ground as in the intelligence of the rider. It was a task of considerable responsibility that was put on John's shoulders; the route was difficult enough to puzzle a professional civil engineer. Baldy was left to find his own way while his rider looked ahead to choose a road that could be traveled by the wagons. From time to time it became necessary to go down the almost perpendicular side of a coulee, when the horse would hunch his hindlegs, keeping his forelegs stiff and stretch out to their fullest extent. Then he would fairly slide down on his tail.

John had found a place that he thought suitable for the night's camp, had traced out a way by which it might be reached, and had turned his pony back toward the wagons.

He thought to himself, as they slid down one bank and scrambled up the other, that it would be a bad place to be thrown. The surface was pitted with half-concealed badger holes, and in the bottoms were many spots where a horse might easily be mired. Baldy, however, knew his business and carried his rider over awkward places safely. John was congratulating himself on the successful conclusion of his errand when he came to the bank of what was in the early spring a roaring torrent, but which now lacked even a trickle of water. To the edge of this cut Baldy approached cautiously. John, anxious to get back to the wagons and report, urged him on. With a shake of his head that seemed to say, "Well, you are the boss, so here goes; but I don't like the looks of it," the pony went forward, gathering his hind legs under him to make his usual slide—when the ground beneath him gave way. Horse and rider went rolling down the slope, but as John felt himself falling he loosened his foot from the stirrup and leaped off, just in time. Boy and steed arrived at the bottom about the same time, but separately. John's mouth, eyes, nose and ears were full of dirt and dried grass; in fact, he always declared that he ate his proverbial peck of dirt then, all at once; but he soon discovered that, barring a few bruises and a badly hurt pride, he was all right. As soon as he got the dust out of his eyes and realized that the earth had not risen, out of special spite against him, he looked for his horse, and was much relieved to find that his four-footed partner had received nothing more than a bad shaking up. Baldy's attitude, however, was anything but dignified. His feet were waving in air, his head was buried in the loose soil, his body was so covered with mother earth that he seemed like some strange freak of nature. As the boy got up, the horse looked at him, he thought, reproachfully and seemed to say: "I told you so."

"Yes, old chap," replied John aloud, "you do know a thing or two, and I'll trust you more next time."

John never told of his mistake and tumble, but explained the dusty appearance of himself and horse by reference to the well-known characteristic of the "Bad Lands," its stifling alkali dust.

(To be continued.)

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Nation Has New President

Sudden Death of Warren G. Harding Elevates Calvin Coolidge to Place of Leadership

The body of Warren G. Harding, whose death occurred suddenly and unexpectedly at San Francisco at 7:30 on the evening of Thursday, August 2, will be laid to rest at Marion, Ohio, Friday of this week, August 10. At the hour THE FARMER goes to press the body of the former president is lying in state in the national capital, where it was taken by special train from San Francisco. The death of Mr. Harding resulted from apoplexy at a time when he was believed to be well on the way to recovery from an illness contracted on his return from Alaska to the states on the last leg of his nationwide tour, which began when he left Washington, D. C., on June 20.

Under the constitution, the vice president immediately becomes president following the death of a chief executive. At the time of President Harding's death Vice President Calvin Coolidge was visiting at his old boyhood home at Plymouth, Vt., where his father still lives and where his mother lies buried. He was notified late at night of the passing of the president. The oath of office was read to him over the telephone and his aged father, who is a notary public, administered it officially, thus performing the formal act which elevated his son to the highest position in the land. The new president paid a visit to his mother's grave before leaving for the national capital, where he arrived Friday evening and took charge of the affairs of the nation.

The first official act of President Coolidge was the issuance of a proclamation announcing the death of his predecessor and designating Friday of this week, the day of the funeral, as a day which the people should observe with mourning and prayer. This proclamation reads as follows:

"BY THE PRESIDENT OF THE UNITED STATES OF AMERICA, A PROCLAMATION.

"To the People of the United States:

"In the inscrutable wisdom of divine providence Warren Gamaliel Harding, 29th president of the United States, has been taken from us. The nation has lost a wise and enlightened statesman and the American people a true friend and counselor whose whole public life was inspired with the desire to promote the best interests of the United States and the welfare of all its citizens. His private life was marked by gentleness and brotherly sympathy, and by the charm of his personality he made friends of all who came in contact with him.

"It is meet that the deep grief which fills the hearts of the American people should find fitting expression.

"Now, therefore, I, Calvin Coolidge, president of the United States of America, do appoint Friday, August 10, the day on which the body of the dead president will be laid in its last earthly resting place, as a day of mourning and prayer throughout the United States. I earnestly recommend the people to assemble on that day in their respective places of divine worship, there to bow down in submission to the will of Almighty God and to pay out of full heart the homage and love and reverence to the memory of the great and good president, whose death has so sorely smitten the nation."

Shortly after having been notified of the death of the former president, President Coolidge in an informal statement indicated that it was his desire to carry out as nearly as possible the fundamental policies which have actuated Mr. Harding in his administration of the public affairs. He is not expected to make any early or sweeping changes in the personnel of the president's cabinet, and it is unofficially reported that he is asking each cabinet officer to remain with him during the term of office which he completes.

There yet remains about one year and seven months of the four years for which Warren G. Harding was elected, he having served since March 4, 1921.

Mr. Coolidge came into nationwide notice several years ago when he, as governor of Massachusetts, ruled with an iron hand in the suppression of the strike of police officers in Boston. He is known as a man to whom law and order are fundamental, in this respect following in the footsteps of his predecessor, who never lost an opportunity to emphasize the necessity of respect for the laws of the land.

Calvin Coolidge was born at Plymouth, Vt., July 4, 1872; Graduated at Amherst college in class of 1895; began practice of law at Northampton, Mass., in 1897; served as mayor of Northampton 1910-1911; served as president of state senate 1914-1915; elected lieutenant-governor of Massachusetts in 1916; served as governor two terms, 1919 and 1920; was elected vice president of United States in 1920, his term expiring in March, 1925.

Farm Business and Markets Outlook

(Continued from page five.)

Carlot shipments of onions are increasing, with Washington the leading state at the present time. Yellow varieties are quoted at $2.50 to $2.75 per 100 pounds in midwest consuming markets.

Apple shipments which have been increasing steadily for six weeks diminished slightly in the last few days. Prices have hardened and No. 1 Duchess and Yellow Transparents are quoted at $1.50 to $1.75 per bushel in Chicago. Gravensteins are quoted at $2.50 to $3 a box in midwestern cities.

LATEST QUOTATIONS.

PORTLAND, Aug. 4.—

PORTLAND, Aug. 4.—Choice steers, $7@7.50; medium to goodsteers,$6.50@ 7; fair to medium steers, $5.50@6.50; common to fair steers, $4.50@5.50; choice heifers, $4.50@4.75; choice cows and heifers, $4.@4.50; medium to good cows, heifers, $3.50@4; fair to medium cows, heifers, $3@3.50; common cows, $2@3; canners, $1.50@2; bulls, $3@4; choice dairy calves, $8.50@9.50; prime light calves, $8.50@9.50; medium light calves, $8@8.50; heavy calves, $5@8.

Hogs—Prime light, $8.75@9.25; smooth heavy, 230 to 300 lbs., $7.50@8.75; smooth heavy, 300 lbs. and up, $6@7.50; rough heavy, $4.50@6; fat pigs, $8.50@8.65; feeder pigs, $8.50@8.65; stags, subject to dockage, $2.50@5.

Sheep—Choice valley lambs, $10@10.50; medium valley lambs, $9@10; common valley lambs, $7@8.50; cull lambs, $6@7; light yearlings, $7.50@8; heavy yearlings, $6@6.50; light wethers, $6@6.50; heavy wethers, $5.50@6; ewes, $1.50@5.50.

SPOKANE, Aug. 4.—Cattle—Prime steers, $6.75@7.25; good to choice steers, $6.25@6.75; medium to good steers, $5.50@6.25; fair to medium steers, $5@5.50; common to fair steers, $4.25@5; choice cows and heifers, $4.75@5.25; good to choice cows, heifers, $4.25@4.75; medium to good cows, heifers, $3.50@4.25; fair to medium cows, heifers, $2.75@3.50; canners, $1.50@2.50; bulls, $2.75@3.50; light veal calves, $7@8; heavy veal calves, $6@7; stockers and feeders, $4@5.25.

Hogs—Prime mixed, $8.50@9; medium, $8.25@8.50; heavies, $5.50@7.75; fat pigs, $8.25@8.50; stockers and feeders, $8@8.25.

Sheep—Prime lambs, $8@9; fair to medium, $7@8; yearlings, $6@7; wethers, $4@6; mutton ewes, $3@5.

THE GRAIN MARKET.

PORTLAND, Ore., Aug. 4.—Wheat—Hard white, Bluestem, Bart, $1.04; soft white, western white, $1.03; hard winter, northern spring, western red, 95c.

SEATTLE, Aug. 4.—Wheat—Hard white, soft white, western white, $1.02; hard and soft red winter, western red, 99c; northern spring, $1; Big Bend Bluestem, $1.04.

COLFAX, Wash., Aug. 4.—Red, 78c; white, 84c.

PULLMAN, Wash., Aug. 4.—Red, 78c; white, 83c.

DAYTON, Wash., Aug. 4.—Club, 89c; red, 84c.

RITZVILLE, Wash., Aug. 4.—Bart, 85c; red, 80c; Fife, 78c.

HAY AND FEED GRAIN.

SPOKANE, Aug. 4.—Wheat, feed wheat, $38 ton; oats, $40 per ton; rolled, $44; corn, $44 per ton; cracked corn, $46 per ton. Barley, $36 per ton; rolled, $38; bran, $25 ton; bran and shorts, $26 ton; shorts, $28 ton.

Hay—Alfalfa, $20 ton in ton lots, $16@18 carload lots; new timothy, $21@22 in ton lots, delivered; $19 a ton in car lots f. o. b. Spokane.

PORTLAND, Aug. 4.—Millfeed—City delivery prices: Millrun, $28 per ton; middlings, $40; scratch feed, $48; rolled barley, $37@39; cracked corn, $48; rolled oats, $42.

Hay—Buying prices, f. o. b. Portland: Alfalfa, $16 ton; cheat, $13@14; valley timothy, $18@19; eastern Oregon timothy, $20@22; clover, $13@14; oat, $14@15; oat and vetch, $15@16; straw, $10.

GENERAL PRODUCE.

PORTLAND, Aug. 4.—Butter—Cubes, extras, 40@41c lb; prints, parchment wrapped, box lots, 44c; cartons, 45c. Butterfat, 43c delivered Portland; 41c station buying price.

Eggs—Buying price: White hennery standards, 27@28c per doz; mixed color standards, 25½@26c dozen. Selling price, Front street: Selects, 34c; candled ranch, 32c. Association selling prices, cash at store, selects, 30c; firsts, 28c; pullets, 27c.

Cheese—Prices to jobbers, f. o. b. Tillamook: Triplets, 27c; longhorns and loaf, 28c per pound.

Poultry—Hens, 14@23c; broilers, 20@25c; ducks, nominal; geese, nominal; turkeys, nominal.

Pork—Fancy, 13c per pound.

Veal—Fancy, 15½@16c per pound.

SPOKANE, Aug. 4.—Poultry (live weight)—Hens, 4 lbs and over, 18c; light hens, under 4 lbs, 12c; springs, 18c to 20c; old roosters, 8c.

Fresh ranch eggs—$5.50 to $6.50 case, according to quality.

Butterfat—42c lb.

SEATTLE, Aug. 4.—Eggs—Select local ranch, white shells, cases included, 26@27c per doz f. o. b. Seattle; mixed colors, 24c per doz; pullets, 22c per doz; checks, 17c per doz; cases returned to shippers, 1c less; do to country stores, f. o. b., 22c per doz; eastern Washington, case count, 22c per doz f. o. b. Seattle.

Butterfat—F. o. b. Seattle: A grade, 45c per lb; raw milk, $2.25 per cwt.

Poultry—Hens, 4½ lbs and up, 22c per lb; do 3½ and under 4½ lbs, 16c per lb; broilers, 1½ lbs and heavier, 22c per lb; do heavy breeds 1 to 1½ lbs, 21c per lb; hens, 3 to 3½ lbs, 13c per lb; do dry picked, 2c above live; capons, live, fat, 6 to 10 lbs, 35c per lb; do dry picked, fancy, dressed, 37c per lb; do roosters, 9c per lb; Belgian hares, 3½ lbs and heavier, 12c per lb; geese, fat, live, 15c per lb; ducklings, live, 3½ lbs and up, 16c per lb; ducks, old, over 3 lbs, 15c per lb; turkeys, fat, dry picked, 8 to 10 lbs, 30c per lb; do live, 25c per lb; squabs, large, dressed, $4.50 per doz; pigeons, $2; guineas, $3 per doz.

Beef—Steers, fancy, 7@8c per lb; cows, fat, 6c per lb.

Veal—Fancy light, 13@14c per lb; do medium, 10@12c per lb; heavy, 7@9c per lb.

Mutton—Fat, 9c per lb; spring lambs, fat, 17c per lb.

Hogs—Good block, 90 to 150 lbs, nominal; do heavy, nominal.

Range of Live Stock Prices for Week Ending August 1

CATTLE.	Chicago.	Spokane.	Portland.	N. Salt Lake.
Choice and prime heavy steers (1100 lb. up)	10.80@11.90			
Good heavy steers	9.50@11.00			
Medium heavy steers	8.00@ 9.65			
Common heavy steers	6.25@ 8.00			
Choice and prime light steers (1100 lb. down)	10.35@11.50			
Good light steers	9.00@10.75			
Medium light steers	7.75@ 9.35	6.50@ 7.50	6.75@ 8.00	6.25@ 6.75
Common light steers	5.50@ 7.75	4.25@ 6.50	4.75@ 6.75	4.50@ 6.25
Common to choice butcher heifers	4.00@10.00	2.75@ 5.50	3.00@ 5.25	3.00@ 4.75
Common to choice butcher cows	3.40@ 8.90	2.00@ 5.00	2.00@ 4.75	2.50@ 4.50
Bologna and beef bulls	4.00@ 5.25	2.75@ 4.00	3.00@ 4.00	2.00@ 3.25
Canners and cutters, cows and heifers	2.65@ 3.50	1.50@ 2.50	1.50@ 2.00	1.50@ 2.50
Canner steers	3.50@ 5.50	2.50@ 4.00	2.50@ 3.50	2.50@ 3.75
Medium to choice light veals	8.50@11.75	7.00@ 8.50	7.00@ 8.50	6.50@ 7.50
Common to choice heavy veals	3.00@11.25	6.00@ 7.00	4.00@ 7.00	
Common to choice feeders (750 lb. up)	5.75@ 8.00			
Common to choice feeders (750 lb. down)	4.15@ 7.85	4.00@ 7.50		
Common to choice stocker cows and heifers	3.25@ 5.50			
HOGS.				
Top of market	7.90	8.75	9.25	7.40
Bulk of sales	6.40@ 7.65	7.50@ 8.50	8.50@ 9.00	6.75@ 7.25
Heavy (250 lb. up)	6.85@ 7.65	7.00@ 8.50	8.00@ 8.75	
Medium (200-250 lb.)	7.20@ 7.90	7.50@ 8.75	8.50@ 9.00	6.75@ 7.40
Light (150-200 lb.)	7.00@ 7.90	7.50@ 8.75	8.75@ 9.25	6.75@ 7.40
Light lights (130-150 lb.)	6.75@ 7.65	7.50@ 8.50	8.50@ 9.00	6.50@ 7.25
Smooth packing sows (250 lb. up)	5.75@ 6.40	6.00@ 7.00	6.00@ 6.75	5.75@ 6.25
Rough packing sows (200 lb. up)	5.50@ 6.00	5.50@ 6.50	4.50@ 6.00	5.50@ 6.00
Medium to choice pigs (130 lb. down)	6.25@ 7.25	8.25@ 8.75	8.50@ 8.75	6.00@ 6.75
Stock pigs		8.00@ 8.50	8.50@ 8.75	5.50@ 6.00
SHEEP AND LAMBS.				
Medium to prime lambs (84 lb. down)	10.50@13.25	9.00@10.25	9.50@11.00	9.00@11.00
Culls and common lambs	7.50@11.00	6.00@ 9.00	6.00@ 9.50	6.50@ 9.00
Medium to prime yearling wethers	7.75@11.50	6.00@ 7.00	6.00@ 8.00	6.00@ 7.50
Medium to prime wethers	4.75@ 9.00	4.00@ 6.00	5.50@ 6.50	5.00@ 7.75
Medium to choice ewes	3.50@ 7.50	3.00@ 5.00	3.00@ 5.50	4.00@ 5.50
Culls and common ewes	1.00@ 3.50	1.00@ 3.00	1.50@ 3.00	1.50@ 3.00
Feeder lambs	10.50@13.50			

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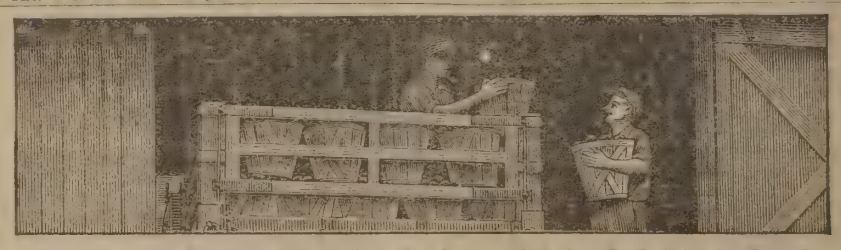
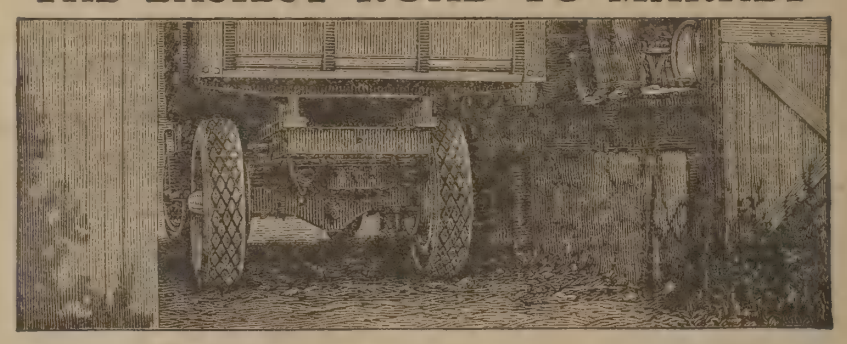


THE EASIEST ROAD TO MARKET



"Eighteen months of hauling have satisfied me that the only way perishable produce can be got safely, economically and profitably to market, is on Goodyear Cord Truck Tires. I load in the orchard, where sand would make the use of solids impossible, and make two extra trips a day to town."

—HARRY J. CHANT, *Maple View Farm*, Beverly, N. J.

THE difference between profit and loss in carrying perishable things to market, often is a set of Goodyear Cord Truck Tires. Big and buoyant, they cushion the load, preventing damage from jolts and jars, protecting the truck, the driver, and the road. Always active, they get over the miles on schedule time. Ruggedly strong with the strength of Goodyear construction in carcass, sidewall and tread, they give you the wear that means more mileage at low tire cost.

The new beveled All-Weather Tread Cord Tire is made in all sizes for trucks and passenger cars

GOODYEAR

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Bits of Fun for Everyone

Cornfield Overseer, "Say, Sambo, what makes your nose so flat?"

Sambo. "I don't know, boss; but I s'pect it's to keep me from stickin' it into other people's business."—Youth's World.

World Speed Record.

Orchestra Drummer—I'm the fastest man in the world.

Violinist—How's that?

O. D.—Time flies, doesn't it?

V.—So they say.

O. D.—Well, I beat time.—Chaparral.

On the Mend.

Doctor—How do your broken ribs feel today?

Patient—Fine, doctor; but I've had a stitch in my side all morning.

Doctor—Great! That shows the bones are knitting.—Youth's Guide.

Doubling Up.

While Horace Mann, the famous educator, was sitting in his study one day, an insane man rushed into the room and challenged him to fight.

"My dear fellow," replied Mr. Mann, "it would give me great pleasure to accommodate you, but I can't do it, the odds are so unfair. I am a Mann by name and a man by nature—that's two against one."

"Oh, come ahead!" the insane man answered. "I am a man and a man beside myself. Let us four have a fight."—Boston Transcript.

To Keep the Peace.

"Papa, will you buy me a drum?" asked a little lad of his father.

"But, my boy," answered papa, "I am afraid you will disturb me with it."

"Oh, no, I won't," said the little chap; "I'll play it when you're asleep."—Toronto Evening Telegram.

On Board the Ship.

Fair Visitor—Is there some place aboard where I can get a drink of water?

The Gob—Certainly, miss. At the scuttlebutt, on the starboard side of the gundeck, 'midships, just forrud of the dynamo hatch.—Judge.

Keeping at It.

Mistress—Mary, have you cemented the handle on the water jug, which you dropped yesterday?

Mary—I started to, mum, but I dropped the cement bottle.

Latest High Class Patterns for the Home

Please order the patterns you desire at least two or three weeks before you wish to use them. Desiring to obtain the latest high-class patterns for its readers, THE FARMER has made arrangements to have them sent dircet from the east, and under present mailing conditions it takes about that time for them to reach you.

4459. Ladies' dress. Cut in seven sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. A 38-inch side requires 6 1-2 yards of 32-inch material. Width at the foot is 2 1-4 yards. Price 10 cents.

4466. Child's dress. Cut in four sizes: 2, 4, 6 and 8 years. A 4-year size requires 1 5-8 yards of 36-inch material. Price 10 cents.

3982. Boys' "overalls." Cut in four sizes: 2, 3, 4 and 5 years. A 4-year size requires 2 1-8 yards of 27-inch material. Price 10 cents.

4472. Girls' apron. Cut in five sizes: 6, 8, 10, 12 and 14 years. A 12-year size requires two yards of 27-inch material. Price 10 cents.

4473. Juniors' dress. Cut in three sizes: 12, 14 and 16 years. A 14-year size requires 3 3-4 yards of 36-inch material. Price 10 cents.

4186. Girls' dress. Cut in four sizes: 6, 8, 10 and 12 years. A 10-year size with sleeves, requires four yards of 32-inch material. Without sleeves five-eighths yard less is required. Price 10 cents.

4191. Ladies' slip. Cut in four sizes: Small, 34-36; medium, 38-40; large, 42-44; extra large, 46-48 inches bust measure. A medium size requires three yards of 36-inch material. Price 10 cents.

4216. Ladies' day dress. Cut in seven sizes: 36, 38, 40, 42, 44, 46 and 48 inches bust measure. A 38-inch size requires 3 3-4 yards of 54-inch material. The width of the dress at the foot is 2 1-4 yards. Price 10 cents.

4453. A stylish wrap. Cut in four sizes: Small, 34-36; medium, 38-40; large, 42-44; extra large, 46-48 inches bust measure. A medium size requires 5 3-8 yards of 40-inch material. Price 10 cents.

4460. Ladies' apron. Cut in four sizes: Small, 34-36; medium, 38-40; large, 42-44; extra large, 46-48 inches bust measure. A medium size requires 4 1-2 yards of 27-inch material. Price 10 cents.

4480. Set of waist accessories. Cut in four sizes: Small, medium, large and extra large. No. 1 requires three-eighths yard, No. 2 requires three-eighths yard (for one pair of cuffs), No. 3 requires three-eighths yard, No. 4 requires five-eighths yard of 36-inch material. Price 10 cents.

4125. Misses' dress. Cut in three sizes: 16, 18 and 20 years. An 18-year size requires four yards of 54-inch material. The width of the dress at the foot is 2 3-8 yards. Price 10 cents.

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PATTERN DEPT., PACIFIC NORTHWEST FARM TRIO, Spokane, Wash.

Enclosed find ..... cents for which send me the following:

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Be sure to give the pattern number and the correct size.

Construction Day by Day

So great and so constant is the growth of demand for telephone service that the Bell System invests throughout the country an average of three-quarters of a million dollars every working day for new telephone plant.

New aerial lines are always under construction or extension, new subways are being dug and cables laid, larger building accommodations are under way, more switchboards are in process of building or installation, and added facilities of every description being mustered into service to care for the half million or more new subscribers linked to the System every year.

This nation-wide construction, this large expenditure of funds, could not be carried out efficiently or economically by unrelated, independent telephone organizations acting without co-operation in different sections of the country. Neither could it be carried out efficiently or economically by any one organization dictating from one place the activities of all. In the Bell System all the associated companies share common manufacturing and purchasing facilities which save millions of dollars annually. They share scientific discoveries and inventions, engineering achievements, and operating benefits which save further millions. But the management of service in each given territory is in the hands of the company which serves that territory and which knows its needs and conditions.

By thus combining the advantages of union and co-operation with the advantages of local initiative and responsibility, the Bell System has provided the nation with the only type of organization which could spend with efficiency and economy, the millions of dollars being invested in telephone service.

"BELL SYSTEM"
AMERICAN TELEPHONE AND TELEGRAPH COMPANY
AND ASSOCIATED COMPANIES

One Policy, One System, Universal Service, and all directed toward Better Service

With the 2-Ton (T35) "Caterpillar" Tractor, you don't have to fit your work to the tractor—the tractor is fitted to your work—versatile, enduring, dependable, powerful and extremely economical.

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You have finished high school and, like all wide-awake graduates, are looking to college.

The State of Oregon offers you the best of training and a collegiate degree in the leading pursuits and professions, as follows:

Engineering, Agriculture, Commerce, Forestry, Home Economics, Military Science and Tactics, Mining, Pharmacy, Vocational Education and Music.

Student life at the college is rich in opportunities for leadership and personal culture.

FALL TERM OPENS SEPTEMBER 28, 1923

For information write to THE REGISTRAR Oregon Agricultural College Corvallis

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Soap, Ointment, Talcum 25c. everywhere. For samples address: Cuticura Laboratories, Dept. U, Malden, Mass.

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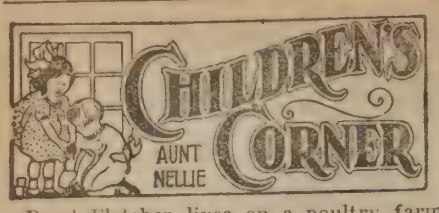


Pearl Fletcher lives on a poultry farm in eastern Washington, Spokane county. They have 1300 chicks and 160 White Leghorn hens. They are doing nicely, Pearl says, and they have lost very few of them. Pearl is 11 years old. She will be 12 January 22, 1923. She sends us the following riddles and a joke. What is taken away from you before you ever get it? Your picture. Why do leaves turn red in the autumn? They blush because they were so green all summer. Mother—How often must I tell you that you can't bite little boys, Charlotte? Charlotte—Oh, but mother, I can! You ought to see Jimmy Park's nose.

Marie E. Kirchner celebrated the Fourth of July at Palmer lake and had great fun boatriding, swimming and fishing, but she did not catch any fish. Her party started out for the lake about 9 in the morning, arriving there at 11 o'clock. Marie is a graduate in Okanogan county, Wash. She likes to cook and says she can make bread, cake, cookies and almost anything. The Kirchners have a large garden and Marie has found plenty to do in it.

June Johnson says she didn't go camping this summer. She spent her vacation at her home in northern Washington and had a good time there. June was 11 years old July 17. We made a mistake in giving her age last time.

Birthday Greetings

THURSDAY, August 9—Jimmy Betz, 11 years old.

FRIDAY, August 10—Emil Hoveling, 11 years old; Catherine C. Lenhart, 9; Grace Marlatt, 11; Ellen Nelson, 11.

SATURDAY, August 11—Ethel Puckett.

SUNDAY, August 12—Florence Bach, 9 years old; Della Evans, 9; Frances Higginbotham, 11; Harold Mott, 6.

MONDAY, August 13—Margaret Bradfield, 9 years old.

TUESDAY, August 14—Joyce Matthews, 11 years old; Hazel Page, 9.

WEDNESDAY, August 15—Clayton Dick, 11 years old; Thelma McTavish, 9; Ella Schrenk, 10; Helen A. Tomlinson, 9.

LETTERS WELCOMED BY AUNT NELLIE.

Among recent letters received by Aunt Nellie are those from cousins whose names follow. A few of these will be published each week in the regular edition of THE FARMER and others will appear from time to time in The Junior Farmer:

Alyda Tenbrink, Ellen Moberg, Mary Plummer, Marjorie Mill, Laura Mill, Edna Yochum, Marion E. Warren, June Johnson, Vera Boyd, Leo A. Anderson, Hulda Wood, Zeita Wood, Ruth Rieper, Della Bromley, Lillian Dunning, Pearl Amburn, Lucy Krebs, Elsie Cramer, Carol E. Spencer, Genevieve Gooley, Everil Godfrey, Violet Pflugrad, Impie Steph, Margaret Plett, Levera Viola Bertholf, Marie E. Kirchner, Mildred Wuorinen,

Ruth Gray, Ellen Bouchard, Bonnie I. Branton, Leatha Runner, Selma Raananen, Esther Kiehn, Esther Wutala, Hermann Lehmkuhl, Helen Staadt, Margaret Nordlund, Molly Litt, Hilda Hageman, Daisy Byrd, Ellen Sanger, Charlie Wolfenbarger, Dorothy Wolfenbarger,

LaVerne George Wolfenbarger, Eva Farrelly, Margaret Kreyssler,

Inez Brown, Vernice Pauline Maurer, Emily G. Maurer, Doris Jones, Elva Blankenship, Ruth Fox, Idell Wolverton, Charles Edward Goetzenbarger, Goldie Richardson, Marion Hamilton, Lempi Lakko, Joyce McDonald, Ivel Reden, John L. Warren, Eda Gross, Olga Gross, Pearl Fletcher.

BEDTIME STORIES

By THORNTON W. BURGESS.

WISHES HE HAD STAYED HOME.

How often when it is too late
We wish we hadn't tempted fate.

That means we wish that we hadn't done the things we did do. It was that way with Chatterer the red squirrel. He wished with all his might that he never had heard of those six eggs of Bully the English sparrow. Anyway, he wished that he hadn't thought of trying to get them, but that he had stayed at home and attended to his own affairs.

Chatterer had gone over to the tree in which Bully had made his nest, chuckling as he went. He had spent part of the day before watching Bully and Mrs. Bully, and he made up his mind that he had nothing to fear from such little birds. Of course, it would be best to wait until only one was at home before he tried to get those eggs, but even if the other should come back it would make no great difference. He had never yet seen a bird as small as they who would do more than scream and make a great fuss when he stole her eggs. Usually this brought all the other birds who were near, and some of them made it very uncomfortable for him; but from what Jenny Wren had said, he didn't think that this would happen this time. In fact he rather suspected that the other birds would be glad to have Bully and his wife robbed of their eggs.

Chatterer was still chuckling as he started to climb the old apple tree in which the nest was. He had seen Bully start for his breakfast over in Farmer Brown's barnyard, and he hadn't the least fear of Mrs. Bully. With the first rattle of his claws on the bark of the tree out popped Mrs. Bully to see what was going on. The instant she saw Chatterer she began to scream, just as he had suspected that she would. And then she had done what he hadn't expected. She had flown at him like a little fury. She had flown straight in his face, pecking at his eyes so that he was only too glad to try to dodge behind the trunk of the tree. But Mrs. Bully was right after him, and in a few minutes Bully himself appeared, for he had heard Mrs. Bully's cries and had hurried home.

For a time it seemed to Chatterer as if the air was full of birds, every one with a stout bill that hurt when it struck. Yes, sir, it seemed as if all the birds in the old orchard must be trying to put his eyes out, or at least tear his red coat to pieces, and yet there were but two, and two little birds at that, for you know Bully and his wife are not very big. The very first chance he got Chatterer darted away for the old stone wall, Bully after him. Once he had reached that, Chattered dodged out of sight between the stones and Bully returned to his home in triumph, boasting loudly of what he had done.

(Copyright by J. G. Lloyd.)

Experience Letters

(Continued from page fifteen.)

to waste by standing back and saying "I'll wait till I see a good one," or "I don't like her." Get out and mix with the girls and see how you like them and don't decide till you do mix with them and get acquainted.

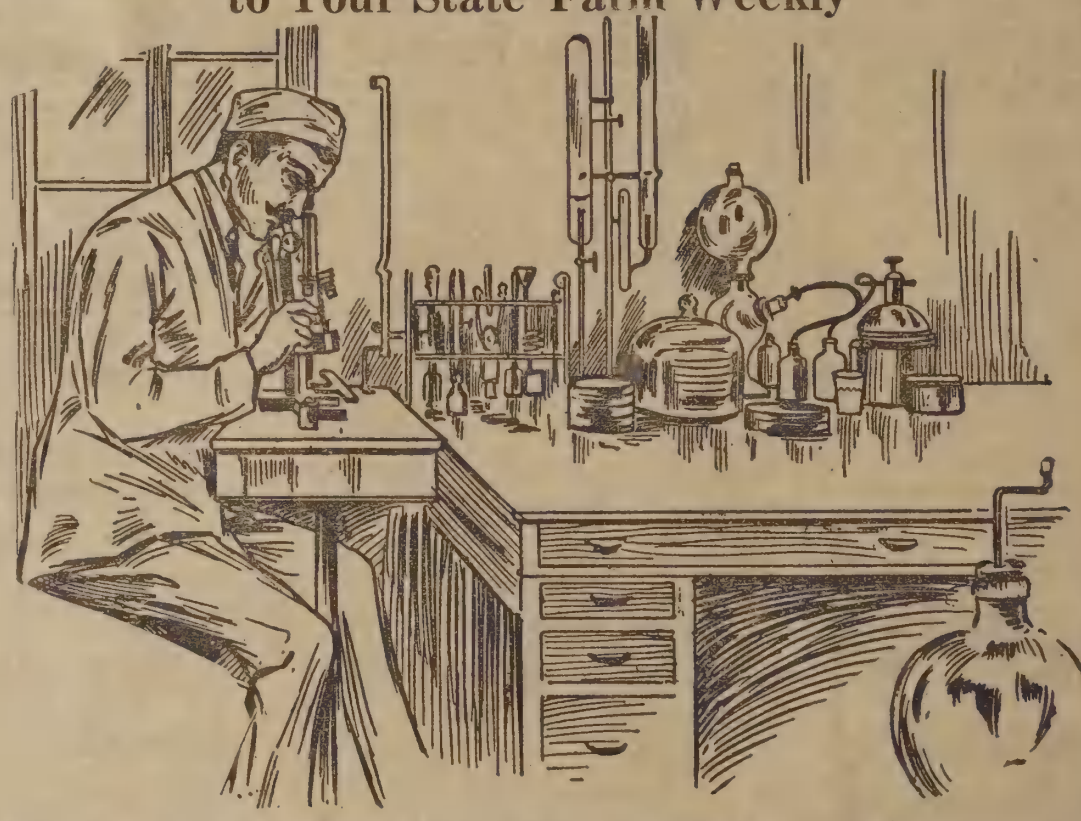
Girls, if you are saving your kisses for the one man, don't let your heart go out to one you like, only to have him turn you down because he don't happen to like you. I would say to you girls also, mix with the boys. I don't mean that you shall seem to be crazy about them or always raving about some one of them, but tell jokes and be a part of the show. Don't wait for the boy to see you sitting in a corner pouting because you haven't been asked to take part in whatever happens to be going on. If you do this you will never have any fun.

I have had more than one boy make a fool of me one night and hate me the next day. This would about break my heart till another boy took me out, then I forgot the preceding one.

I would like to hear from the boys through THE FARMER on their ideas of an ideal boy. I would like to know if boys have trials, too, that they keep hidden away. I remain in my mood till I understand some boys better.

LONESOME PEGGY.

Scientists, as Well as Practical Farmers, Contribute to Your State Farm Weekly



In addition to printing hundreds of articles from practical farmers, fruit growers, market gardeners, stock breeders and dairymen, The Washington Farmer gives space to the scientist and the agricultural expert who carry on careful research work with regard to seeds, plant growth, soils, fertilizers, the care and breeding of poultry and farm animals, the eradication of pests, and many other matters which have a close bearing on agricultural production and prosperity of this state. He has a vast store of information garnered together from many sources which can help solve the farm problems peculiar to this section. What the experimenters at the agricultural schools are finding out, what the scientists who specialize on agricultural problems discover are given to our readers in complete, reliable form. This feature helps round out the paper and gives it greater value to those who make a business of farming

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August 9, 1923.

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FLY-TOX has a pleasant odor and will injure nothing except insects, to which it is certain death.

Sold by Druggists, Grocers, Hardware Stores, Department Stores.

If your dealer hasn't it yet, send in the coupon below with 75 cents for 1 pint. Mouth sprayer free. Convenient hand sprayer, 50 cents.

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Please send me 1 pint FLY-TOX—75 cents; 1 hand sprayer—50 cents; money for which is enclosed.

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Will reduce Inflamed, Strained, Swollen Tendons, Ligaments, or Muscles. Stops the lameness and pain from Splint, Side Bone or Bone Spavin. No blister, no hair gone and horse can be used. $2.50 a bottle at druggists or delivered. Describe your case for special instructions and interesting horse Book 2 R Free.

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Waterloo, Iowa

In writing advertisers, be sure to say you saw their advertisement in The Washington Farmer.

News for Breeders

HIGH AYRSHIRE RECORDS.

What is characterized by the Ayrshire Digest as a most remarkable production record for a heifer has just been completed by Lady Scott of Wenatchee, owned by Wenatchee Ayrshire farm, Wenatchee, Wash. Starting test at 2 years and 201 days of age, she produced 12,608 pounds of 4.85 per cent milk, 609.06 pounds of butterfat and qualified for the 50-pound list every month of her lactation period. Starting again at 3 years and 256 days, she qualified again in March, with 48.16 pounds of fat in 22 days.

Two Ayrshires owned by Washington State college completed a trio of good ones. Chinook Peter Pan Bessie produced 15,506 pounds of milk, 649.05 pounds of butterfat at 4 years and 251 days of age, and Willowmoor Ila, a 7-year-old, produced 14,367 pounds of milk, 735 pounds of butterfat.

Wenatchee Ayrshire farm has eight animals in the latest 50-pound list, that for March, and three of them are class leaders. Stewart Girl of Wenatchee 2d heads the list of 17 junior 4-year-olds with a record of 108.4 pounds of fat that was the highest in the United States, regardless of age. Empress Lady of Wenatchee heads the senior 2-year-old class of 54 with a credit of 67.35 pounds, and Wenatchee Bloom leads the 36 junior 2-year-olds with 60.77 pounds. In addition Lady Scott of Wenatchee 2d appears among the 25 senior 3-year-olds on the list, Wenatchee Scottish Queen and Lady Robin of Wenatchee among the senior 2-year-olds, and Stewart Lassie of Wenatchee and Wenatchee Blossom among the junior 2-year-olds. It will be noted that these are all of Van Tassell's own breeding. Oregon Agricultural college, which has one each in the junior four, senior two and junior two, is the only other northwest breeder to appear.

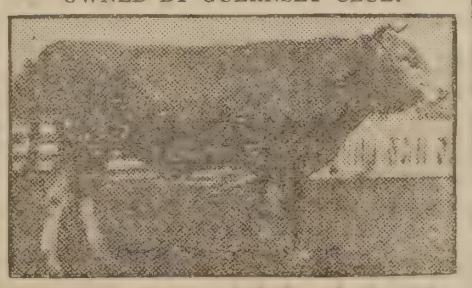
USE A TRIED HERD BULL.

There are 60 grade Holsteins on the Rufus Arland farm near Montesano and a large part of the farm is kept in permanent pasture. In fact 70 acres are used for the cows and never plowed up except when a new rotation is desired. If not pastured too close the grasses hold out well and do not have to be reseeded.

An interesting detail of the Arland herd is the fact that they are using a tried herd bull instead of getting a new one whose prepotency is unknown. Mubroco Colantha De Kol is from an Ohio herd and was for a time in the Ed Valentine herd in the Wynoochee valley. Mr. Valentine has nine daughters from this bull and finds that they all have very uniform udders and one of them will make 300 pounds as a 2-year-old. There are 25 heifers from the bull in the Arland herd and they all promise to be good milkers with straight toplines and the same strong constitution as the sire.

This herd was high in the county cow testing association for four months last year and second for another four months. The average for the year was 352 pounds and one animal was high cow in the association with a production of 548 pounds. Another cow milked 85 pounds in one month and 77 the next, but fell off when she got an attack of foot rot and went down to 30 pounds a month. As it was she made 400 pounds for the year and next year they expect to have some real figures to show for her.

OWNED BY GUERNSEY CLUB.



Here is a picture of the bull doing service for the recently formed Guernsey association, near Shelton, in Mason county. He is Chicona Tamerak, his name indicating A. L. Gile's Chicora farm, near Chinook, Wash., as his original source.

IS AWARDED GOLD MEDAL.

Pocahontas of Sunrise, a Jersey, owned by H. L. Wiester of Skamokawa, Wash., was recently awarded gold medal by the American Guernsey Cattle club upon completing her record of 712.22 pounds of fat from 13,931 pounds of milk in 365 days. Another cow in this herd, St. Mawes Lady Etta, recently completed a record of 523.61 pounds of fat in 305 days, which entitles her to a silver medal. The record was made as a junior 3-year-old, but she has a senior yearling record which stands second in the state. Mr. Wiester expects to make other similar records at the Sunrise farm near Skamokawa.

JUST ENOUGH IS BEST.

An excessive feeding renders digestion inefficient.

It's NATURAL for a hog to wallow
Provide a wallow and add
DR. HESS DIP and DISINFECTANT
then~

1. **Your hogs will be free from lice.**
2. **They will have clean, healthy skins.**
3. **Disease germs will be destroyed.**
4. **Foul odors will be kept down.**

If you do not have a wallow, use the sprinkling can freely. Sprinkle the animals—the sleeping quarters and pens.

Sprinkle the cow barns to keep them healthful and clean-smelling—

The poultry-house to kill the mites and lice.

Use it about the house—in the closets, sinks and drains. Excellent for the sickroom.

Standardized Guaranteed

DR. HESS & CLARK, Ashland, Ohio

Breeders' Dept.

Richly Bred Holstein Bull
Corda Prince Pontiac 241,002

Calved March 16, 1918; great grandson of King of the Pontiacs. Dam, Corda 95347, has record of 22.15 lbs. butter and 549.2 lbs. milk in 7 days. Sire's dam, Bovud 159692, made 22 lbs. butter, 452 lbs. milk in 7 days. Weighs 2130 lbs. Tuberculin tested under federal supervision. His daughters that have freshened with the first calf are averaging 5 gallons milk per day.

$400 F. O. B. GOLD HILL.
G. W. JACOBS, Gold Hill, Ore.

Hollywood Holsteins A well-marked, fine individual heifer calf, reasonably priced.
HOLLYWOOD FARMS, Hollywood, Wash.

Ayrshires

The Perfect Cow.
A few registered bull calves, suitable to head any herd; also baby and heifer calves. Federal accredited herd No. 19073.
All animals sold subject to 90-day retest t. b., and guaranteed breeders.
C. McCLURE, Jerome, Idaho.
Breeder of Registered Ayrshire Cattle.

Milking Shorthorns Cows and young bulls by Peerless Knight, by Beau of Glenside, carrying 93¾ per cent of champion milch cow, Rose of Glenside.
J. E. DANILLS, Murphy, Ore.

Two Richly Bred Jersey Bulls
Sire, St. Mawes Rinda Lad Duke, by St. Mawes Rinda Rosaire, he by Poppy's Golden St. Mawes. 13 and 6 months old, out of gold and silver medal cows. Splendid individuals, priced right.
H. L. PLANK, Rt. 2, Junction City, Ore.

Midway Farm Jerseys Herd headed by St. Mawes Lad of Midway, son of St. Mawes Lad and Lad's Little Pauline, 941 lbs. fat.
W. H. McCONNEL, Shedd, Ore.

Jersey Bulls ready for service. World's highest producing strains. St. Mawes Lad and Rinda Lad blood lines. Priced for quick sale.
SHORTLEY BROS., Orcas, Wash.

Richly Bred Young Jersey Bulls
Sired by Gertie's St. Mawes and out of tested dams with good records.
C. F. BATES, Rt. 5, Salem, Ore.

Silver Medal Jersey Dams First four two year-old daughters of Susie's St. Mawes Poppy, average 575 lbs. fat, with first calf. Young bulls at attractive prices.
JOHN KOPPLIN, Gaston, Ore.

Allandale Jersey Farm
offers some fine heifers and bull calves at farmer's prices. Good producing stock.
A. A. BIXBY, Freewater, Ore.

Entire Jersey Herd
Seven cows, four heifers, two calves, and two bulls; cows to freshen early this fall.
J. H. McCONNEL, Shedd, Ore.

Gold and Silver Medal Jersey Breeding
Heifers and bulls, offspring of the great gold and silver medal bull, Silver Chimes of S. B.
DEL PERKINS, Carlton, Ore.

Entermille Poland Chinas at Auction
Last call Aug. 17, 1923.
30 bred sows and gilts—all extra good ones. 7 Feb. and March boars. Exceptionally well bred and a few are kept good in any state futurity. Come or wire bids to Auctioneer, Col. Amos J. Miller, in my care.
FRED D. ENTERMILLE, Baker, Ore.

Big Type Poland Chinas Weaned pigs, bred gilts at farmers' prices. My pigs please from California to Alaska.
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Polands Big type male pigs, weaning age; Archdale, Peter the Great 2d, Designer, Peter Fashion, Chess, Clansman, breeding; reasonable prices.
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Who Shall Lead in Seeking Wheat Price Solution?—Page 5

State College Honors Five Leaders

For four years it has been the custom of the State College of Washington to confer upon a limited number of citizens of the state at commencement time certificates of recognition for outstanding work done in the interests of Washington agriculture. Last June five such certificates were awarded to the men whose portraits appear on the cover page of this paper, Albert S. Goss, Seattle; Robert T. Reid, Bellevue; Joseph F. Sears, Yakima; John A. Scollard, Chehalis, and John L. Smith, Spokane. In the three previous years this honor had been conferred upon Soren Sorenson of Ellensburg; H. H. Curtis, Pullman; D. Tancred, Kent; A. A. Kelly, Spokane, F. M. Rothrock, Sprague; Alex. Todd, Yakima; J. L. Dumas, Dayton; J. H. McCroskey, Sprague; H. M. Sparks, Vancouver, and H. L. Blanchard, Chimacum.

Concerning the five to whom certificates were awarded this year, the college authorities issued the following brief statement at the commencement:

ALBERT S. GOSS, genuinely interested in the development of rural life and agriculture, recognizes the fact that stability in the field of agriculture is impossible without the development of sound business principles in the management of the farm and in the development of cooperative organizations for the sale of farm products and the purchase of things needed in the maintenance of the farm. Albert S. Goss is recognized as one of the worthy and competent leaders of the northwest.

ROBERT T. REID, a citizen of Washington since his early manhood, is devoting his life to the development of horticultural work in western Washington. He has been unselfish in his endeavor to keep alive any active organizations that are primarily developed for the benefit of the farmers and fruit growers of that section of the state. He has been for three successive times elected to the presidency of the Western Washington Horticultural association, and is now serving his second term of office as secretary of the association. He is also a life member and first vice president of the state horticultural association, and a member of the American Pomological society. He has done more to develop the home orchard and to encourage the growing of the American grape in western Washington than any other one man. Mr. Reid has kept abreast of the times in practical development and up-to-date in the best literature of his chosen field of work. He is known and admired by men from Vancouver to the Canadian line and has contributed largely to the success of his neighbors in horticultural work.

JOSEPH F. SEARS is a highly trained business man and with his many years of experience in safe thinking among the farm interests he has obtained a deep and broad knowledge of the problems which affect all farmers. Since he came to Washington he has become especially interested in many problems concerning the sheep and general live stock industry of the state and northwest. Through this keen insight Mr. Sears has been able to advise regarding, and put into successful operation, several measures that are of vital importance to the live stock industry of this state. He has been one of the leaders who has thought clearly and worked straight toward his ideals for the benefit of the live stock industry and general agriculture.

JOHN A. SCOLLARD is a progressive farmer, live stock breeder and outstanding leader in the cause of cooperation among farmers. As president of the United Dairy Association of Washington he has given his sincere devotion, unusual organizing ability and superior energy to the constructive upbuilding of the economic conditions of the farmers of Washington and the northwest.

JOHN L. SMITH has long been a leader in the agriculture of our state and has been especially active and successful as a breeder and judge of dairy cattle. He has done as much as any other man in America to fix the type of Holstein-Friesian cattle as we now have it. He bred and developed the herd that won stellar honors in the show ring at the national dairy show, Chicago, in 1914 and really blazed the trail for the northwestern breeders in advertising what could be accomplished in dairy cattle breeding in the northwest.

As a former member of the board of directors of the Holstein-Friesian Association of America and of the board of directors of the National Dairy show and exposition his influence has been country-wide.

A loyal friend of agricultural education, his advice has always been constructive and his assistance and help in this cause cheerfully rendered.

August Crop Report

The August 1 crop report for the state of Washington indicates a decrease in total estimated wheat production as compared with the forecast of July 1. The report, as released by G. S. Ray of the federal division of crop and live stock estimates, further indicates increases in the expected crops of oats, barley, potatoes and apples, as compared with July 1 estimates.

The winter wheat crop is estimated at 37,341,000 bushels, as compared with the July 1 forecast of 39,576,000 bushels, the 1922 crop being 23,244,000 bushels and the five-year average 23,368,000 bushels. Spring wheat is estimated at 20,861,000 bushels, as compared with the July 1 estimate of 19,806,000 bushels, the 1922 crop of 9,200,000 bushels and the five-year average of 16,673,000 bushels. For all wheat, August 1 estimate, 58,202,000; July 1, 59,382,000 bushels; 1922 crop, 32,444,000 bushels; five-year average, 40,040,000 bushels.

The oat crop is estimated at 10,969,000 bushels; July 1, 9,799,000 bushels; 1922 crop, 7,959,000 bushels; five-year average, 9,660,000 bushels.

Barley crop, 3,256,000 bushels; compared with 1,813,000 bushels for 1922; five-year average, 3,190,000.

The corn crop estimate is 3,055,000 bushels, against 2,747,000 bushels in 1922.

The rye crop is placed at 288,000 bushels, as against 169,000 bushels in 1922.

The potato forecast is 8,458,000 bushels; July forecast, 8,308,000 bushels; 1922 crop, 9,425,000 bushels; five-year average, 8,276,000 bushels.

Hay crop, 2,609,000 tons. July 1 forecast, 2,583,000 tons and the 1922 crop of 2,341,000 tons.

Apple crop, 29,601,000 bushels, as against July 1 estimate of 29,580,000, while the commercial apple crop is put at 26,049,000 bushels, as against 26,031,000 bushels on July 1.

The pear crop is estimated at 1,881,000 bushels; July 1 estimate, 1,834,000 bushels and the 1923 crop 1,708,000 bushels.

Fears Federal Grades

"The farming interests of this state must view with alarm any standards of their commodities that are being established by the federal government," Director E. L. French of the state department of agriculture told the recent meeting of grain dealers.

"No matter how conscientious the federal office may be in trying to establish a standard for your crops, no swivel chair artist living 3000 miles away is in as good a position to grade your commodity as is the fellow who is on the job and knows your local problems and markets. A national policy of grading grain has caused the northwest millions of dollars' loss because the standards do not fit the intrinsic value of our wheat.

"Last year we were compelled to hold meetings in the state to explain to the hay growers a proposed federal standard for hay. These meetings were held jointly with the state of Oregon, and it was the consensus of opinion of the farmers at these conventions that none of the hay they produced could be successfully marketed under those standards. In fact, one of the big Ellensburg timothy hay producers said there was not a ton of hay in the Kittitas valley that would measure up to those requirements. Through the insistence of the farmers of this state the standards were not adopted in this state.

"Federal grain standards have been corrected from time to time to overcome local conditions and are now much more nearly applicable to our wheat crop, although there are yet needed changes."

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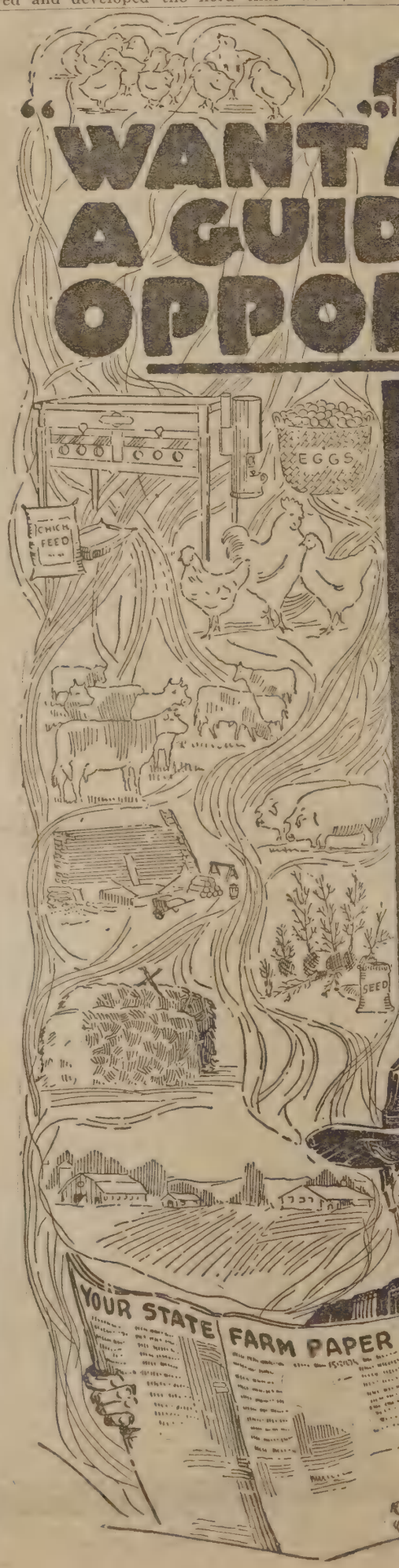

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Wheat Growers Ask Emergency Price Legislation

Farm Organizations Urge President Coolidge to Call Immediate Session of Congress

Following on the heels of similar action by the American Wheat Growers, Associated, a conference of between 200 and 300 farmers at Spokane Monday, August 13, adopted a resolution urging President Calvin Coolidge to call a special session of congress immediately and urging upon congress the advisability of enacting emergency legislation that would fix a price of $1.75 per bushel on No. 1 wheat at primary markets.

The resolution also urges wheat growers to hold their wheat off the market until the president and congress have acted upon the petitions being presented to them for price stabilizing legislation, and urges bankers and business men to support the farmers in the movement for a living price for wheat.

The resolution was written by a committee composed of J. P. Simpson, Ephrata,; J. M. Reid, Pullman; John Brining, Dayton; J. L. Naylor, Moscow, Idaho, and L. P. Turner, Harrington, appointed by President J. Q. Adams of the Farmers' Union of Washington and Northern Idaho, who had called the conference. Mr. Adams presided at the meeting and George P. Mix of Moscow served as secretary.

The Resolution.

The resolution as adopted reads as follows:

"Whereas, the present market price of wheat is far below the cost of production, and not on an equality with the other industries, and whereas, the present condition, which has been steadily growing worse since September, 1920, and whereas, the present condition if continued will ruin a large majority of wheat farmers and the business institutions in the wheat belt, and the present conditions, therefore, constitute a dire emergency in agriculture, and whereas, the government of the United States has already established a precedent of controlling the market of wheat at a time when price control meant lower returns to the wheat farmer and a profit to the government agency handling the wheat.

"Therefore, be it resolved, that the president of the United States be petitioned to call an extra session of congress to consider this matter and take such steps as are necessary to stabilize the price of wheat.

"We recommend that congress shall enact legislation establishing a federal corporation with $500,000,000 capital stock, $50,000,000 paid in and the balance available on call. The corporation shall have power and authority to purchase and sell wheat in any quantity at any time or place at a basic of $1.75 per bushel at primary points. The fixed price shall be available as of a certain date and sufficient variation may be announced from time to time to provide for carrying charges and to control distribution. The fixed price shall be on the basis of clean wheat testing 58 pounds per bushel, and the corporation shall establish a schedule of discounts and premiums in accordance with the milling value of wheats of various subclasses, test weights, mixtures, percentages of moisture and foreign content.

"In order to take care of any loss that might accrue in selling the export surplus the corporation may retain from the original sale price not to exceed 10 cents per bushel in addition to the amount estimated to be necessary to pay operating costs and interest at a rate of 4 1-2 per cent per annum on capital stock actually used. Wheat may be purchased or resold only by the corporation or by concerns licensed by the corporation and operating under rules, regulations and restrictions imposed by the corporation. Every licensed concern shall make reports of its purchases and resales in such forms and at such times as the corporation may direct.

"We recommend that the chair appoint a committee of five to carry on the work of this organization along the lines as set forth in these resolutions.

"Resolved, that we heartily commend the action of our fellow farmers in Idaho calling a meeting to discuss the wheat price situation and we urge all who possibly can to attend this meeting.

"We further request that all wheat growers cooperate throughout the United States in furthering this united effort by selling no wheat nor offering any for future delivery until this or some other definite action is taken for the handling of this crop at cost plus a reasonable per cent above expenses and also ask the bankers and merchants and the public in general to give us their sympathy and support for a square deal that the wheat growers may not be driven to serfdom or leave the farm for other occupations, thereby crowding the laborer from his job."

The Minneapolis Resolution.

The resolution conforms in general to that adopted by the American Wheat Growers, Associated, at Minneapolis last week, which read in part as follows:

"The American Wheat Growers, Associated, Inc., advocates, through immediate legislation, the establishment of a federal agency, suitably financed, to go into the open market and purchase wheat whenever the price drops below a basis of $1.75 per bushel for No. 1 dark northern spring wheat at Chicago, with suitable differentials for wheat of different grades and qualities, this agency to act during the marketing year of 1923 and until July 1, 1924. From that date onward wheat producers, through their organization, will exert sufficient domestic price control to insure capital returns commensurate with their capital and labor investment."

Need Concrete Plan.

One of the principal speakers at the Spokane conference was Senator William E. Borah of Idaho, who urged the farmers to prepare a definite, concrete program to present to congress and unite solidly behind it, declaring that there was such strong opposition in congress from senators and representatives who came from nonagricultural sections that nothing but a solid front and a specific, constructive program of relief would receive serious consideration. He declared that he would support any measure that seemed to him economically sound if it had the indorsement of the united wheat growers. He urged that the farmers do not forget that this is but a temporary measure and that the future depended upon the development of world trade, the opening of the channels of international commerce and the upbuilding of farm marketing organizations. He expressed opposition to any movement for the reduction of acreage or production of wheat, declaring that the reestablishment of a world market would create a market for normal American production.

Congressman French Favorable.

Congressman Burton L. French of Idaho delivered a strong address in which he urged necessary legislation, but suggested that if government purchasing of wheat be resorted to the law provide that the government enter the market on a certain date next spring or summer, say May 1, prepared and under obligation to buy all wheat in the hands of growers at that time at a guaranteed price. He argued that this plan would limit the activity of the government in the buying of grain, inasmuch as the immediate price in the open market would tend to rise to the price at which the government would be required to buy next May less the carrying costs up to that time. Senator Borah inquired if that might not work to the advantage of the speculator or dealer rather than to the grower, but Congressman French said he felt that the ability of the growers to borrow money to cover carrying costs from the intermediate credit banks would enable them to protect themselves against the necessity of immediate dumping at whatever price the dealers offered. He joined other speakers in urging increased unity of effort on the part of growers through cooperative organizations.

Would Fix Selling Price, Too.

George A. Allen of Medical Lake spoke in favor of the Gooding bill, with which the resolution conformed in most essentials, except that he favored an amendment that would fix both the price at which the government would buy and at which it must sell, the latter to be a few cents above the buying price. He said this would result in the government's having to buy no wheat until an actual surplus was found to exist near the close of the season, if at all. He said that unless there were an actual surplus private buyers would rush in to buy from the growers at the price which the government would pay rather than delay until they later would have to buy at the higher price below which the government could not sell.

Others who spoke, in addition to those mentioned and to President Adams, who opened the meeting with a comprehensive statement of the needs for relief in some form, included Dean E. C. Johnson of the state college experiment station; Roscoe Smith, Ephrata; J. M. Klemgard, Pullman; John Brining, Dayton; George P. Mix, Moscow; Director E. L. French of the state department of agriculture; C. E. Spence, state market agent of Oregon; S. B. Hill of Waterville, democratic candidate for congress in the Fifth district; C. E. Myers of Davenport, republican candidate for congress in the Fifth district; F. L. Hopper, president of the Montana farmers' union, and others who spoke informally from the floor. A favorable letter was read from Governor L. F. Hart.

A similar meeting is scheduled for Moscow, Idaho, next Saturday, August 18, at which several of the same speakers, and in addition Senators F. R. Gooding of Idaho and C. C. Dill of Washington, will speak.

Kittitas County Sets the Pace in Livestock Improvement

Live stock breeders of the state of Washington may well receive an inspiration from Kittitas county. It stands first in the states west of the Mississippi river in the number of pledges signed by farmers in the recent purebred sire campaign. It ranks sixth in the United States. Out of 945 farmers in the county, 144 have signed the agreement to use only purebred sires on their farm.

The campaign was a systematic plan launched by the department of agriculture in 1919 in all of the states of the Union. The plan called for the help of the county agents, who were asked to secure as many signatures as possible, either by a series of community meetings or through the different community project leaders in each county.

The pledges in Kittitas county were secured almost entirely by the local leaders, many of whom went from farm to farm as though he were selling something. In fact, he was selling something. He was selling the idea of the purebred sire to the farmers and live stock owners of his own community who theretofore had been content to use inferior animals.

"The influence of these leaders can not be over-estimated," said W. L. Davis, the county agent. "In fact, it was the community leaders who put the plan across. In the districts where we had leaders who were live wires, it was an easy matter to sell the idea to the people, and on the other hand the communities that failed to carry the campaign were those where leaders were not wholly in sympathy with the movement, or there were no leaders to be had who could do the work.

Indirect Influence Counts.

"While our direct results are more than encouraging, we feel safe in saying that the greatest influence of the pledges lie with the indirect influence that the campaign has had on the live stock owners of the entire county. The truth about the purebred sire has spread even to those who have only heard of the term now and then, and they are either keeping purebred sires or take their females to some farm where there is a good sire."

Perhaps the most striking example of this movement is in the number of registered farm flocks of sheep now kept in the county. In the opinion of Mr. Davis, the purebred sheep industry has practically been developed during the last four years, or since the purebred sire campaign has been put on. Before that time there were only one or two flocks that contained purebred animals, although there were a number of flocks headed by registered rams.

While a number of scrub dairy bulls have been eliminated the increase in the number of good dairy bulls has not been as rapid as it might have been. There has been more room for betterment among the beef bulls since there is a state law that prohibits a scrub bull from running on the range. There are a few beef herds in the county that are headed by scrub bulls, but they are few and far between and it is sincerely hoped that these few will soon be replaced by better animals.

Clubs Take Leadership.

In speaking of this purebred sire movement, one should not overlook the influence exercised by the boys and girls' clubs. Of these, the Hampshire sheep club has resulted in the placing of more purebred sires on the farms. They have also done more fair work. The swine clubs, of which there are three in the county, one each for the Chester Whites, Berkshires and Poland Chinas, have a greater membership and have been the cause of establishing more purebred farm herds. This has been done by each member's purchasing a bred gilt and caring for her and the litter of pigs and showing them at the county fair.

The dairy calf club, while ranking third in numbers, is by no means least in importance. The members have taken great interest in their club work and have shown their animals at the county fair for two years and two members took their calves to the state fair at Yakima. The beef clubs were started to get the boys and girls interested and also to dispose of some of the farm roughage at a profit and the movement is still going. They are mainly Shorthorns this year, but there are also a few head of Aberdeen Angus steers in the club.

A poultry club has just been started this year, and although the members are doing good work and are interested in their project, the increase in the number of farm flocks has been due largely to the consistent work of W. D. Buchanan, poultry specialist of the state college. During his short visits to the county Mr. Buchanan has advocated the small farm flock which, if properly housed and fed, will return a comfortable profit to the owners.

The many farms that have a modern laying house and a flock of good layers have demonstrated to the people the fact that chickens don't "eat their heads off because feed is so high," but they find that much of the feed can be obtained from the grain crops and even some of the mashes can be prepared at home if a feed grinder is available.

The addition of the 25 or 30 farm flocks that range in size from 200 to 500 hens may be credited both to the work of Mr. Buchanan and to the influence of the better sires campaign. There are also two larger commercial flocks in the county—one having about 1000 birds and the other over 1500.

Quality Is Increased.

"I would not hesitate to say that the live stock industry has increased from 50 to 75 per cent in quality, due to the better sires campaign," insisted Steve Woodhouse, who is project leader in the Edgmont-Thrall community.

In the Thorp community, west of Ellensburg, 65 per cent of the live stock owners signed the pledges, thus agreeing to use nothing but registered sires on their farms. This was the highest percentage of signatures of any district in the county.

"It has not only been the signing of the pledges, but the campaign itself has had a wonderful influence on the community," said F. P. Newman, project leader for this district. "There are few, if any, who will breed to anything but purebred sires. In fact, the people who didn't sign the pledge have come to the point where they insist on taking their females to registered sires."

In the case of the district west of Ellensburg, where S. P. Wipple is the project leader, there is not a single scrub

(Continued on page fourteen.)

Incorporate Poultry Association

Articles of incorporation are being filed this week by the organization committee of the Farmers' Union Egg and Poultry associations. It is expected by the officers that the corporation will be ready to do business by the first of October, by which time it is believed the full 50,000 hens will be signed up by members as originally planned. The present members of the new association represent 35,000 hens, according to J. Q. Adams, president of the Farmers' union and chairman of the organization committee of the new marketing association.

The new association is a pure cooperative organization formed under the cooperative marketing law of Washington. The organization work is being done by a committee of representative poultrymen selected by the officers of the Farmers' union because of their poultry interests and their interest in improving the marketing of poultry in the Inland Empire. The contract being used is the same as that of the Washington Cooperative Egg and Poultry association, which has been operating successfully in western Washington for several years. Experienced marketing experts from the older association will assist the new organization in getting started in the actual marketing business on a sound business basis when it is ready to receive the eggs and poultry of its members. All the poultry products of the members will be assembled by the association, graded and pooled with returns made each week to each member on the basis of quantity and quality of his product.

Contracts were received by the association last week for about 3000 hens and a considerable number contemplated signing up as soon as the corporation is incorporated.

Shortly after incorporation an election will be held by which the members will elect their own board of directors from among themselves, the law requiring that only producers may be members of a cooperative association and that only members may serve on the board of directors, with the exception of one director to be appointed by the state director of agriculture as a representative of the general public.

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Honey on Your Hot Cakes

This magazine believes that not only the beekeepers of our territory would profit from increased use of honey by the people generally, but that the people themselves would benefit in two ways thereby. In the first place honey is a delightful and healthful food. Secondly, the liberal use of this sweet would do its bit to prevent unjust prices for sugar, which have been experienced recently and many times in the past. With these thoughts in mind we have communicated with a large number of hotels and restaurants, urging upon them the benefits that would accrue to everybody concerned were they to increase the use of honey on their tables. We have likewise urged upon them the use of this delightful sweet as produced by the beekeepers in their own localities, thus, to this degree, stimulating home industry and helping the local beemen over a period that has been not altogether prosperous.

Beekeepers should strive to produce the highest quality of honey possible, market it in the most cleanly and attractive way possible and thus merit the increased patronage they receive.

Satisfied With Low Returns

Most of us are satisfied with our poor cows or hens or hogs. At least, we are not sufficiently dissatisfied to make a serious effort to increase their production. We go on year after year with the two-gallon cow when we might as well have a five-gallon producer. We keep the hen that lays six or seven dozen eggs a year when we should have no hen on the premises that lays fewer than 10 or 15 dozen.

It is just plain carelessness on our part, and, when we get down to brass tacks, a lot of our financial distress is due to this class of indifference. It costs just about as much to feed and care for the low producing cow as the high producer, and for the hen that gives little return as for the one that gives high return. The low producer does not pay for her keep, much less leave us a profit. The high yielder makes money for us if we give her half a chance.

Let's get out of this scrub rut! Let's get rid of our boarder cow and our boarder hen. Let's build up the kind of herds and flocks that will make us some money and lend a little pride to our daily lives.

Educate for World Peace

It was a wise move on the part of the educators assembled at San Francisco recently to launch a world federation of educational associations, the outstanding purpose of which is to promote world peace through educational means.

Education is the basis of progress in any fundamental endeavor. Differences that lead to conflict between individuals or between nations are usually due to misunderstandings. Misunderstandings may be removed by education. It is seldom that sheer viciousness dominates an educated mind or an educated people.

By education we mean more than just the amassing of knowledge of concrete facts. We must include the training of the moral nature. The simple virtues must be indoctrinated into the hearts of men at home and abroad. The ten commandments must be preached by example and by precept, for he who keeps these commandments is educated in a sense more practical than he whose mind is merely overflowing with material facts.

In our own country we find it impossible to legislate an evil out of existence until the mind and heart of the people at large are educated to a point of willingness to dispense with that evil. Likewise, we will never, by league of nations or court of international justice, be able to legislate world peace into being or enforce international concord until the conscience of the world submits to the appeal of harmony. Education alone, in the broadest, biggest sense, can cure this world of its evils and relieve it of its resultant distresses.

A Noble Life Ennobles Generations Yet to Come

The endlessness of one's influence is a phase of eternal life.

What we as individuals are today is in no little part the consequence of personal influences in generations that have gone before us.

The course of the world down future ages is now being determined by our own lives. If base, they debase the future as surely as they debase the present. If noble, they ennoble the future as they ennoble today, for the influence of the individual upon those about him never dies. Were it not so, the writer of these lines would have to say that he had lost a friend. But the friend is merely at rest; her influence abides and is at work forever.

One of Washington's noble women has yielded to a human ill and reluctantly ceased her active work of service to her fellowman. For many years the work of her wonderful mind and heart has stimulated, uplifted and wholesomely entertained thousands of men and women, boys and girls, in every nook of the state. The more secluded and isolated the farming community or the industrial camp, the more eagerly did she seek it out and minister to it. Multitudes who benefited from her service knew not her name nor even realized that they were the beneficiaries of a carefully planned and painstakingly administered institution superintended by a woman—or by any one. They received as a matter of course, and she rejoiced to serve them. She sought no compensation but a simple livelihood and a consciousness of helpful service rendered to those who needed help.

Mrs. Lou Gertrude Diven, for more than a decade superintendent of the Washington state traveling library with offices at the state capital, will no longer select from its shelves those books most suited to the particular needs of distant communities to whom good literature is not easily available. But the books will continue to go, for she has left behind a corps of workers whose lives have absorbed much of the wisdom and tact and selflessness of her for whom they sorrow. No more will her host of friends gain inspiration from personal contact with her lovely character and her courageous genius. But the inspiration which she has been to those of us who knew her well lives on and on forever, and in numberless hearts who knew her not at all, nor even knew she lived, there is hope and courage and a touch of nobility implanted there by the never-ending influence of her quiet, deep-flowing life of consecrated service.

Lower Rate on Vinegar

Apple growers of the Pacific northwest have gained a point in a decision made by the interstate commerce commission.

This permits the railroads to reduce the present rate of $1 per hundred pounds to 75 cents on vinegar from Pacific coast producing points and the middle west.

Semi-Annual Index Ready

The Washington Farmer publishes an index semi-annually of all articles published in its columns. The index for the first six months of 1923 is now ready for distribution. If you have saved your copies of THE FARMER and wish a copy of the index, send a 2-cent stamp to The Washington Farmer, Room 44, Review Bldg., Spokane, Wash., and one will be forwarded to you.

Washington State Gleanings

EXPECT GOOD HOP CROP.

H. A Kaufman of Klaber, head of the Klaber Investment company, declares the outlook for a hop crop in the 110-acre yard which the company has in bearing this year is at this time most encouraging.

HOLD-OVER PRUNES ARE SOLD.

Manager W. H. Wood of the Washington Growers and Packers corporation, cooperative marketing association of prune growers in Clarke county, announced July 30 that the association had just completed packing for shipment approximately 1,250,000 pounds of prunes. This pack constitutes the last of the "carry-over" from the 1922 prune crop, and disposes of the last of slightly more than 7,000 000 pounds of prunes, which the association received into its warehouses last fall.

THURSTON PLANS HATCHERY.

Establishment of an accredited hatchery for Thurston county was determined on at a meeting of poultrymen at Olympia, July 24, and it was also decided to place this on the highest practical standard by certifying cockerels for breeding purposes only from 250-egg hens, instead of the regular state standard of 200-egg hens.

Sufficient poultry growers signed up to insure the initial success of the venture, and the prospects are good for a large increase in membership.

O. B. Gregory of Olympia was selected to operate the hatchery and a model plant will be put in with total capacity of not less than 12,000 eggs.

CREAMERY INCREASES OUTPUT.

The Winlock Cooperative creamery for the first six months of 1923 shows a gain in its output of nearly 18,000 pounds of butter over the corresponding period for 1922. June 30, 1922, a total of 207,799 pounds of butter for the period named had been made. This year the total was 225,728 pounds.

A fine new plant has recently been built for the home of the institution. Inside 60 to 90 days moving of the machinery and other equipment will begin. When newly housed the Winlock Cooperative creamery will have a plant equal to the very best in the entire country in the matter of convenience and other ways.

BIG ONION YIELD AT PASCO.

Thirty-five sacks of onions from a plot 107 by 54 feet is the record made in an experiment on the A. R. Welch farm, two miles east of Pasco. The trial was made on ground reclaimed from sagebrush two years ago on the Inland Empire highway, near the Snake river bridge.

On the same farm, another experiment with cabbage put out last fall was made and a comparison carried out with other garden communities. The cabbages matured 10 days earlier than they did under the same conditions at Walla Walla. The experiments were made by Italian gardeners from Walla Walla who plan to buy land here for gardening.

CANNERY WORKING FULL TIME.

One of the busy places in Friday Harbor is the plant of the San Juan islands cannery, which is now canning green peas for the market.

The cannery has a capacity of 2000 cases an eight-hour day, and gives employment to approximately 30 people.

The acreage was planted in blocks at different times, so that the crop would not ripen in excess of the capacity of the cannery.

Mr. Henry, manager of the company, is well pleased with the outlook and says this has been an ideal season for growing the crop and that the indications are that a better pack than was expected will be put up.

GROWING RED CLOVER SEED.

Growing of red clover seed in the vicinity of Chehalis is becoming a substantial industry, according to J. W. Elston of Chehalis. The largest field of clover is that of J. A. Scollard, west of Chehalis, where 100 acres of second crop clover presents a beautiful sight. The Cairns Brothers on Boistfort Hill also have a large acreage and it has been determined that Lewis county hill lands are exceptionally well adapted to growing clover for seed purposes. Both Mr. Scollard and the Cairns Brothers have now sufficient acreage to make purchase of clover hullers necessary. Four or five combined threshers and hullers also will work in the Chehalis section. Mr. Elston reports an increase of 500 per cent this season over 1922 in Lewis county.

PLANTING NUT TREES.

Prune orchards are being rooted to make room for walnut and filbert trees in various sections of Clarke county, according to successful growers, who predict that the nut culture is a coming industry in Clarke county.

Some walnut enthusiasts in the county are A. A. Quarnberg, John Spurgeon, Fred Brooker, Henry J. Biddle, Charles Gibbons, A. Ward, R. E. Turk and L. F. Russell, who possess the largest groves, which are yielding good returns.

Mr. Russell is a prominent prune grower, having 60 acres. His plan is to take up every third prune tree and plant a grafted walnut tree in its place until all of the former have been taken up.

Robert E. Turk of Washougal is owner of the largest planting of bearing walnuts in this state, which consists of 900 13-year-old trees, covering 22 acres in one field. The walnut ranch is in the Mount Pleasant community, near the Skamania county line. Mr. Turk expects to plant 20 acres more of walnuts, to be interplanted to filberts as soon as possible. He uses the 40-foot spacing for walnuts and a 10x10 filler system for filberts.

One of the largest walnut groves, consisting of Franquette and Mayette varieties, in this part of the country is owned by John H. Hoff, in the Sara district, seven miles south of Ridgefield, who is a firm believer in the walnut crop as a coming industry for Clarke county.

Wheat Solution Sought

Now a Joint Committee on Research Begins Work

The wheat grower's plight persists in claiming public attention. It is a serious agricultural situation and looms large in the talk of bankers and other business men.

Representative Sydney Anderson of Minnesota believes there are four things that can be done, all of which will be helpful to the wheat growing industry in the future. These are:

An increase in consumption.

An improvement in the quality of grain grown.

A readjustment of acreage.

Better marketing methods.

Mr. Anderson is president of the recently named wheat council, and the joint committee on wheat research is already at work on the problem.

Mr. Anderson believes that the present price of wheat is due to a considerable extent to psychological influences, including bearish reports from Europe, while the actual facts do not justify the depression of the market. Most of the trouble, in his opinion, is due to an increased acreage as a result of war stimulation. This increase amounts to about 11,000,000 acres.

The committee of seven members is made up of Sydney Anderson, president; W. I. Drummond of Kansas City, chairman of the board of directors of the International Farm congress; O. E. Bradfute, president of the American Farm Bureau federation; S. J. Lowell of Fredonia, N. Y., master of the national grange; H. D. Irwin of Philadelphia, a wheat exporter; George C. Jewett, general manager of the American Wheat Growers' association; A. J. Brosseau of New York, president of the Mack Trucks, Inc.

This committee was created as a result of a suggestion made by Julius H. Barnes, president of the National Chamber of Commerce of the United States, at the wheat conference held in Chicago in June, the committee's expenses being borne by the national chamber.

Mr. Barnes believes that the national chamber "can perform no more helpful service to all business than to provide the means by which leaders of the farm organizations can study the question and see if in certain sections and among certain groups of farmers this period of distress can be lightened, until the day of full recovery, which has always come—and which will come again—for intelligent, self-respecting American agriculture," and Mr. Anderson adds that "the work of this committee will constitute an honest effort on the part of farmers and business men, including the manufacturers of wheat products and those interested in associated products, to help the wheat farmer deal with the wheat problem."

Wheat growers themselves can look at this whole situation from two points of view. First, to find some one who can solve the problem for them and, secondly, to dig out a solution for themselves.

Shall the wheat growers, themselves, merely aid the other fellow in solving the problem or shall they use the aid of the other fellow in their own solution?

Who is to take the lead in this work, the one who produces the wheat or the one who buys the wheat? Both are interested, each in his own way. Both can cooperate, but only one can lead.

Shall the wheat grower find leadership within his own ranks or will he trust even to joint leadership?

Successful Farming: When a society or organization is functioning well under trained officers, it is well to continue them in office. When officers form a self-perpetuating clique among themselves, it is time to clean house. When an officer can not hold his job on the merits of his efficiency alone, it is time to make a change. Eternal vigilance is the price of liberty.

Food Value of Meats

Educational Program Outlined at Meeting in Chicago.

It would seem that the American people are especially given to fads in their diet, especially in the matter of not eating certain kinds of food. Some one comes along and says that potatoes are so largely made up of starch that they are to be limited, if not eliminated, in the diet. On the other hand, it is claimed that potatoes are the most healthful of foods. Years ago tomatoes were denounced as conducive to a certain malignant disease. Now they are declared to be most healthful. Wheat flour has its advocates as well as those who object to its use. Perhaps more propaganda has been given on both sides to the subject of meat than to any other class of foods.

In the midst of all these contradictory opinions, what can the average person, with a normal stomach, do? If you are not already in the hands of a physician and if you are enjoying fair health, about the best thing you can do is to eat temperately of a variety of standard foods—cereals, meats, vegetables, fruits. You can easily go to an excess in the matter of sweets, pastry and desserts.

A widely representative meeting of men interested in the live stock and meat industry of the country has just been held in Chicago. It outlined an educational program designed not only to promote a more widespread knowledge of the food value and healthfulness of meat, but also to teach the best methods of preparing and selecting and using meats.

Among those present at the meeting were representatives of the American Farm Bureau federation, the American National Live Stock association, the National Woolgrowers' association and the Institute of American Meat Packers.

FARM BUSINESS AND MARKETS OUTLOOK

A few western cattle have been drifting into midwest markets for the last three weeks, but the season was opened in the last few days, when over 100 loads, mostly from Montana, reached Chicago, where steers sold at a range of $6.90 to $8.25. Later arrivals are expected to show higher finish and bring proportionately more money.

Prices of thin cattle are a shade lower than last year, but corn is 30 per cent higher, while fat cattle average only slightly higher, although the top is about $1 higher. Purchases usually show a sharp increase in August over the July level. Well finished grassers are in demand for short feeding to take advantage of present prices for prime steers.

Hogs Highest in Four Months.

Receipts of hogs have fallen off about 20 per cent in the last four weeks, but the movement remains 50 per cent above normal for this season and every moderate advance in price stimulates free loading by the country. The market has shown a surprisingly good undertone, however, considering the burdensome supply, the stocks of stored product to be vended and the falling off in exports compared with a few months ago. The Chicago top rose to $8.30 last week, the highest since early in April.

More Stability in Lamb Market.

Another moderate decline in lamb prices was registered last week, but the market shows more stability and probably has been readjusted to the western range run. Prices at which contracts for western lambs are being made have not been reduced, but range mostly from $10 to $10.50.

Wool Market Still Hesitates.

While more confidence in wool values has been evident in the last few weeks, the volume of sales to mills remains small and purchases from producers show no special activity, as prices offered are unsatisfactory. In Wyoming 40 to 42 cents are being paid for the finer wools and Ohio and Pennsylvania delaine wools are selling at 55 to 56 cents.

Foreign markets are steady. The new Australian clip, which will begin to come on the market in another month, is about 10 per cent less than last year, as a result of drought. The loss is mostly in fine wools, which already are scarce.

Wheat Crop Estimates Reduced.

While losses in spring wheat prospects as a result of black rust and extreme heat were partly discounted in the par yields used in calculating the early forecasts, the damage during July was greater than the average. The government's forecast as of August 1 was 235,000,000 bushels less than a month previous. Private reports pointed to greater injury as well as indicating a smaller acreage than the official figures. Early threshing returns for spring wheat have been disappointing both in quantity and quality.

The winter wheat estimate was also reduced 18,000,000 bushels chiefly in Kansas and Nebraska, and the total prospect for all wheat is now placed at 793,000,000 bushels, compared with 862,000,000 bushels last year. The smaller crop is only partially offset by a carryover 20,000,000 bushels larger than a year ago.

The Canadian crop is still an unknown quantity.

In spite of plans for holding wheat on farms instead of forcing it on a depressed market during the harvest season, which seem to have some influence on sales in the southwest, the movement to primary markets promises to be a large one. The peak of the winter wheat movement will soon be over, but the more urgent needs of flour mills and exporters have been filled and wheat is arriving at terminals considerably faster than it is moving out. The disappearance of wheat from commercial channels in the first five weeks of the new crop year was only 34,057,000 bushels, against 47,572,000 bushels last year.

It is calculated that there is an exportable surplus of only about 15,000,000 bushels of wheat east of the Rocky mountains outside of the durum, which is used only to a slight extent by domestic mills. The intermountain and Pacific coast states have the remainder. Owing to the small crop of good bread spring wheat, northwestern and eastern mills will be compelled to buy large amounts of hard winter wheat in the southwest.

The rye crop estimate at 65,000,000 bushels also is smaller than a month ago and is 30,000,000 bushels smaller than last year.

Corn Crop Nears Three Billions.

The corn crop has passed through most of the critical period of growth and rather general rains in the last few days have practically made the crop. The government's forecast as of August 1 was 2,982,000,000 bushels.

The oats harvest is well advanced and primary receipts are increasing, although low prices are curtailing the movement to some extent. The crop forecast is 1,316,000,000 bushels or 115,000,000 bushels more than last year. The barley crop estimate is 202,000,000 bushels, compared with 186,000,000 bushels last year, and an average of 192,000,000 bushels from 1917 to 1921.

The flax crop has improved in the last month and is placed at 19,000,000 bushels, the largest since 1912.

Cash Grain Markets.

The range of cash grain prices for the week ended August 8 was as follows: Chicago—Wheat—No. 2 red, 97 1-4@99c; No. 3 96 3-4@98 1-4c; No. 2 hard, $0.97@0.10 1-4; No. 3, $0.97@98 3-4. Corn—No. 2 mixed, 85@87 1-2c; No. 2 yellow, 85 1-2@88 3-8c; No. 2 white, 85 1-4@87 1-2c. Oats—No. 2 white, 35 1-4@40 1-4c; No. 3, 35@39c. Rye—64@66c. Barley—50@64c.

Seed and Feed.

Red clover seed advanced again last week. Toledo prices now show an advance of over $1 from the season's low point as a result of crop damage. Very little red clover is moving, but new alsike is beginning to come on the market. Timothy seed prices have weakened slighly. Chicago, per 100 pounds, timothy, $4.75@6; clover, $15@17.

An easier tone manifested itself in the market for wheat feeds and cottonseed meal last week.

Hay Prices Firm Again.

Heavy receipts of new hay weakened the market for a short time, but the supply has become lighter and prices are firm again. Very little of the best grades of timothy or alfalfa is arriving. Demand is fairly good from eastern dairy districts, where the crop is light, and the southeast also is beginning to buy more freely.

The August 1 forecast of the hay crop was 97,300,000 tons, compared with 112,800,000 tons harvested last year and an average of 99,500,000 tons from 1917 to 1921. The reduction compared with last year is almost entirely in tame hay.

Prices per ton in carlots: Chicago—No. 1 timothy, $25@26; No. 2, $21@24; No. 1 light clover mixed, $21@23; No. 1 clover, $19@21; No. 2 clover, $14@16; No. 1 alfalfa, $16@23; midland prairie, $16@19; rye straw, $12.50@13.50; oat and wheat straw, $10@11.

Egg Values Still Advancing.

Belief that the general trend of egg prices will be toward higher levels was supported by further advances in the market last week. Receipts were fairly liberal, but graded offerings were scarce, although some improvement as a result of cooler weather last week was seen. However, the bulk of recipts fall into medium and undergrade classes, so that the market continues in a strong position on a quality basis.

Larger holdings of eggs on August 1 than expected were shown by the preliminary report, which gave holdings on that date of 10,390,000 cases, as compared with 10,161,000 last year.

Latest quotations: Chicago—Eggs—Miscellaneous, 23@23 1-2c; dirties, 20@20 1-2c; checks, 20c; fresh firsts, 24@25c; ordinary firsts, 22@22 1-2c. Live poultry—Hens, 22 1-2c; broilers, 26c; springers, 29c; roosters, 14c; ducks, 22c; geese, 20c; turkeys, 20 1-2c.

Butter and Cheese.

With supplies of top scores of butter insufficient to meet buyers' demands in all cases, and firmer foreign markets, prices on all grades advanced again last week.

Cheese prices declined slightly at primary markets early last week, but did not reach the level predicted by many dealers.

Fruit and Vegetables.

Carlot shipments of potatoes have fallen off nearly 50 per cent, compared with two weeks ago, as the peak of the early movement has been passed. Prices are firm in consuming markets in spite of the large supply of potatoes grown near by and trucked in and they are considerably higher than last year. Kansas and Missouri Early Ohios are quoted at $1.75 to $1.90 and Cobblers at $1.90 to $2.15 per 100 pounds in midwest consuming markets.

The forecast for the main crop of potatoes shows but little change from a month ago and is placed at 380,000,000 bushels, against 451,000,000 bushels last year and a 1917-1921 average of 388,000,000 bushels.

Carlot shipments of apples are about 30 per cent lighter than two weeks ago. California is furnishing about half of the total at present. Duchess and Yellow Transparents

(Continued on page twelve.)

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LIVESTOCK AND DAIRY

Cream Cheese

Good Quality Milk Is Necessary

By A. H. RISHOI, Instructor in Dairy Manufactures, State College of Washington.

Can cheese be made from sour separated cream? How? H. H.
Snohomish, Wash.

Cream cheese is ordinarily made from milk that contains about 6 per cent milk fat and as cream from the ordinary separator will test anywhere from 20 to 45 per cent milk fat, it would seem that cream as it comes from the separator is too rich to use for cheese making unless it is first mixed with skimmed milk so as to bring the test down to about 6 per cent. An easy way to figure how much milk and cream to mix in order to get milk of a test you can use in making cheese, is as follows: Draw a square with the sides an inch or two and put the desired test of the milk in the center of the square. Then in the upper left-hand corner place the figure representing the test of milk. Whole milk tests about 4 per cent, skimmed milk 0. Now subtract the per cent of fat in the milk in the lower left-hand corner from the per cent of fat in the milk you have in the center of the square. Put that figure in the upper right-hand corner of the square. Then subtract the per cent of fat in the milk desired, which is in the center of the square, from the percentage of fat in the cream, which is in the upper left-hand square. This difference is to be placed at the lower right-hand corner. The figures you have at the two right-hand corners indicate the proportion in which you must use the cream and the milk. To show just how this would work, we might figure an easy example. Let us say we have cream that tests 30 per cent, whole milk that tests 4 per cent and we want the milk to test 6 per cent. Draw the square as directed. Place the figure 6 in the center of the square, the figure 30 at the upper left-hand corner, the figure 4 at the lower left-hand corner. Now subtract 4 from 6, giving 2, and place that figure in the upper right-hand corner. Then subtract 6 from 30, leaving 24. Place that in the lower right-hand corner. We now have the proportions in which we must mix the cream and milk, which is 2 to 24, or 1 to 12. When 30 per cent cream and 4 per cent milk are mixed in the proportion of 1 to 12, the resulting test will be 6.

In order to make good cream cheese, it is necessary to use milk which is not sour and also it is necessary to use milk which is in all respects of good quality.

The cheese is made by allowing rennet to act on the milk on the same time that the milk is souring. If you have very good milk it might be well to add a small amount of sour milk so as to hasten the ripening of the milk.

The following directions for making the cheese are based upon using about 3½ gallons of milk.

If you want to use any sour milk to hasten the ripening of your milk it is well to use about 1 or 1½ per cent sour milk to add to the sweet milk. First heat the cream or milk to about 83 degrees Fahrenheit, then add about 10 drops of commercial liquid rennet diluted in half a cupful of cold water and stir this thoroughly into the can of milk. If you wish you can use fresh tablets in place of rennet. In this case you dissolve one tablet in 10 tablespoonfuls of cold water and use about four tablespoonfuls of the solution. After the coagulating agent has been added you should set the milk away for from 15 to 18 hours so as to give the rennet a chance to act. When about one-half inch of whey collects on the surface of the curds and on the top of the whey is a scum of fine curd particles the curds is sufficiently coagulated. It is well to set the milk in the evening so that the curdling occurs during the night and is not disturbed for from 15 to 18 hours. The milk should, of course, be well covered during the night. When the milk is firmly clabored the contents of the can or pail are poured on a strong grained cloth. The can be shaken slightly before pouring in order to loosen any curd which has a tendency to stick to the side or to the bottom of the pail. The curds should be left undisturbed for three or four hours, after which you can work it toward the center of the cloth so as to hasten the draining. The draining should be allowed to continue until most of the visible whey has escaped and the curd appears dry as compared with its former mushy condition. Then the four corners of the cloth are drawn across and tied. If you want to cool the curd you can place it on ice for a few hours. This will help to expel water or whey from the curd. The curd is then ready to be put under pressure. A weight of about 50 pounds is sufficient. After having been pressed the cakes of curd are salted and worked (for working you can use a potato masher or butter worker or run it through a food chopper). Fine dry salt is sprinkled over the curds, using about two level tablespoonfuls of salt to the curds from 30 pounds of milk. This amount may, of course, be varied to suit your taste. These should then be put away at a temperature as near 50 as you can get it and kept there until you are ready to use it. Under favorable conditions the cheese should keep in good condition for from six to 12 days.

How to Avoid Milk Fever

By E. V. ELLINGTON,
Head Dairy Division, State College of Washington.

Would it be safe to have a 10-year-old cow that had milk fever when her last calf was born raise another calf? Would she have trouble because of her age?
St. John, Wash. J. C.

It would be entirely safe to have your cow raise another calf. Of course, age is rather a strong accessory cause of milk fever. This disease usually appears with the third, fourth or fifth calf after the growth of the cow has ceased and when all her powers are devoted to the production of milk.

Before your cow calves again special care should be given her to prevent a recurrence of this disease. The well-nourished cow is more subject to it than the underfed cow. Consequently she should be put on a laxative ration as parturition approaches. Ground oats or a bran mash should be given her for a week before calving. A free access to salt and water is most important and a dose of Epsom salts (1 to 2 pounds) should be given 12 to 14 hours before calving. We follow the practice of not drawing any milk from the udder for 12 to 24 hours after calving from cows that we feel are susceptible to milk fever or have had milk fever at some previous calving.

Foot and Mouth Disease

Today foot and mouth disease is sweeping Europe and it exists in Asia and South America, and ahs traveled as far north as Honduras. It has on several occasions been introduced in the United States, always to be eradicated not without much work and frequently at great cost, the last outbreak totaling something more than $5,000,000. At the present time every effort is being exerted to cause a proper disposal of all foreign packing materials, such as hay, straw, etc., used in packing crockery and other imported breakables, that might in any manner convey the virus or infection material of foot and mouth disease to our live stock.

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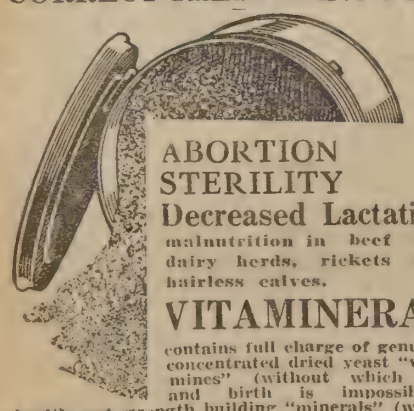

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Vitamineral is indorsed and used by leading veterinarians, farm advisers, county agents and big breeders everywhere. Secretary Axby (Indiana State Vet. Ass'n.) has had miraculous results with VITAMINERAL in entire herds afflicted with abortion; he advises every veterinarian and breeder to use it.
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The price of Champion X is but 60 cents and the Blue Box Line 75 cents because of Champion's tremendous production of more than 125,000 spark plugs every working day.

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For motor car, truck, tractor or stationary engine, a full set of Champions gives much better performance and saves oil and gas.

And yet Champion prices are lower, even though it is a better spark plug.

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IN LIVE STOCK PRODUCTION. Your knowledge of live stock is worth more when completed by a course in Veterinary Medicine. A splendid field in practice or in the field of sanitation protecting animal and human health. Write to
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Visit Canada this summer—see for yourself the opportunities which Canada offers to both labor and capital—rich, fertile, virgin prairie land, near railways and towns, at $15 to $20 an acre—long terms if desired. Wheat crops last year the biggest in history; dairying and hogs pay well; mixed farming rapidly increasing.

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If you wish to look over the country with a view to taking up land get an order from the nearest Canadian Government Agent for special rates on Canadian railroads. Make this your summer outing—Canada welcomes tourists—no passports required—have a great trip and see with your own eyes the opportunities that await you.

For full information, with free booklets and maps, write

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Desk 81, Cor. 1st and Post Sts.
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We will equip your farm machines for Rose High Pressure Lubrication absolutely free. 2,000 sets of Rose Fittings will be given away before Sept. 30. Write today for details.
Your farm machines are wearing out 5 to 10 years before they should. Present oiling systems fail to lubricate. Grease cups supply only 1-20 the grease needed.
Rose High Pressure Lubrication is 100% sure. It forces grease under terrific pressure to all points that need it.

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HIGH PRESSURE LUBRICATING SYSTEM
Equip your farm machines at our expense. Write today for details and instructions for ordering. Send make and model of your automobile.
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Dept. 119 Hastings, Neb.

WANT ADS offering farms, live stock, poultry, second-hand machinery and a hundred and one other things on "Want Ad" page of this issue.

POULTRY AND RABBITS

Ship Poultry

New York Gets Washington Birds

The Bellingham branch of the Washington Cooperative Egg and Poultry association has handled over 125,000 pounds of live poultry this season, most of which were broilers and were frozen and shipped to the New York market. The association requires that all cockerels be brought to the central plant, where they are fattened, killed and dressed, when all are of a uniform weight.

A pool is made of all dressed poultry brought in by the members and partial payments are made on a weekly basis. At the end of each year each member receives a deferred payment for the balance of his share of the dressed poultry supplied to the pool. (The plan is an excellent one, since all feeding and dressing can better be managed cooperatively and done by experts.) Few of the producers are fitted to carry on this work at their farms, even if they have the time to do so. By marketing the cockerels through the association they get better results because of the standardized market which prevents glutting, and consequent low prices during the spring season.

The association is located in its new building on the water front at Bellingham. It has a capacity for handling 1500 birds daily, and cold storage room which can store several carloads of dressed poultry for an indefinite period if desired. So far there has always been a market for broilers and from three to four cars have been shipped to New York markets each year.

Storage, Candling, Processing.

Since eggs are the main output for the association the greater part of the new building has been devoted to storage, candling and processing of the eggs that are brought in by the members. From both Bellingham and Lynden plants there were 64,000 cases, or 128 cars shipped out during the first five months of this year. Practically all shipments were sent to the New York and Detroit markets. A large per cent of the eggs that were received during the rush season were processed and shipped direct to storage. All departments have had much better facilities for carrying on their work since the new building was ready for occupancy early in June, 1922. The new structure was built entirely of concrete, has plenty of light and was erected at a cost of $45,000. Fully half of the 1200 members in the county association bring their eggs and poultry to this plant for disposal.

When the association vacated the old building they turned it over to a new and rapidly growing department known as the Washington Cooperative Poultry Feed association. While this is entirely a separate organization, it is made up only of association members with the exception of a few dairymen who have expressed a desire to purchase their dairy feeds from this organization. The membership is about the same size as the poultry association; namely, about 600.

"There are practically 900 tons of feed sold through this organization during each month," said H. G. Smith, manager of the association. "This, of course, includes all poultry feeds and a few dairy mashes that we have put up for the special trade. There have been times when we have used two carloads of grain a day to keep up our supply of mashes and other feeds. We find that by operating the plant on a small margin basis we can save about $5 a ton when compared with prices in other markets, or where there is no competition from a cooperative organization.

Machinery Worth $5000.

"We are handling our feeds on a smaller margin than are some of the other plants, but we believe that this is because we have better facilities for handling them. There is $500 worth of machinery in the Bellingham plant alone, and we have practically everything that is necessary for cleaning, grinding and mixing all kinds of grains.

"We have thrown our store open to any producer who desires to deal through our warehouse, but he is charged a fee of $5 a year for the privilege of dealing with the association. Members of the Egg and Poultry association are given full privileges in the feed association and are allowed to buy all their feeds from us if they so desire.

"We do not claim to be selling our feeds at cost," continued Mr. Smith. "But we have to plan on a small margin in order to maintain our plant and make such improvements as are necessary. Last year, however, we made 12,000 profits and made a rebate to our members of 4 per cent on the amount of their purchases. We are now incorporated for 20,000 and are gradually redeeming all deferred stock."

The association is scarcely two years old, having been organized in October, 1921. The officers of the feed association are: John R. Gill, president; B. C. Young, vice president; R. T. Hawley, secretary-treasurer; A. D. Foster, G. E. Van Horn, directors.

Poultry Diseases

"What good is it to know how to breed, feed and house chickens if one can not control their diseases?" says Dr. W. T. Johnson, veterinarian at the western Washington experiment station. "How can any one logically hope to successfully raise their stock without some knowledge of the fundamentals in the prevention and control of intestinal parasitic diseases?"

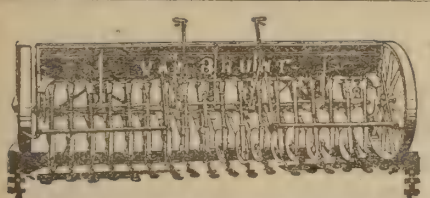
"If one is successful in raising the young stock, how is egg production to be consistently maintained without adequate knowledge of the agents working to undermine health and thus bring about a slump in egg production? Yet, how many in the poultry business or those who are contemplating entering upon such a venture realize the necessity of informing themselves regarding even the common diseases of fowls?

"One of the worst diseases that affect mature fowls is chickenpox. There has been an increase in this disease and it has done its most damage in the curtailed production of the flock rather than the loss of birds from the flock, as is often supposed. The only practical method of controlling this disease is to innoculate when the trouble is anticipated. We do not advise innoculation of healthy flocks with the idea of preventing the disease, but the breeder should watch for any symptoms of the trouble and be prepared to take immediate actions in case they are necessary.

The loss of young stock in the state for the last year has totaled actually $100,000 to the poultry industry. The most of these troubles can be traced to insanitary conditions of the yards and can be avoided by placing the brooder houses on clean soil. There is only one disease that can be traced back to the breeding stock and that is white diarrhoea. This is a disorder that can only be determined in the mature stock by means of a blood test. The hens can not be vaccinated to prevent it in the chicks, but when one gets chicks from flocks that he knows are clean he can be assured that he will have no trouble of this kind.

SUCCESS IN SMALL QUARTERS.

Success is obtained with poultry in small quarters, but give us a good range every time when practical.



Drills Either Treated or Dry Seed Evenly

Every size and kind of seed can be planted without bruising or cracking it, in the desired quantity per acre, in trenches of uniform depth and width, by using the

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Van Brunt Grain Drill
with double-run feed

Adjustable gates of the Van Brunt double-run feed, together with multiple gear construction, make it possible to plant 48 different quantities of grain — no wire reducers or other contrivances are required.

Built strong like a bridge — angle steel reinforced frame — the Van Brunt cannot buckle or sag. Gears always in mesh—guaranteed disc bearings; tilting levers, single or double discs —shoe or hoe furrow openers.

Sold by John Deere dealers.

FREE BOOK DESCRIBES THE DRILL. Write today, address John Deere Plow Co., Portland, Ore., and

Ask for booklet RC-647

JOHN DEERE
THE TRADE MARK OF QUALITY MADE FAMOUS BY GOOD IMPLEMENTS

Ever stop to think of this?

We are what we eat!

It's a startling fact, yet a simple truth.

This is the reason every one should know that his food is *really nourishing*—not merely filling.

Grape-Nuts—made from wheat and barley—is one of the few cereal foods that includes the vital mineral salts so necessary for supplying proper nourishment for nerve and bone structure.

In Grape-Nuts, too, is retained the important vitamin-B of the wheat.

No food has greater influence in strengthening the body of a growing child than Grape-Nuts. And remember, children need *the very best* there is in the way of nourishment.

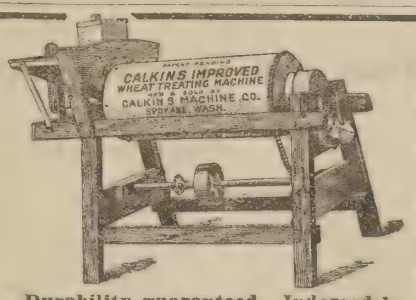
Grape-Nuts is just as delicious as it is healthful, whether served right from the package as a breakfast cereal with milk or cream, with fresh or stewed fruit, or made into an appetizing recipe. Try the suggestion given below.

GRAPE-NUTS ICE CREAM

Prepare plain flavored ice cream in the usual way. Just before the cream hardens in freezing, add Grape-Nuts as it comes from the package, in the proportion of one-half cup of Grape-Nuts to one quart of ice cream. If you buy ice cream ready-made add Grape-Nuts in place of nut meats. You'll find the resulting flavor unique.

Where you don't find Grape-Nuts, you won't find people—

"There's a Reason"



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As seeding time approaches, more and more farmers are showing interest in our device for treating wheat with copper carbonate. Soon our factory facilities will be taxed to the limit in supplying orders.

The CALKIN'S IMPROVED
Copper Carbonate Machine
enables you to treat your seed wheat much more speedily and effectively than by hand.

Capacity up to 60 to 70 bushels per hour. Durability guaranteed. Indorsed by state colleges and many individual users. Mr. H. P. Barss, plant pathologist, Oregon Agricultural college, said of grain treated at the rate of 60 bushels per hour it was as thoroughly coated as it has been possible for them to treat even in the laboratory.

ORDER NOW TO INSURE DELIVERY

The saving of seed on 275 acres more than pays the price of the machine, $67.50. FREE descriptive literature on request.

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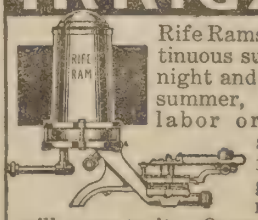

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Tell us about your water conditions and we'll send you a quotation or an expert to talk things over. Write today.

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Write for our new book "Making Silage" and learn the truth about silos and silage.

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BE OUR AGENT

Every housewife wants a Pressure Cooker. Pays for itself quickly in fuel and time saved--no scorched or burned food--cooks meal on one burner--greatly improves flavor. Ideal for canning. Get one for your own use at agent's greatly reduced price. Take your friends' orders. Earn some real money. Let us tell you all about this dandy proposition. Write quick.

1218 Sts. C. CO. Omaha, Nebr.

The department editors of this paper are anxious to be of service to you. Do not fail to write to us if they can be of help to you.

ORCHARD AND GARDEN

Apple Prices

Range Higher Than Last Year

Opening apple prices quoted by north central Washington marketing agencies are ranging from 25 to 50 cents per box higher than quotations made last year under similar circumstances. The actual market on apples is not established here until after the International Apple Shippers' convention, which took place this year, August 7-10, in Detroit.

The prices quoted by the Northwestern Fruit exchange are typical of those asked by various agencies. These are as follows for extra fancy grade, best quality packed in oil wraps, f. o. b. shipping station:

Winter Banana, $2.75; Grimes Golden, $1.75; Jonathan, $1.75; Delicious, $2.75; Spitzenberg, $1.85; Rome Beauty, $1.65; Black Ben, $1.50; Black Twig, $1.65; Staymans, $1.75; White Winter Pearmain, $1.75; Yellow Newtown, $1.75; Arkansas Black, $1.35; Winesap, $2.

H. G. Fletcher, sales manager for the northwestern, in a statement accompanying the quotations, declares that conditions favor a good market, provided the fruit can be picked and delivered in prime condition. The cooperation of growers and packing units can help bring about this result.

The oiled wrap will probably be used on one-half the apple crop shipped out of the district this year, according to the estimate of local dealers and marketing agencies. The great success attained last year with late keeping apples has given a great impetus to the use of oil treated paper. In the quotations of the Northwestern Fruit exchange given bove, only the Winter Banana and Jonathan varieties are exempt from oil wrapped specifications.

Most growers, however, will only wrap Winesaps, Arkansas Blacks, Black Bens, Staymans, Yellow Newtowns and possibly Spitzenbergs. But experts declare that Rome Beauties, Jonathans and Delicious will be greatly benefited by the use of the oil wrap.

Large Apple Tonnage.

The Northwestern Fruit exchange handled the apples grown by the American Fruit Growers as well as that of 15 local units in north central Washington and one or two in the Yakima valley. Altogether this is one of the largest, if not the very largest, single block of apple tonnage in the northwest.

The district will be represented at the International Apple Shippers' convention by C. E. Chase, district manager for G. M. H. Wagner & Sons; O. B. Webb of the Wells & Wade Fruit company; R. L. Shultz of the same firm; W. F. Gwin of the Federated Fruit and Vegetable Shippers' association and Dwight L. Woodruff, general manager of the Wenatchee District Cooperative association.

At the hearing as to the adequacy of car supply, held in Spokane July 30, the Wenatchee Valley Traffic association presented a mass of evidence regarding the delay in shipping the 1922 apple crop and the damage claims that resulted running into the millions. Attorney Fayette B. Dow of the International Apple Shippers' association represented the local shippers and those who attended and testified were: Secretary Bert L. Baker of the association, Conrad Rose of the Wenatchee Produce company, W. E. Miller of Gwin, White & Prince, and J. A. Meade of the Northwestern Fruit exchange. Much of the same testimony that was presented at the Wenatchee Southern hearing went in to the interstate commerce commission at the adequacy hearing, and also some that was deemed inadmissable by Commissioner C. B. Aitchison.

Mice and Moles

BY LEO K. COUCH.

I am having trouble with pocket mice in my garden. They are simply ruining everything. Would you please give me some advice as to how to get rid of them?
H. R.

Pocket mice have been only recently causing trouble in some sections. They are, however, easily controlled. Dust 1-8 ounce powdered strychnine alkaloid on three quarts table rolled oats and mix thoroughly. Sprinkle this bait along the fence runs and under weeds wherever indications show that mice are running. This formula is good only on a small scale. On a large scale, you should mix one pint laundry starch paste with one ounce strychnine alkaloid, to a creamy mass. Pour this over about 16 pounds of heavy recleaned steam rolled oats or table oats.

Pocket mice, as a rule, confine most of their damage to grain crops, and growing corn and peas. They are active almost entirely at night, traveling over a considerable area. Two applications of the poison baits should prevent any further damage.

Please tell me how to get rid of moles in a field of cow beets and potatoes.
MRS. W. N.

The only satisfactory method at present is to trap them. There are two types of traps on the market which we recommend. One is called the scissors jaw type, the "Out O' Sight"; the other the choker loop type, named "Nash." These traps are designed to hide in the soil and to capture the mole when he reopens his burrow.

The mole feeds almost entirely upon earth worms and the larvae of insects. The damage they cause to crops is largely physical; that is, drying them out. Other small rodents, usually field mice, inhabit mole runways and do the damage which is laid to the mole. To test for the presence of field mice in a mole burrow, place in it a trap baited with rolled oats. If there are many mice infesting the field, they can be controlled by a poison bait consisting of 1-8 ounce powdered strychnine alkaloid dusted upon three quarts of table rolled oats thoroughly mixed. It is necessary, however, to capture the moles first, as it tends to discourage the presence of mice in the garden.

Orchard Problems

By A. C. HILDRETH, Department of Horticulture, State College of Washington.

In my orchard I have several 5 or 6-year-old apricot trees that bloom every spring and get quite a bit of green fruit, but a few weeks after blooming they begin to dry. The leaves fall off and large bubbles of sap form and run down the branches. After the trees have been bare a few weeks the leaves again come out and after a time the whole thing is repeated. Yet the trees seem to grow from year to year. The peach trees are afflicted with the leaf-curl. Is there a remedy for that? I find tiny white worms eating the fine roots of my young kale, causing the main root or stalk to decay, killing the plant.
H. T.
Bothell, Wash.

We are unable to tell what is the trouble with your apricot trees from the brief description which you gave in your inquiry to The Washington Farmre. If you could write us more in detail describing the symptoms, we might be able to offer some suggestions.

The white worms that have been causing trouble on your kale are cabbage maggots. This pest attacks not only kale, but cabbage, cauliflower, radishes, turnips and even wild mustard. There seems to be no very satisfactory remedy for this pest. Tobacco dust sprinkled around the plants at planting time sometimes acts as a repellent. Commercial cabbage growers now generally use small disks, cut from tarred felt, about four inches across, and with a slit to the center so that they can be slipped around the young plant easily. These are put on at the time the young plants are set and although somewhat expensive and tedious to install, give good results. I doubt if it would be profitable to use this method on a crop of such small value as kale. Burn all crop refuse after harvest and plow deeply. Plant none of the above crops on the same ground next year. Stir the soil frequently around the plants.

Could you tell me what is wrong with my cherry trees and what to do for them? They begin dying at the tops and also crack, not only the bark, but the trunks simply split down. We have some apple trees that are bearing. The branches grow long spaces with no leaves on them. We spray often, but there seem to be no insects.
C. E. G.
Yakima, Wash.

The cherry trees are undoubtedly suffering from winter injury. Trees growing in unfavorable locations, especially where they make growth late in the season, are likely to be affected in this way. The only treatment would be to remove the dead wood after you are certain it is not going to recover, and provide good growing conditions for the trees in the way of culture and irrigation. A good application of barnyard manure or some nitrogen containing fertilizer, as ammonia sulphate or nitrate of soda, could be added this fall or early next spring before growth starts.

Your apple trees seem to be suffering from apple rosette, a disease about which little is known. Where the trees are growing in an orchard the planting of a permanent alfalfa crop has generally given relief after about the third or fourth year. An application of nitrogen fertilizer, about three pounds to the tree, should help in establishing the alfalfa. Where it is not possible to grow alfalfa, heavy mulch of manure and straw about six inches deep could be applied to the soil and left without any cultivation.

Two Acres in Cherries

W. H. Cushing, of the Haller Lake district in King county, has two acres of cherries, most of which are the Late Duke, English Morella and Montmorenci. While both of the sour varieties find a ready market from the commission houses in Seattle and from buyers who stop at the farm to buy direct, the English Morella, a dark colored sweet cherry, is perhaps the most popular variety of the three.

All of the trees on the place, which is owned by W. E. Fellows, are the dwarfs, thus affording more convenience in picking. All of the fruit is picked with the stems on, even for cannery use, since they will keep better than where the stems are removed.

The trees were sprayed twice this year with arsenate of lead, which prevented much possible loss from insects. The heavy rainfall during July this year caught many of the sweet cherries, and caused much loss from cracking. This, however, is unusual and it is only during an exceptional year that such loss occurs.

In addition to fruit, Mr. Cushing is raising a large variety of flowers about the place, but as yet there are none raised for sale. A few water lilies have been started along the edge of the lake, and it is hoped that within a few years there will be enough of these and other flowers growing to warrant a part of the income.

MANY KEEP BEES.

It is estimated that nearly 1,000,000 persons in the United States have bees.

See All There Is to be seen with this

High-Power Glass

COAT POCKET SIZE

MAGNIFIES SIX TIMES

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"BIASCOPE" SIX—POWER

Every farm home needs this splendid field glass.

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We prepay postage on all orders.

This Fall Give the Seed a Better Chance

Use a Hoosier-Empire Jr.-Kentucky Grain Drill

No matter how good your soil nor how good the seed bed, if the seed is not properly put into the ground the yield is sure to suffer. You can prevent this happening to your crop. Safeguard *your* investment by using a good grain drill.

When you drive into the field with one of these dependable drills you may rest assured your seed will be planted right. None will be cracked, nor will there be any skipping or bunching. The seed will be evenly distributed in uniform seed trenches and covered to the correct depth. Every grain will get a square deal.

Hoosier, Kentucky, and Empire Jr. Drills are built for horse or tractor power. Grass seed attachments always available. Furrow openers for any soil—the McCormick-Deering dealer will show you the style that is suitable for your soil.

INTERNATIONAL HARVESTER COMPANY
of America (*Incorporated*)
606 So. Michigan Ave. Chicago, Ill.

93 Branch Houses and 15,000 Dealers in the United States

Tomato in Third Rank

The tomato now ranks third in importance among truck crops, according to the department of agriculture in a recent report from Washington, and the demand for high quality or slicing tomatoes is increasing. Because there is need for improvement in the cultural methods and quality of tomatoes grown for the early market, the department has published a summary of the methods and results of tomato growers who have been especially successful.

FARMERS' WANT ADS

This is the farmers' "want," "sale" and "exchange" department for small advertisements of farmers, including live stock and poultry.

Advertising rates for ads running 1 to 3 times, 10c per word per insertion, with a special rate to Farmer subscribers, as follows: Ads running 4 to 12 times, 9c per word per insertion; ads running 13 times or more, 8c per word per insertion.

All commercial and land advertising, 10 cents per word per insertion. Open also to nonsubscribers.

In using these columns advertisers must observe (1) No advertisement will be inserted for less than $1.00. (2) Every word, number and initial, including name and address, must be paid for. (3) New advertisements, changes of copy or cancellations must reach general office, Spokane, Wash., 10 days in advance of publication date. (4) Cash must accompany order.

Above rates include insertion in The Washington Farmer, The Idaho Farmer and The Oregon Farmer, which constitute the Pacific Northwest Farm Trio, 46 Review building, Spokane, Wash.

MONUMENTS F

COMPLETE STOCK. WRITE FOR DESIGNS and prices. Inland Monument Co., N1001 Monroe, Spokane.

HELP WANTED—Female 1

GIRLS DESIRING WORK FOR HALF BOARD and room, while attending school, write Gooding College, Gooding, Idaho, today.

HELP WANTED—Male 3

MEN WANTED—TURN YOUR SPARE TIME into cash or devote your whole time to a highly paid, congenial business; good money year around; cash weekly. Middle-aged men find this attractive. Many of our men receiving $4000 to $5000 yearly under our plan. Experience not required. Washington Nursery Company, Toppenish, Wash.

FARMER WANTED—PRACTICAL MAN, CAPable of operating general farm near city and school; good home, electrically equipped; permanent position for right man. Write, giving experience, number in family and references. A 2, Washington Farmer, Spokane.

LOCAL SALESMEN FOR OUR COMPLETE line "Trees That Please," all or part time contracts. Write Capital City Nursery company, Salem, Ore.

HELP WANTED GENERAL 5

MEN AND WOMEN, AGE 17 TO 30, AT ONCE to train for positions with Western Union Telegraph Co. and various railroads. Pacific Telegraph Institute, Spokane, Wash.

AGENTS WANTED 9

AGENTS—C. T. A. PRICES LOWER THAN ever. Suits, $18, made to order; any size or style. Orders easy to get. Big profits. Agent's outfit free. Sample suit at cost. Write Chicago Tailors' Ass'n, Dept. 417, Sta. C, Chicago.

SALESMEN WANTED 12

WHOLESALE HOUSE SELLING SPECIALTY lines of groceries and dry goods direct to consumers needs several local salesmen with cars; excellent proposition. Consumers' Wholesale Company, Spokane, Wash.

SCHOOLS AND COLLEGES 26

EARN $110 TO $250 MONTHLY, EXPENSES paid, as railway traffic inspector; position guaranteed after 3 months' spare time study or money refunded; excellent opportunities. Write for free booklet G-157, Stand. Business Training Inst., Buffalo, N. Y.

LEARN AT HOME—YOU CAN GET A PRACTICal business college course by correspondence. Tuition, $25 a year. Montana Business Institute, Miles City, Montana.

FRESH FOOD PRODUCTS 51-3

OREGON PRUNES, LARGE 60-65 COUNT TO pound, direct from Red Hill Orchard; specially fine quality, sanitary packed, in 28-lb. boxes (25 net), $2.12 per box; or in 100-lb. sacks, double, canvas and burlap, $7 per 100 lb.; loganberries steamed and pressed, sanitary, in wax paper-lined boxes, 15½ lb. (12½ net), $4.90 per box. These prices are f. o. b. Salem. Edw. Dencer, Grower and Packer, Route 3, Box 158, Salem, Ore.

FISH—4 LBS. SMOKED SALMON, $1; 4 LBS. Alaska salmon bellies, $1; 4 lbs. black cod, $1; 3 lbs. best codfish, $1; delivered by mail. Coffin Fish Co., Seattle, Wash.

BEES AND HONEY 53

ALFALFA-SWEET CLOVER HONEY—2 60-LB. cans, $9.75; one can, $5, f. o. b. Rigby; one 40-lb. can, prepaid to fourth zone, $5.75; quality guaranteed. Heckman & Larsen Honey Co., Rigby, Idaho.

FAMOUS KITTITAS VALLEY ALFALFA HONey, extracted; postpaid 2d and 3d zones: 10 lb. pail, $1.85; 3 10s, $5; 3 5s, $2.75; 60-lb., $8. Kittitas Valley Apiaries, Ellensburg, Wash.

QUEEN BEES—BUY THE BEST. UNSURpassed Italian queens, 1, $1; 6, $5.75; 12, $11; 50, $45; 100, $85. Circular free. J. D. Harrah, Freewater, Ore.

HAPPY HOME HONEY—ALFALFA AND clover; 60-lb. can, $6.50; two cans, $12.75; case six 10-lb. pails, $7.75. H. N. Paul, Mabton, Wash.

BEST QUALITY EXTRACTED ALFALFA AND clover honey; 60-lb. can, $5; 2 cans, $9.50. Meyer Bros. Honey Co., Rigby, Idaho.

VALLEY BLOSSOM HONEY; QUALITY GUARanteed; 1 60-lb. can, $7.50; 2, $14.40. Ernest Sires, Route 7, Yakima, Wash.

PURE, WATER-WHITE SWEET CLOVER honey; 60-lb. can, $5; two, $9.75. H. R. Bowen, Roberts, Idaho.

EXTRACTED HONEY FOR SALE—WELLS D. Rose, Sunnyside, Wash.

MISCELLANEOUS—FOR SALE 60

SASH AND DOORS—O. B. WILLIAMS CO., 1943 First ave. So., Seattle. Chicken house sash, 20" wide by 25" high, 80c; a dozen different sizes in stock for immediate shipment. Skylights for chicken houses, 36"x40"; price, glazed, $2. This is the size recommended by the Western Washington experiment station. We carry them in stock for immediate shipment. Sash and doors for all purposes at lowest prices. All orders receive prompt attention. Our large illustrated catalog No. 35, showing full line of building material and built-in fixtures for the home, free on request. O. B. Williams Co. Established 1899.

PURE CANE SUGAR 7 CENTS PER POUND; 10-lb., 25-lb., 50-lb., 100-lb. sacks, when purchased with other food products. Also corn sugar. Write for bargain price list. Guaranteed Products Supply Co., 2108 First ave., Seattle.

SPECIAL—ONE-POUND TIN "SATISFACTION tobacco" and pipe for $1. Smoking, chewing tobacco, cigars, cigarettes and complete line of pipes. Wholesale and retail. Peter M. Jacoy, 3 Washington st., Spokane.

WALL BOARD—WRITE FOR SAMPLE OF Washington plaster wall board; won't warp, won't burn. Manufactured by Washington Building Products company, 6851 E. Marginal Way, Seattle, Wash.

POCKET SIZE, 5-IN-ONE TOOL KITS, 45C; safety razors, used Gillette blades, 45c. Agents wanted. Army Blanket Supply Store, 309 Riverside ave., Spokane.

MISCELLANEOUS—FOR SALE (Continued) 60

PIPE—GET PARTICULARS ON OUR SPEcial flue pipe, 1¼, 1½ and 2 inch. Big saving on it. We also have all sizes second-hand and new standard pipe at low prices. We also save you on roofing, belting, pumps, engines, cables, etc. Alaska Junk Co., S120 Adams, Spokane, Wash.

NATURAL LEAF TOBACCO—CHEWING, 5 lbs., $1.75; 10 lbs., $3; smoking, 5 lbs., $1.25; 10 lbs., $2. Pay when received. Pipe and recipe free. Farmers' Cooperative Tobacco Union, Paducah, Ky.

TOBACCO — FINE, YELLOW MAMMOTH chewing, 10 lbs., $3; smoking, 10 lbs., $2; 20 lbs., $3.50. Farmers' Club, Mayfield, Ky.

GRAIN BINS AND TANKS 90

METAL GRAIN BINS SAVE YOU MONEY. Write for circular T and prices. Spokane Culvert & Tank Co., Spokane, Wash.

MACHINERY—For Sale 93

GOOD AS NEW—USED 1½-TON TRAILER, also 25 horsepower motor, in excellent condition; bargain price. Mission Service Station, Spokane.

GANG PLOWS, NEW AND USED TRACTORS, small gas and steam engines, sawmills. Fallquist Bros., W20 Riverside ave., Spokane, Wn.

AUTOMOBILES—FOR SALE 112

SEE CHEVROLET FIRST—NEW AND USED cars at prices that will surprise you; stop in or write Inland Empire Chevrolet Sales Corp., 916 2d ave., Spokane. Open evenings. Open Sunday.

AUTO ACCESSORIES AND PARTS 119

NEW AND USED AUTO PARTS—NEARLY all cars. A trial order is all we ask. C. & D. Auto Salvage & Supply Co., 1904 Grand ave., Kansas City, Mo.

INTERNAL GEAR TRUCK PARTS; WIRE and disc wheels; sales and service. Pacific Gear & Auto Parts Co., 1022 First, Spokane.

STOVE REPAIRING 128

WRITE MYER RUBENS, SPOKANE, ABOUT stove repairs, welding broken parts, nickel plating.

PATENTS 150

PATENTS, TRADEMARKS, COPYRIGHTS. Write to B. P. Fishburne, registered patent lawyer, 398 McGill bldg., Washington, D. C.

FUR-BEARING ANIMALS 170

SILVER AND CROSS FOXES FOR SALE. William Rambo, 407 Sprague, Spokane.

PETS—Dogs, Birds, Etc. 171

CLOVERLAND AIREDALES—THE PERFECT farm dog; puppies for immediate delivery. Cloverland Kennels, Gooding, Idaho.

GENUINE TOY FOX TERRIER PUPPIES. Mrs. Lida Harrington, Yoncalla, Ore.

REGISTERED AIREDALE PUPPIES. 3202 East 32d st., Tacoma, Wash.

POULTRY 174

WHITE LEGHORN PULLETS — MARCH, April and May hatches. From thoroughbred, mature hens, mated with cockerels of 225 to 265 egg record, Hollywood, Tancred or Gilbert strains; 8 weeks old, $1.20 each; 12 weeks old, $1.40 each; shipped with a guarantee of being satisfactory or any undesirable ones may be returned within three days and refund will be promptly made. Send 25 per cent with order; balance C. O. D. Mention this special offer when ordering. Queen Hatchery, 1430 First ave., Seattle, Wash.

CERTIFIED WHITE LEGHORN QUALITY chicks for summer and fall months, from selected free range, high egg producing breeding flocks, inspected and accredited by the Sonoma county farm bureau. Send for catalog and attractive prices. Safe delivery and full count guaranteed. Must Hatch Incubator Co., Inc., 445 Seventh st., Petaluma, Calif.

250,000 ACCREDITED BABY CHICKS FOR sale during May and June. Send in your order early. "A" grade, $6 for fifty; $11.50 per hundred; $110 per thousand. "AA" grade, $8.50 per fifty; $16 per hundred; $155 per thousand, f. o. b. Petaluma. Member of the Sonoma county farm bureau accredited hatchery list. White Hatchery, Petaluma, Calif.

WHITE LEGHORN BABY CHIX FROM flocks mated to males having sire's dam record of 240 to 297 eggs per year. Full particulars and interesting literature on request. We are accredited by Sonoma county farm bureau. The Pioneer Hatchery, 422 Sixth street, Petaluma, Cal.

SUMMER SALE "HENACRES" PULLETS; best for fall and winter eggs, $1.25 to $2 each. Hens for breeders, $1 to $1.50 each. High grade stock at reasonable prices. Booking orders now for 1924 baby chicks. Free catalog and price list. "Henacres," Box A, Prosser, Wash.

DOLLARS FOR YOUR EGGS—WE PAY THE top market prices for your eggs and poultry. Daily cash remittances. McClintock-Trunkey Co., produce department, Spokane.

LIVE STOCK 177

WE GUARANTEE TO PAY THE HIGHEST market price for your poultry and live stock. Veal market growing stronger. Owing to the constant changes in the market we are unable to quote prices in this paper from week to week. We will furnish tags and prices when you are ready to ship. Write us what you have to sell. Prompt returns. John Lewis & Co., Spokane, Wn.

FOR SALE—A FEW REGISTERED CHESTER White brood sows at $40 and $50. A number choice gilts, weighing 80 lbs., at $20 each, 2 for $35; 40 to 60 lbs., $15. All from prize-winning stock. Will register them free. R. J. Borne, Farmington, Wash.

REGISTERED SHROPSHIRES—FIFTY EWES, two years and up; fifteen yearling ewes, twelve rams, 68 ewe and ram lambs. Some show rams. Eight registered Oxford ewes. J. W. Cook, Brownsville, Ore.

TOP PRICES PAID FOR CREAM, EGGS, poultry, pork, veal, also fruits, berries and vegetables in season. Inland Products company, Second at Cedar, Department E, Spokane, Wash.

FRESH MILCH GOATS AND KIDS. MAMIE Rand, E1024 Decatur, Spokane.

LIVE STOCK (Continued) 177

UNIQUE DISPERSAL — ENTIRE JERSEY herd, St. Mawes, through Captain Tristram and Pilot blood line. Bulls ready for service, cows with records, heifers and calves; anything you want at your own price. See next ad. Pool Farm, Malaga, Wash.

WE PAY TOP PRICES FOR YOUR LIVE OR dressed veal, hogs, and poultry. Your check by return mail. Shipping tags on request. M. & J. Packing Co., Spokane.

WE PAY THE HIGHEST CASH PRICE AND remit every day for strictly fat dressed veal and pork and live poultry. Address Dept. T, Welch's, Spokane, Wash.

REGISTERED HOLSTEINS—BULLS, HEIFers and cows for sale; accredited herd. Oscar Dunlap, Junction City, Oregon.

REGISTERED BERKSHIRE BREEDING pigs, $16; big type, champion blood. Chas. O. Churchill, Shelton, Wash.

TWO REGISTERED JERSEY CALVES; ONE for sale; one exchange for equal blood. John Wodtli, Rt. 1, Waterloo, Ore.

FOR SALE—REGISTERED GUERNSEY BULL, dehorned; t. b. tested. Sam Rodius, Coeur d'Alene, Idaho.

REGISTERED SHROPSHIRE RAMS, FROM prize-winning stock. G. H. & J. J. Thompson, Macleay, Ore.

THOROUGHBRED CHESTER WHITE PIGS; big type. Shoreacres Ranch, Route 1, Vancouver, Wash.

REGISTERED SHROPSHIRE RAMS AND ewes. Write McK. Edwards, Valley, Wash.

HARNESS and SADDLERY 189

SEND FOR FREE HARNESS AND SADDLE catalog today; cut out the middleman, buy direct from the manufacturer. Lowest prices in the west; satisfaction guaranteed. Established 1881. Write Pierce Harness Co., Dept. T, Spokane, Wash.

HOTELS 306

FAIRMONT HOTEL—RATES $1 DAY AND UP. 319 Riverside, Spokane. Free bus.

FAIRS 370

HARVEST FESTIVAL, NAMPA, IDAHO, SEPtember 18 to 21. Southwestern Idaho's great fair and livestock show. Premium list free. Write P. W. Duffes, secretary, Nampa, Idaho.

JACKSON COUNTY FAIR—SOUTHERN OREgon's great farm and livestock show, September 12 to 15. Premium list free. Write H. O. Frohbach, secretary, Medford, Ore.

TWIN FALLS COUNTY FAIR—SOUTHERN Idaho's great fair and livestock show, September 11 to 14. Premium list free. Write J. M. Markel, secretary, Filer, Idaho.

GRAYS HARBOR COUNTY FAIR—BIG FARM and livestock show, at Elma, Wash. August 29 to Sept. 2; premium list free. Write C. H. Palmer, secretary, Elma, Wash.

WESTERN WASHINGTON FAIR, PUYALLUP, October 1-7, both inclusive. 133,000 in attendance last year. You are invited to participate. W. H. Paulhamus, Manager.

WASHINGTON STATE FAIR—THE GREAT fair and livestock show of Washington, Sept. 17 to 22. Premium list free. Write H. P. Vermilye, secretary, Yakima, Wash.

JOB PRINTING 372

WEDDING ANNOUNCEMENTS AND INVItations, catalogs, booklets, high school annuals, letter heads, envelopes, cards, butter wrappers, etc. Union Printing Co., 412 First ave., Spokane, Wash.

$1.50 POSTPAID—YOUR NAME AND ADdress on 200 sheets and 100 envelopes. Hammermill bond writing paper, neatly boxed. Parker Printing Co., 405 Pacific blk., Seattle, Wash.

CLEANING, DYEING, Etc. 420

FRENCH DRY CLEANING BY PARCEL post. Ladies' and gents' suits, furs, hats, etc., prompt service. Address City Dye Works (Dept. A), E422 Sprague ave., Spokane, Wash.

TANNING 425

ANY KIND OF HIDE TANNED WITH HAIR on, or for leather. Fur and taxidermy work done to order. M. R. Mohr Co., 321 Sprague, Spokane, Wash.

KODAK FILM DEVELOPING 472

FREE ENLARGEMENT WITH 75C ORDER high gloss print. Spokane Film Co.

FILMS DEVELOPED FREE—KODO, THE PICture King, S15 Stevens, Spokane.

MATERNITY HOMES 497

MATERNITY HOSPITAL; STRICTLY PRIvate; doctor in attendance; prices reasonable. Mrs. Elizabeth Peel, matron, W1324 Broadway, Spokane.

BUILDING MATERIAL 588

TURNS PLASTERING INTO PLAY—PERFECtion plaster wall board can be nailed on just like lumber, and makes a perfect plaster job. Western Wallboard Co., Seattle, Wash.

LUMBER, LATH, SHINGLES, MILLWORK— Direct from mill to you. Free catalog and plan book. Home Builders Supply Company, Leary building, Seattle, Wash.

SEEDS 620

HUNGARIAN VETCH SEED, POSITIVELY aphis proof. Good forage crop. Write for circular describing same. We have common vetch, red and alsike clover. Corvallis Feed & Seed Co., Corvallis, Ore.

ORDERS FILLED PROMPTLY FOR VETCH, clover, pasture mixtures, gray and black oats, seed wheat and barley; hay of all kinds. Brownsville Warehouses, Chas. Sterling, owner, Brownsville, Ore.

NURSERY STOCK 621

TREES—NOW BOOKING MAIL ORDERS AT reduced prices for limited time only. Apples, pears, peaches, nut trees, prunes, cherry, small fruits, etc. Live agents wanted. Lafayette Nursery Co., Lafayette, Ore.

FARM LANDS FOR SALE 651

1000-ACRE SHEEP RANCH; 150 ACRES CULtivated; two barns; fine house; water; seven miles sheep-tight fence. Price $22,000. Fred Markham, Hunters, Wash., owner.

FARM LANDS FOR SALE (Continued) 651

CUTOVER LANDS, EASY TO CLEAR; $15 TO $20 per acre; 25 miles north of Spokane; on hard surfaced highway; Great Northern and Milwaukee railways; excellent opportunity for dairying and stock raising with Spokane markets and creamery near at hand. Will help the man who will live upon this land and agree to clear a part each year by giving lumber to help start his buildings, and a purebred Jersey bull to groups of farmers. Interest and payments low. Write Milan Farms Development company, Dept. T, Old National Bank bldg., Spokane, Wash.

POTATO, POULTRY, BERRIES. ALL cleared and in meadow. A few feet from paved highway; located a half mile from railroad station, good store and sawmill; excellent neighbors, fine schools, close to several good towns. Priced at only $100 an acre. Sold in 5, 10 or 20 acre parcels. Small payment down, balance in 10 years at 6 per cent. This is the best land at the price that we know of. Write or call for full information. Carter, MacDonald & Miller, 208 Columbia st., Seattle, Wash.

HIGHEST TYPE FARM LAND, WHERE SETtlers get steady and permanent employment and live at home. Level bench and river valley land; all good soil; in already well developed farm district; school, markets, roads, etc. Around Onalaska, Washington, and near Pacific highway (15 miles southeast Chehalis); 20 acres or more, $15 to $50; long, easy terms. A clean cut and fair proposition. Go to Onalaska or write Graham Land Company, American Bank bldg., Seattle.

DO YOU WANT A HOME IN A RICH VALLEY near Spokane, on three transcontinental railroads? Where soil is perfect, rainfall ample. Summers cool, winters moderate? The kind of stump land that pays to clear? Timothy and clover green eight months in year; natural stock country. Land cheap, 10 yearly payments at 6 per cent. Humbird Lumber Company, Box 00, Sandpoint, Idaho.

480 ACRES SPLENDID LAND; IN SNOHOmish county; some clearing; several buildings; family orchard; two living creeks; fine well; corners in fine lake; 300 acres native timber; four miles from good town and paved highway; county now putting fine road through land; will sell very cheap or will trade for small improved place. Address E. L. Meeker, Arlington, Wash.

HARRINGTON DISTRICT—640 ACRES GOOD wheat land; 100 acres pasture; creek; good buildings; macadamized road; 2 miles from Harrington; main line Great Northern; good schools, churches, stores; small payment will handle, balance easy terms; bargain; no trades. Owner, W. E. Shrader, Harrington, Wash.

BIG OPENING SALE OF YAKIMA VALLEY farm land, under an assessed state and government approved irrigation project; best, deep soil; close to town and good roads. Price $25 per acre and up. Very easy terms. Western Lands, Inc., owners, 918 Green bldg., Seattle.

E&G LUMBER COMPANY LAND SALE—IN Skagit county; 40-acre tracts, $1400; $200 cash, balance easy. Lots work for the settler. Splendid district, roads, schools, towns. Information free. H. C. Peters, 726 3d ave., Seattle.

40 OR 80 ACRES; BEST BUY IN SPOKANE county for the price; plenty of hay, wood, water, fruit, garden truck; all good land; small amount stock, machinery; ready to move in; some terms. Lee Zachary, R. 1, Elk, Wash.

160 ACRES; 60 UNDER CULTIVATION; house, barn, family orchard; fenced; water; good road; school one mile; good location; $2000 cash, balance $500 each year; bargain. Dr. J. Finney, Harrison, Idaho.

100 ACRES; 3 MILES FROM GRANTS PASS, Ore.; in Grants Pass irrigation district; land practically level; will sell in 5 and 10 acre tracts. For information write C. D. Brooks, Route 2, Grants Pass, Ore.

SELL YOUR PROPERTY QUICKLY FOR cash; no matter where located. Particulars free. Real Estate Salesman company, 501 Brownell, Lincoln, Neb.

320 ACRES LAND; 25 CLEARED; SPRING house, barn. Particulars, write Box 381, Cashmere, Wash.

BARGAINS IN DRY AND IRRIGATED farms. Oregon Mortgage Co., Paulsen bldg., Spokane.

FARM LANDS—Wanted 654

NO COMMISSION — SELL YOUR FARM through Washington Farm Bureau Exchange, represented in 45 states. Lists of farms for sale by owner mailed free. 312½ Lindelle, Spokane.

WANT TO HEAR FROM OWNER HAVING farm for sale; give particulars and lowest price. John J. Black, Chippewa Falls, Wis.

I HAVE INQUIRIES FOR FARMS IN NORTHwest. Describe fully and state price. R. A. McNown, 310 Wilkinson Bldg., Omaha, Neb.

FARM LANDS FOR RENT 657

FARMS FOR RENT—IN THE FERTILE Flathead valley of Montana. We have a large acreage of first-class, nonirrigated farm land for rent to practical farmers. Land adjoining raising 25 to 40 bushels wheat this season. Also adapted to diversified crop raising. Write, giving references. Flathead County State Bank, Polson, Mont.

FOR LEASE—440 ACRES DAIRY FARM; ON Puget Sound; low rent; part cash, part in labor. J. M. Dempsey, owner, 326 East 58th st., Seattle.

IRRIGATED LANDS—For Sale 663

CORBIN ADDITION TO GREENACRES—IN the beautiful Spokane valley; 30 minutes from Spokane; paved road; 40 inches of water for irrigation; gravity flow. Ask for booklet with all information.

Return coupon—The Fred B. Grinnell company, Spokane, Wash. I am interested in the Spokane valley. Please send booklet and all information to

Name .....

Address .....

THE BEST LOCATED AND IMPROVED IRRIgated 31 acres in the early Kennewick district, very cheap. Speculators and others investigate. Jesse Reed, Route 1, Kennewick, Wash.

FOR SALE OR EXCHANGE 702

160 ACRES; SIX SLASHED; GOOD ROAD; running water; good timber, some cedar; comfortable buildings; team and tools; close to school. Box 124, Northport, Wash.

IMPROVED STOCK RANCH, 530 ACRES; NO encumbrance. Price $20 per acre. What have you? Jessie Hawthorne, Enterprise, Ore.

SALE OR TRADE FOR SMALLER RANCH— 480 acres; 405 under cultivation; 7 miles town. Write Otto Linnell, Broadview, Mont.

FOR INCOME PROPERTY—40 ACRES KENnewick irrigated land; value $12,000; improved. J. Jacot, Finley, Wash.

TO EXCHANGE—Real Estate 705

$15,000—CLEAR TACOMA INCOME PROPerty for clear farm, equipped, same value. Write owner, 3200 N. 27th st., Tacoma, Wash.

Cattle Ranch To College

By Russell Doubleday Copyright by Doubleday & McClure Co

The first time we met John Worth, the leading character in this story, he was taking an active part in preparing the little frontier village of Bismarck, N. D., to withstand an Indian attack. We next see him playing the part of a man, although he was only 12 years old, in defending the village when the warriors appeared.

After the Indians were repulsed by the frontiersmen under the leadership of Jim McKenzie, the sheriff, and order was restored, Mr. Worth, John's father, set out for the north to search for outcroppings of coal, he being a miner as well as a freighter. During his absence, Mrs. Worth felt many misgivings owing to the dangers that confronted the wilderness traveler, but bravely assumed responsibility for John, his brother Ben, aged 10, and the baby. Mr. Worth had not been gone many days when he returned, clothed only in an Indian blanket and a pair of worn-out moccasins. He had been the victim of a thieving party of redskins who had taken all his clothing, leaving him naked on the prairie, where early winter winds would have brought certain death but for the friendliness of an old Indian whom he had once befriended. This old warrior's blanket and moccasins saved him.

It was not long, however, before he was on the trail again and when he came back in the spring he reported that the Indians were becoming more and more hostile toward the whites, and that it would not be safe for any mining expedition to venture away from the village for some time yet.

It was over a year before Mr. Worth was able to lead the mining party to a mine that he had discovered. It was a great day for the boys when the wagon train started across the wild prairie, but the first few hours out brought an experience that they long remembered. They rode away from the party for a swim in the river, and when they came back to where they had tied their horses they found them gone. Afoot they started after the outfit, now miles ahead and it was late at night when they wearily dragged themselves into camp and went to bed after a suppor of cold beans and coffee.

They finally reached their destination. The mine was opened and worked throughout the winter, during which the boys enjoyed many sports in the adjacent region. The following year, however, camp was broken and the start made for a new mine far to the westward.

CHAPTER VII.

A Buffalo Hunt.

Many weeks were spent in the migration, and it became exceedingly monotonous and tiresome before their destination was at last sighted. When, one beautiful afternoon, Mr. Worth pointed ahead to a rolling knoll covered with trees and announced that there was their future home, John and Ben set up a wild cheer and dashed ahead to examine the spot. Camp was pitched on the banks of the Yellowstone, and dug-outs were made—the cave part first and then the outer portion of substantial logs. Two large cabins were constructed for the family's dwelling and kitchen, and several more for the men, of whom there were many, this being an important mine.

No time was lost in settling, and in an incredibly short while the household belongings were in place, the provisions stowed away safely, and the regular camp routine begun. It was necessary to get a considerable portion of the tunnel driven before frost came. The opening was made horizontally into the side of the hill and continued in a straight line until the vein of coal was struck, when the tunnel had to follow it in whatever direction it went.

The boys were to be initiated into real miner's work at this camp. They were well grown, strong lads, fully able to do their share. During the preliminary digging of the drift they did little beyond their regular chores, except to drive the teams that carted away the earth from the mouth of the cave.

The important duty of supplying the camp with fresh meat was also entrusted to them, and it was not long before every haunt of furred and feathered thing that lived within a radius of miles around was known to them.

Within a few weeks after the establishment of the camp all preliminary work had been completed and the mine was ready for business. To facilitate the delivery of coal to daylight, a rough railroad had been built; its tracks were of wood, its rolling stock one small, four-wheeled box car, its motive power, Jerry the mule. Of this underground railway John was installed as president, board of directors, general manager, inspector general, passenger and freight agent, chief engineer and superintendent of motive power. One day he was engaged in his many brain-taxing duties, the most trying of which was keeping the motive power "moting." The flaring lamp in his hat showed but little of the mule's tough hide, but that little the superintendent belabored lustily. The little car rumbled and bumped along the rough wooden rails on its way to one of the rooms where the coal was being dug. John whistled cheerily to himself and occasionally interrupted the melody to shout into the mule's wagging ears: "Git up, Jerry!" Soon a point of yellow light appeared far off in the darkness, and as the lumbering car went on it grew in size and strength until its nature could be made out distinctly.

"Hello, Ben," shouted the young driver to his brother, whose cap-light had showed him clearly up the tunnel. "You'd better oil the hinges of that door; they squeak like a hungry rat."

The mule had stopped before a great door which blocked the way; it was so placed as to change the ventilating current of air, and it was Ben's duty to open and close it after each loaded or empty car. He sat in a little recess of the wall and pulled the door open and shut with the aid of a rope.

"It's mighty lonesome here," said he. "Seems as if I couldn't stand it sometimes, so I brought along the 'Arabian Nights' today. Been reading about Aladdin; he was underground, too, but all he had to do was to rub a lamp and he just wallowed in pearls, diamonds and things, while I sit here all day for half a dollar, and do nothing but open and shut this door for you and your old mule."

"Yes, I know all about him," answered John, as he drove through the doorway.

"'Tisn't true, any way," shouted Ben after him. "Couldn't be. Aladdin was a Chinaman, and no Chink ever made even a dollar a day."

"Guess you're right, but don't get lonesome," the voice came echoing back through the darkness, mingled with the rumble of the car and the sharp slap of the stick on poor Jerry's flank.

For a month or more John continued to drive the mule and Ben tended the door. It was late one afternoon, and the younger boy was feeling very tired of living away from the sun and the bright fresh air; the darkness and dankness oppressed him not a little, so he was glad to hear John's strong voice singing:

"Down in the coal mine,
Underneath the ground,
Digging dusky diamonds
All the year around."

"I'd sing too if I was getting a dollar 'stead of a half, and had a chance to see daylight once in a while," grumbled Ben as his brother stopped to talk a bit.

"Hold on a while and don't get excited," counselled the elder. "I'm going to be promoted, and what's the matter with you moving up, too?"

"Why? How?" inquired the discontented one eagerly.

"I'm going to be a regular miner; going to work with Bill Cooper, best miner out, father says."

"Then I'll drive Jerry and gather in the dollar," cried Ben. "But who'll tend door?"

For a minute the boy's face showed his disappointment; then he smiled again as the thought came of a way out of the difficulty. A friendly Indian camp was located across the river, and the boys, white and red, often came together for all sorts of sports.

"Why not get 'Coyote-on-a-hill' to work the door while I run the car?" said Ben exultingly. "He'd be scared to death at first, but I'll tell him about the 50 cents a day and that will brace his nerve."

And so it turned out. The Indian boy took Ben's place, while John turned over Jerry to his brother and cast in his fortunes with Bill Cooper.

"Coyote-on-a-hill" was pretty badly scared the first day, but Ben gave him a word of encouragement whenever he went by, and never failed to remind him of the money he was making, so he stuck it out like a man, and presently got quite used to the dreary darkness.

Both of the Worth boys expressed themselves as pleased with the change; what Jerry thought of it he never remarked.

John found his new work anything but easy. Bill Cooper was a fearless miner and a hard worker, and his assistant had all he could do to keep up with the task set for him. It was necessary first to cut under the mass of coal that was to be dislodged; to do this John had to lie on his side and so swing his pick in a cramped position. To make the vertical cut was not much easier, for he found it hard to work squeezed in between the walls of coal as the crevice deepened. The bottom and side cuts made, he bored holes (round holes with the flat drill, the knack of which he acquired only after long practice and a choice collection of smashed fingers) and then tamped in the paper cartridge of powder. When the fuse was in place, all that was needed to complete the work was a light from his lamp. The former was plain, straightforward hard work, the latter sport. The fuse lay like a snake just sliding into its hole, the place was quiet as death and as dark as a tomb, except where the flickering glare of the young miner's lamp shone; his face was covered with coal dust, through which his eyes peered with unnatural prominence.

He would take the lamp from his cap, stoop down and touch the bare flame to the end of the snake fuse; it would immediately begin to sputter sparks, and as John drew back for safety he could watch it eat its way towards the black wall and the powder within it. The red sparks drew nearer and nearer the hole, then, after a spiteful little shower, disappeared. It seemed a long time to the miner waiting behind his protecting shield before the rending, shaking report sounded, followed by the glare of the explosion and

"Come out if you want to save your skin," Bill."

the rattle of the falling coal. Then Ben soon turned up with Jerry, and both boys shoveled the loose coal of varying-sized lumps into the car.

Bill Cooper, though insisting that John must do his share, generally took the hardest and most dangerous places himself; so it came about one day that the boy worked at the vertical cut while his partner cut under, propping up the mass of coal (with wooden logs cut for the purpose) as he went in deeper.

The work was hard, and neither man nor boy spent any breath in talking. The dull ring of the pick was the only sound. Deeper and deeper grew the crevice; soon only John's foot was visible and Cooper had disappeared entirely under the overhanging ledge of coal; only the faint glowing of the light and the sound of the tools betrayed the workmen. It was dirty, tiring, dangerous work. At any moment that great mass of mineral might fall if the supports were not properly placed or the king-brace happened to be lodged in a soft spot.

"Come out if you want to save your skin, Bill," cried John suddenly. "I hear it popping and working all around, and it's beginning to move."

"In a minute. Wait till I dig out this far corner." His voice seemed to come from the bowels of the earth and had such an uncanny sound that John shivered.

"Hurry! Never mind the corner—it's going to fall. Come out, quick!" John's voice had such a note of fear and entreaty in it that the man below was impressed.

"All right," he said, "I'll come right along."

The boy stopped working and listened. There was a peculiar sliding sound that filled the air all about him, and from time to time a stone dropped to the floor with an echoing rattle.

"Come out." With an appalling roar the great mass of coal came down. John was badly squeezed, his light was extinguished, and all the breath was knocked out of him, but he managed to work himself free and make his way to the room. His only thought was of Bill, under that heap of coal somewhere, and of the need of help.

He rushed along blindly through the solid darkness, his hands outstretched before him, shouting as he went, "Help, quick!"

Some men who were working in the entry answered him.

"What's up?" they asked.

"Help!" Bill lies under a whole lot of coal."

They hurried to the coal face, and John showed them where he thought the imprisoned man lay, buried under tons of coal; the men, seizing picks, wedges and sledges, began working frantically to rescue their comrade.

For half an hour they toiled as they never toiled before. Then there was a cry of horror. The body was found. The poor fellow's arms were raised in the very act of swinging his pick, and he evidently had had an instant and well-nigh painless death.

"Well, boys, I hope mine comes as easy as his," said old Mike McGuire, who had witnessed many a similar scene.

They took up the body gently and tenderly laid it in the car, the mule was unhitched, and the miners pushed it slowly to the open air, the whole force following.

On Sunday Bill's sorrowing comrades buried him. Mr. Worth read a few verses from the camp's only Bible, offered a short prayer, and the simple ceremony was over.

Of Bill Cooper, like many of the men of that time, little was known, and if any one should question as to his origin he would probably be answered with, "Came From the East, I guess." He had many friends, but none felt his tragic death more than his young partner.

After this the work became irksome. John did not get along so well with his new partner, and often when he stopped to rest the sight came before his eyes of his dead friend as he lay under the black shroud of coal. Nevertheless, he toiled away faithfully, and seemed in a fair way of becoming an expert coal miner.

It was now well toward midwinter, and the boys began to long after some skating on the clear ice which had for some time covered the river completely. Alec was a handy blacksmith, and at their entreaties he set to work and fashioned them two pairs of rough but very serviceable skates. Since skating on the ice was something the boys had never learned, they had to get Yumping Yim, the Swede, to teach them how to use these new acquisitions. Though they were rude affairs, the boys, whose muscles were developed by snowshoeing, soon managed to make good headway on the river. In a sharp spin down the glassy surface after the day's work was over they could forget that their backs ached and their arms were heavy as lead. The brisk wind and change of exercise was like a tonic to them, and though the air holes in the ice made night skating rather dangerous, it only added zest to their enjoyment.

As the boys skimmed past the Indian camp, which was a large one, they sometimes found a whole delegation of young savages out to watch their progress. The Indians had never seen skates before, and their wonder and interest were great. This camp, in turn, greatly interested the white boys; as they lay in bed they could hear the bum-bum-bum-bum of the medicine man's tom-tom come booming monotonously over the river. This sound continued so everlastingly every night that the boys' curiosity was aroused and they determined to see what the medicine man did beside making such a row.

After dark one night they stole out and over to the red men's lodges, traced the booming noise, and finally, after great care and much dodging—for the Indian will not tolerate any spying on or interference with what he considers sacred—they reached the tepee from which the sound came; then they crept round to the opening flap and John cautiously thrust his head in, but quickly withdrew it.

"What's the matter?" whispered Ben.

"Old Crow Hat's facing this way. I was afraid he'd see us," John answered. "Let's look under this side."

Suiting the action to the word, the boys lifted the side of the tentlike lodge and

(Continued on page fourteen.)

Bits of Fun for Everyone

An Optimist.

The pessimist was suffering from rheumatism. "Every bone in my body aches," he complained.

"You ought to be glad you are not a herring," said the optimist.—Farm and Fireside.

What Is the Joke?

"Has your wife a sense of humor?"

"I don't think so," replied Mr. Pynhead. "I have told her the same joke over and over, and I don't believe she has laughed at it more than twice in her whole life."—Washington Star.

As Time Flies.

Manager (to applicant for office boy vacancy)—Aren't you the boy who applied for this position a fortnight ago?

Boy—Yes, sir.

Manager—And didn't I say I wanted an older boy?

Boy—Yes, sir. That's why I'm here now!

He Knew Them All.

The class composition was on "Kings," and this is what one boy wrote:

"The most powerful king on earth is Wor-king; the laziest, Shir-king; one of the worst, Smo-king; the wittiest, Jo-king; the quietest, Thin-king; the thirstiest, Drin-king; the slyest, Win-king; and the noisiest, Tal-king."—Youth's World.

Convinced of Error.

Teddy—I wish I hadn't licked Jimmy Brown this morning.

Mamma—You see how wrong it was, don't you, dear?

Teddy—Yes; 'cause I didn't know till noon that he was going to give a party.—Western Christian Advocate.

How Big Is a Bean?

Tommy is fond of squeezing toothpaste out of his shiny new tube.

"Don't take too much this time, dear," his mother said to him one morning when he was cleaning his teeth.

"How much may I have?" asked Tommy.

"Well, I should think a little bit, perhaps as big as a bean."

Tommy gave a great pinch and out shot the paste.

"Oh, oh!" exclaimed his mother, "not all that, Tommy. Didn't I say as big as a bean?"

"Yes," replied Tommy. "This is a string bean."—Youth's Companion.

FAMILY CIRCLE

ALICE W. BARLAND
EDITORIAL CONTRIBUTOR

If we would check the speaker
When he spoils his neighbor's fame:
If we would but help the erring,
Ere we utter words of blame:
If we would, how many might we
Turn from paths of shame.

Ah, the wrongs that might be righted
If we would but see the way!
Ah, the pains that might be lightened
Every hour and every day,
If we would but hear the pleadings
Of the hearts that go astray.

In each life however lowly,
There are seeds of mighty good.
Still we shrink from souls appealing,
With a timid, "if we could":
But a God who judgeth all things
Knows the truth is "if we would."
—Author unknown.

Experience Letters

Dear Mrs. Barland and Family Circle: I have been wanting to write for a long time. I find many helpful suggestions and I am sending in a few of my own. First I want to express my appreciation for the interesting and inspiring messages which Mrs. Barland gives us and I wish we had them oftener.

I use pasteboard boxes laid flat on top of the springs; they protect the mattress from being worn from contact with the springs. I use a light weight canvas 72 inches wide and long enough to lap well under the mattress on all sides; it keeps the mattress free from dust which always gets into the places where it is stitched. I find the silk floss mattress the best, as they are very comfortable and hold their shape. They are light in weight and easy to handle. I use a 30-pound weight, but think 27 pounds is about as good.

I cover all my pillows with unbleached muslin, which protects the ticks and is very easily removed to wash. The white underneath also gives a better appearance when the slips are on the pillows.

I would like to hear from the Circle women telling me of the west. I would like to know what is raised and how much to the acre and what kind of grass is raised for stock. I would like to know of the kind of soil and the climate. We have become quite interested in the west through reading THE FARMER, which was handed us by a friend. We have gotten much information from it.

MRS. HENRY MARX,
Dalton, Neb., East R.

Dear Mothers and Fathers of the Circle: In the letters published last week you were given an insight into the ways of girls and what is in the minds of some of them. I want you to read the letters this week, for further enlightenment concerning your girls.

I hope I can get some frank heart-to-heart letters from the young men, too, and perhaps we will be able to let some light into this social muddle that seems to be dragging some, yes too many, of our young people into the mire. If by this free and open discussion we can help even a few young people to keep to the safe path or to induce some who have started wrong to turn back to safe and sure traveling, we shall have accomplished the deep desire of my heart. Perhaps, mother, it will be your girl that needs help. Read carefully and think over the letters signed "Brown-Eyed Bell" and "Lucille" and if you are hindering your girl from confiding in you, change your attitude at once. Never, never abuse the confidence of any one and especially a young person. Nothing grieves them more. Your friend,

ALICE W. B.

Family Circle Girls

Dear Mrs. Barland: I have been reading the Family Circle for the last eight months and now I just can't help expressing my opinion. Of all the letters I have read, I think that of S. I. S. of Oregon is one of the few who have really expressed her mind. Who wouldn't enjoy speeding on a good piece of road?

People can gossip and preach around about the immorality of the young people of today, but who is to blame? The young people will have their fun; if it isn't given or provided for them they will take it. Why don't the older people provide a decent place, a club house, where boys and girls can entertain and be entertained?

Many adults and most boys seem to be very alert for an opportunity to find something about the appearance of a girl that shall call forth some smart (?) remark about her. If she is up-to-date in dress she is called a modern flapper, if she isn't up-to-date they say she is a "stick" or a "dead one."

I am thankful that most girls have too much self-respect to smoke or drink, but if she does do these things it is certainly not a man's place to censure her.

If all the girls would adopt bobbed hair and a short, one-piece dress it would increase the health and happiness, I believe. To my mind a long mass of hair which takes hours to care for is more ridiculous than short hair.

Some new fashion is considered outrageous until the new has worn off and by that time a still newer custom is introduced and so the tongues keep wagging. People just must have something to talk about and so they select us girls.

I will have to admit that there are extremes in the ways and dress and manners of both sexes, but I will also affirm that in my experience it is a greater treat for a girl to meet a decent boy than for a boy to meet a good girl.

Many thanks for giving me a chance to "explode." LUCILLE.

Dear Mrs. Barland: I am 19 years old and am not a flapper. I am an interested reader of the Circle page of The Farmer.

The various letters printed have set me to thinking and I have come to the conclusion that the boys and the mothers are principally to blame for the flappers. I don't want you to get the idea that I think that the girls are perfectly innocent of all wrong doing because I don't think they are—but:

If more of the mothers would be more truthful with their daughters and hold more sacred their confidences, and try to advise instead of nag at them, and wouldn't object quite so strenuously to the work that goes with a party or a dance in the home, there would be fewer girls going out on the streets or in cars for their pleasures.

But, of course, you can't expect a girl to tell her mother anything when she knows that it would be held in confidence only until her mother saw the neighbor woman, and unfortunately that is as long as a great many mothers hold their daughters' confidences.

Besides, who likes to be nagged at? But that is the trouble with most mothers; they complain when their daughters don't stay at home, but they don't realize that they make home life unbearable by that everlasting habit of nagging.

As for the boys; if they were not more than willing and didn't encourage it, there would be no wild night rides and kissing parties. The girls think that the boys demand it of them and they think right.

What I think is that these boys who have been writing to The Farmer and condemning the girls had better be sure that their own house is clean enough to receive company before they start criticizing the girls, and by the way, while they are cleaning their house it might be well to help the middle aged men (both married and single) clean their houses. Many a good girl has placed her trust in one of these old-young kind of men, with a big car and lots of money, only to find after it was too late that he was a regular Judas.

I don't believe any one will have to worry about the girls if the men and boys will raise their standard of morals. Women are quick to notice and adopt new ways and standards.

BROWN-EYED BELL.

Pickle Recipes

Pickled Peaches—One gallon peeled peaches, three pounds sugar, one pint good cider vinegar, two dozen cloves, six sticks cinnamon.

Boil vinegar, sugar, cinnamon and cloves 15 minutes then pour it over the peaches and let stand over night in a stone jar covered with a plate. Next morning pour off the liquor and heat to the boiling point, then add the peaches to the boiling liquor and let cool slowly till tender. Seal in glass jars.

MRS. W. R. S., Kansas.

Spiced Pickles—Put fresh cucumbers into fruit jars or stone crocks, make a brine of 1 gallon of boiling water, 1 cup of salt, allowing enough to cover the pickles. Scald this same brine and pour over for nine mornings, then wash cucumbers and cover with spiced vinegar to taste, pouring it over hot and seal. I add a piece of alum to keep pickles firm.

I make some pickles by adding to the cucumbers small onions and bits of cauliflower. I pour the hot brine over these for two or three mornings, then mix with the cucumbers and add spiced vinegar same as for the cucumbers alone. This is an old and tried recipe.—A Subscriber, Oregon.

GIRLS LEARN TO BAKE.

Over 31,000 girls learned to bake bread in the baking clubs last year. It is estimated that they baked 37,000 loaves of bread. At 10 cents a loaf this would be worth $3700.

REST WHILE COOKING.

A fireless cooker is a labor saver.

Just Folks

Change thrives on misfortune.

Those who count their steps have a hard time in reaching the goal. They are using up valuable figures.

It is even more difficult to get along with those who are addicted to lies than with those who are addicted to narcotics.

The "why" points the way to the "how." You have not really learned how to do a thing until you have learned why it is done.

During my recent visit to the east I met a young lawyer who asked me why Portland, Ore., was located above the mouth of the river. "I know there is a reason," he declared.

In fact, people may be divided into the hows and the whys. The hows are the big majority. Now and then there is a why and he has the first quality of leadership.

I had a refreshing talk with the young Maine lawyer to whom reference has been made. "I am surprised every day of my life with the common people I meet," he said. "It is up to you to write up to them; don't try to write down to them. Only use plain words and they can understand the best. I had a client come into my office the other day. He was a workingman earning common wages. I caught a glimpse of a book he was carrying in a bag. After considerable persuasion I found he had three books with him which he had bought at a second-hand book store. One was a book of adventure and the other two would be classed among the books of solid information. He is building up a home library and I have no doubt is a better informed man than many of those assuming a higher social position." EAS

New Use for Worn Sheets

Mrs. Bertha Keech of Monroe, Snohomish county, tried a novel plan of making home-made curtains and dyed them a light blue for one of her rooms, which she is working out entirely with that color scheme. The curtains are made from worn bed sheets, and remodeled in such a way that it is difficult to tell what their former use had been after they are completed. Mrs. Keech is very much pleased with the outcome, and intends to try other similar suggestions given by Mrs. Harriet B. Stowe, county home demonstration agent.

MODERN THINGS DESIRABLE.

The farm home should be filled with labor-saving equipment, home-made or otherwise.

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High Points in News of the Week

It is doubtful if President Calvin Coolidge will at any time during the administration which he is now entering experience a more trying week than the first one following his elevation to his high position. With numerous grave problems facing the administration, he was compelled to brush them aside and devote his thought and energies to the funeral services and memorials in honor of his former chief, the late President Harding. With this week, however, he returns to the national capital from Marion, Ohio, where he attended the final burial services, and shoulders the responsibility for guiding this country through the remainder of the reconstruction troubles which his predecessor so vigorously combated for the two years and five months which he served.

One of the new president's first problems is the handling of the threatened anthracite coal strike, which is scheduled for September 1. He is known to be a disbeliever in strikes where the public welfare is at stake and, therefore, predictions are freely made that federal intervention will be used in an attempt to prevent the strike and in the control of it should it occur.

Agricultural interests, especially the wheat growing industry, has been bringing pressure to bear for a special session of congress immediately to enact emergency legislation designed to insure the wheat farmer a price at least equal to the cost of production for his 1923 crop. President Coolidge has given no definite intimation as to whether or not he looks with favor upon an early session. Many who are in close touch with him believe he is not inclined to call such a session.

* * *

The thoughts of the American people were largely engaged last week in paying appropriate respects to memory of the late President Harding. After the coast trip of the special funeral train from San Francisco, the body lay in state in the rotunda of the capitol building for several hours, where the formal official funeral services were conducted and where many thousands of his personal friends and official acquaintances were permitted to pass by and look upon his face. The body was then taken to his old home town of Marion, Ohio, where the less formal funeral services were conducted in the presence of thousands of his former townspeople, neighbors and personal friends. On Friday afternoon the body was placed in a temporary vault where it will remain until a mausoleum is erected where it will lie permanently. The funeral service at Marion occurred at three o'clock, central time. A widespread movement was carried out for a five-minute memorial at the corresponding hour throughout the entire nation when all industrial activities should cease.

* * *

Great Britain has made public her note to her sister allied governments proposing new methods of settling the reparations controversy. The outstanding points in the proposal are as follows:

"1. The German government to undertake to abandon the policy of passive resistance.

"2. Steps to be taken upon the cessation of passive resistance for the resumption of the civil administration of the Ruhr, and to provide for the progressive evacuation of those areas.

"3. A body of impartial experts to be set up charged with the duty of advising the allied governments and the reparations commission respectively as to Germany's capacity to pay and to the mode of payment to be prescribed. The cooperation of an American expert to be sought, and arrangements to be made for German experts to be consulted and heard.

"4. The same body, or a body similarly constituted, to be asked to advise the reparations commission as to the economic sureties and guarantees to be pledged by Germany to the allies.

"5. Interallied discussions to be opened with as little delay as possible, whether by conference or otherwise, for the purpose of elaborating a comprehensive plan of a general and final financial settlement.

"6. So soon as the economic sureties and guarantees which Germany will have pledged to the allies have been put into effective operation, the occupation of all German territory outside the limits laid down in the treaty of Versailles to come to an end."

* * *

The government of Germany is undergoing a sweeping change as a result of industrial and political unrest, which in turn has developed a strong socialistic and communistic tendency. Chancellor Cuno and his cabinet have resigned, and President Ebert has accepted their resignations. The socialists demand that a new cabinet be formed on a coalition basis, giving the socialists and communists liberal representation.

The money situation in Germany continues to be exceedingly unstable. A strike in the government printing department threatened to disrupt the printing of paper money with which the country has been flooded. The value of this paper money is indicated by the fact that the ministry of labor awarded the strikers a weekly wage of 6,500,000 paper marks, when their demands had been for 20 gold marks. It is said that most of the Hamburg shipyards are closed because the managers can not grant the demands of the workers for increased wages. A London dispatch from Berlin says, "Reports from all parts of Germany show that unrest among the workers is increasing alarmingly, so much so that in political circles fears are not concealed that a revolution may break out as suddenly as that in November, 1918 did."

* * *

On the ground that two terms of four years each are too great a strain for any human being to bear as president of the United States, Senator Cummins of Iowa has gone on record favoring a constitutional limitation to one term.

* * *

The navy department has ordered the scrapping of the uncompleted battleships Indiana and South Dakota, that were in the process of construction at the time of the signing of the international agreement for limitation of armament. The two vessels, if completed, would have cost $70,000,000 and have been the two largest afloat.

* * *

Notwithstanding the high cost of building construction in this country a report issued by S. W. Straus & Co., investment bankers of Chicago, says that in 239 leading cities building activities were over 14 per cent greater during the month of July than during July 1922. Building permits for these 239 cities aggregated buildings that will cost about $234,000,000.

The Railway Age, in an article just made public, says that up to July 21, this year, the number of cars of freight hauled by the railroads of the country was 11 per cent greater than during the same period of 1920, when all records for heavy traffic were broken. The article says that the railroads have this year effected the greater increase in operating efficiency in their history.

Farm Business and Markets Outlook

(Continued from page five.)

are quoted at 75 cents to $1.25 per bushel at Chicago.

The commercial apple crop is estimated at 32,900,000 barrels, compared with 31,000,000 barrels a year ago and an average of 25,700,000 barrels in the preceding five years. The total crop is placed at 188,000,000 bushels, against 201,,000,000 bushels a year ago.

LATEST QUOTATIONS.

The Live Stock Market.

PORTLAND, Ore., Aug. 11.—Cattle—Choice steers, $7@7.50; medium to good steers, $6.50@7; fair to medium steers, $5.50@6.50; common to fair steers, $4.50@5.50; choice heifers, $4.50@5; choice cows and heifers, $4@4.50; medium to good cows, heifers, $3.50@4; fair to medium heifers, $3@3.50; common cows, $2@3; canners, $1.50@2; bulls, $3@4; choice dairy calves, $8.50@9.50; prime light calves, $8.50@9.50; medium light calves, $8@8.50; heavy calves, $5@8.

Hogs—Prime light, $9@9.50; smooth heavy, 230 to 300 lbs., $8@9; smooth heavy, 300 lbs. and up, $6.50@8; rough heavy, $5@6.50; fat pigs, $8.50@9; feeder pigs, $8.25@8.65; stags, subject to dockage, $2.50@5.

Sheep—Choice valley lambs, $9.50@10; medium valley lambs, $9@9.50; common to valley lambs, $7@8.50; cull lambs, $6@7; light yearlings, $7.50@8; heavy yearlings, $6@6.50; light wethers, $6@6.50; heavy wethers, $5.50@6; ewes, $1.50@5.50.

SPOKANE, Aug. 11.—Cattle—Prime steers, $6.75@7.25; good to choice steers, $6.25@6.75; medium to good steers, $5.50@6.25; fair to medium steers, $5@5.50; common to fair steers, $4.25@5; choice cows and heifers, $4.75@5.25; good to choice cows, heifers, $4.25@4.75; medium to good cows, heifers, $3.50@4.25; fair to medium cows, heifers, $2.75@3.50; canners, $1.50@2.50; bulls, $2.75@3.50; light veal calves, $8@9; heavy veal calves, $6.50@8; stockers and feeders, $4@5.25.

Hogs—Prime mixed, $8.75@9.25; medium, $8.50@8.75; heavies, $5.75@8; fat pigs, $8.50@8.75; stockers and feeders, $8.25@8.50.

Sheep—Prime lambs, $8@9; fair to medium, $7@8; yearlings, $6@7; wethers, $4@6; mutton ewes, $3@5.

The Grain Market.

PORTLAND, Ore., Aug. 11.—Wheat—Hard white, Bluestem, Bart, $1.05; soft white, western white, $1.03; hard winter, northern spring, western red, 96c.

Grain futures: Wheat, unchanged. Oats, No. 2 white feed, August, $25.50; September, $25; No. 2 gray, August, $24; September, $23. Corn, No. 2 eastern yellow, shipment August, $37; September, $36. Mill run, August, $28; September, $18.

SEATTLE, Aug. 11.—Grain: Wheat—Hard white, soft white, western white, $1.04; hard red winter, soft red winter, $1; northern spring, $1.01; western red, $1; Big Bend Bluestem, $1.06.

DAYTON, Aug. 11.—Club, 90c; red, 85c.

LEWISTON, Aug. 11.—Red, 82c; white, No. 1, 85@86c.

COLFAX, Aug. 11.—Red, 79c; white, 84c.

DAVENPORT, Aug. 11.—Bluestem, 84c; Gold Coin, 80c; club, 80c; northern spring, 76c; Turkey red, 76c.

ODESSA, Aug. 11.—Bart and Bluestem, 86c; Turkey red, Marquis and Forty-fold, 82c; Jones' Fife, 80c.

Hay and Feed Grain.

SPOKANE, Aug. 11.—Wheat—Feed wheat, $38 ton. Oats—$40 per ton; rolled, $44. Corn—$44 per ton; cracked corn, $46 per ton. Barley—$36 per ton; rolled, $38. Bran—$23 ton. Bran and shorts—$24 ton. Shorts—$26 ton.

Hay—Alfalfa, $20 ton in ton lots, $16@18 carload lots; new timothy, $21@22 in ton lots, delivered; $19 a ton in carlots f. o. b. Spokane.

PORTLAND, Ore., Aug. 11.—Millfeed—City delivery prices: Millrun, $28 per ton; middlings, $40; scratch feed, $48; rolled barley, $37@39; cracked corn, $48; rolled oats, $42.

Hay—Buying prices, f. o. b. Portland: Alfalfa, $15.50@16 ton; cheat, $13@14; valley timothy, $18@19; eastern Oregon timothy, $20@22; clover, $13@14; oat, $14@15; oat and vetch, $15@16; straw, $8.

General Produce.

PORTLAND, Ore., Aug. 11.—Butter—Cubes, extras, 41@42c lb.; prints, parchment wrapped, box lots, 46c; cartons, 47c. Butterfat, 45c delivered Portland; average station buying price, 42c pound.

Eggs—Buying price: White hennery standards, 30c per doz.; mixed color standards, 27@28c doz. Selling price, Front street selects, 37c; candled ranch, 34c. Association selling prices, cash at store, selects, 35c; firsts, 33c; pullets, 30c.

Cheese—Prices to jobbers, f. o. b. Tillamook: Triplets, 27c; longhorns and loaf, 28c per pound.

Poultry—Hens, 14@23c; broilers, 20@25c; ducks, nominal; geese, nominal; turkeys, nominal.

Pork—Fancy, 13c per pound.

Veal—Fancy, 16c per pound.

Onions—Walla Walla Globes, $1.60 per hundred. Sweet potatoes, 15c pound.

Potatoes—New Oregon, $1.25@1.75 per hundred; sweet potatoes, 15c pound.

Vegetables—Cabbage, Oregon, bulk, 1½@2c lb.; lettuce, $1.50@1.75 crate; garlic, 17½@20c lb.; tomatoes, $1.25@1.60 box; celery, 85c@$1.50 doz.; peas, 6@7c; peppers, green, 10@15c lb.; cucumbers, 50@75c box; beans, 56c lb.; corn, $1.20@2 sack; bunched beets, 35@45c doz.; bunched carrots, 35@45c doz.; radishes, 30@35c doz.; green onions, 30@35c doz.; beets, $2@2.50 sack; carrots, $2@2.50 sack; rutabagas, $2 sack; egg plant, 12½@15c pound; summer squash, $1.50@1.75 crate.

SEATTLE, Aug. 11.—Eggs—Select local ranch, white shells, cases included, 32c per doz., f. o. b. Seattle; mixed colors, 30c per doz.; pullets, 21c per doz.; checks, 16c per doz.; cases returned to shippers, 1c less; do to country stores, f. o. b., 30c per doz.; eastern Washington, case count, 23c per doz., f. o.b. Seattle.

Butterfat—F. o. b. Seattle: A grade, 47c per lb.; raw milk, $2.25 per cwt.

Poultry—Hens, 4½ lbs. and up, 22c per lb.; do 3½ and under 4½ lbs., 15c per lb.; broilers, 1½ lbs. and heavier, 24c per lb.; do heavy broods, 1 to 1½ lbs., 23c per lb.; hens, 3 to 3½ lbs., 12c per lb; do dry picked, 2c above live; capons, live, fat, 6 to 10 lbs., 35c per lb.; do dry picked, fancy, dressed, 37c per lb.; do roosters, 9c per lb.; Belgian hares, 3½ lbs. and heavier, 12c per lb.; geese, fat, live, 15c per lb.; ducklings, live, 3½ lbs. and up, 16c per lb.; ducks, old, over 3 lbs., 15c per lb.; turkeys, fat, dry picked, 8 to 10 lbs., 30c per lb.; do live, 25c per lb.; squabs, large, dressed, $4.50 per doz.; pigeons, $2; guineas, $8 per doz.

Beef—Steers, fancy, 7@8c per lb.; cows, fat, 6c per lb.

Veal—Fancy light, 14@15c per lb.; do medium, 10@12c per lb.; heavy, 7@13c per lb.

Mutton—Fat, 9c per lb.; spring lambs, fat, 17c per lb.

Hogs—Good block, 90 to 150 lbs., 9@10c, nominal; do heavy, 6@8c.

Range of Live Stock Prices for Week Ending August 8

CATTLE.	Chicago.	Spokane.	Portland.	N. Salt Lake.
Choice and prime heavy steers (1100 lb. up)	11.10@12.25			
Good heavy steers	9.85@11.40			
Medium heavy steers	8.15@10.25			
Common heavy steers	6.40@ 8.50			
Choice and prime light steers (1100 lb. down)	10.90@12.00			
Good light steers	9.50@11.25			
Medium light steers	8.00@10.00	6.25@ 7.25	6.25@ 7.50	5.75@ 6.25
Common light steers	5.65@ 8.40	4.25@ 6.25	4.50@ 6.50	4.50@ 6.00
Common to choice butcher heifers	4.00@10.50	3.00@ 5.25	2.75@ 4.75	3.75@ 5.00
Common to choice butcher cows	3.50@ 9.25	2.50@ 4.75	2.25@ 4.50	3.75@ 4.75
Bologna and beef bulls	3.25@ 4.85	2.75@ 3.50	3.00@ 4.00	2.00@ 3.25
Canners and cutters, cows and heifers	2.60@ 3.50	1.50@ 2.50	1.50@ 2.25	1.50@ 3.00
Canner steers	3.50@ 5.75	2.50@ 4.00	2.50@ 3.50	
Medium to choice light veals	8.50@12.75	7.00@ 8.00	8.00@ 9.50	6.75@ 7.75
Common to choice heavy veals	3.00@12.50	6.00@ 7.00	5.00@ 8.00	
Common to choice feeders (750 lb. up)	5.75@ 8.45			
Common to choice feeders (750 lb. down)	4.15@ 8.00	4.00@ 5.25		4.00@ 5.25
Common to choice stocker cows and heifers	3.25@ 5.35			
HOGS.				
Top of market	8.30	9.00	9.25	8.50
Bulk of sales	6.45@ 8.10	8.25@ 8.75	8.25@ 9.00	7.15@ 7.85
Heavy (250 lb. up)	7.00@ 7.90	8.25@ 9.00	8.00@ 9.00	7.00@ 7.75
Medium (200-250 lb.)	7.25@ 8.15	8.50@ 9.00	8.50@ 9.25	7.25@ 8.00
Light (150-200 lb.)	7.00@ 8.15	8.25@ 9.00	8.75@ 9.25	7.50@ 8.50
Light lights (130-150 lb.)	6.75@ 7.90	8.00@ 8.50	8.50@ 9.00	
Smooth packing sows (250 lb. up)	5.80@ 6.45	6.25@ 7.00	6.00@ 6.50	5.75@ 6.35
Rough packing sows (200 lb. up)	5.60@ 6.00	5.50@ 6.25	4.50@ 6.00	5.00@ 5.75
Medium to choice pigs (130 lb. down)	6.25@ 7.25	8.25@ 8.50	8.50@ 8.65	
Stock pigs		8.00@ 8.25	8.50@ 8.65	
SHEEP AND LAMBS.				
Medium to prime lambs (84 lb. down)	10.25@13.00	9.00@10.00	9.00@10.50	9.50@11.00
Culls and common lambs	7.50@10.50	6.00@ 9.00	6.00@ 9.00	7.00@ 9.50
Medium to prime yearling wethers	7.50@11.00	6.00@ 7.00	6.00@ 8.00	5.00@ 7.00
Medium to prime wethers	5.00@ 9.00	4.00@ 6.00	5.50@ 6.50	4.75@ 5.75
Medium to choice ewes	3.50@ 7.50	2.50@ 5.00	3.00@ 5.50	2.50@ 4.00
Culls and common ewes	1.00@ 3.50	1.50@ 2.75	1.50@ 3.00	1.50@ 2.50
Feeder lambs	10.25@12.65			

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Your Health

By Royal S. Copeland, M. D., F. A. C. S.

Summer indiscretions in eating and drinking are responsible for lots of trouble. One such disturbance is inflammation of the lining membrane of the intestines, a condition called "enteritis." Any part, or all, of the intestinal tract may be involved. The chief symptom of this trouble is diarrhoea.

Dr. Copeland.

Even the mental condition has its effect upon the bowel action. The muscular contractions of the walls of the intestines are given the name "peristalsis." Their movement may be increased by fright or worry. The result is "nervous diarrhoea."

The first indication of trouble is "stomachache," or pain in the bowels. This may be colicky in character, coming and going, or it may be cutting, quite knifelike, indeed.

In acute cases there may be fever, loss of appetite and intense thirst. If long-continued, there is great prostration and real illness. In chronic diarrhoea, there may be loss of flesh and interference with the general health.

In infants and young children the cause is usually found in the quality of the milk. In older children, ice cream, iced lemonade, "soda-pop" or over-indulgence in candy or pastry, may be responsible.

In adults the cause is found in indiscretion in diet, such as excessive indulgence in ice cream or ice water. Bad meat, unclean food, contaminated food-handlers, may be responsible for the attack.

If the disease does not yield in a day or two, you should see your family doctor. It is so easy to overlook typhoid fever or some other serious difficulty which may begin the same way that no chances should be taken.

If diarrhoea appears in a child, the milk should be stopped at once.

Many adults suffer from chronic diarrhoea or from frequent attacks of enteritis. In such cases there is some underlying cause that must be found by the doctor.

The baby must be given particular care, especially in the summer season. Fresh air, all the time by ventilation and every day by out-or-door life, is most important. Sunlight at all seasons is vital.

All the water given to a child should be boiled unless it comes from a source of known purity.

If the baby is bottle-fed it must be from a sterilized bottle, equipped with a sterilized nipple.

I have said that the milk should be stopped at once if diarrhoea occurs in a child. Many mothers, especially young mothers, are so fearful that the child will starve to death that this advice seems cruel. It is far better, however, to give the child nothing but water for a day or two. So long as the temperature continues, your doctor will probably advise against food, and it is good advice.

The colic may be relieved by hot, moist compresses to the abdomen, by a hot-water bottle or a hot tub-bath.

Remodels Her Kitchen

Mrs. George Cass of Monroe is remodeling her kitchen and entire first floor of the farmhouse under the supervision of Miss Minerva Lawrence, home management specialist of the state college, and Mrs. Harriet B. Stowe, county home demonstration agent. The entire plan is being worked out with the idea of greater convenience for the housewife, such as more cupboard room, better light, and generally a better arrangement of all the kitchen equipment.

Hiram on "The Ladies"

They used to keep our buttons on, and darn our heavy socks;
They used to dress in closer-fitted, neater-looking frocks;
But now they wear these baggy, bulgy, blousy, bunchy smocks
And rat and rough and roll their once serene and glossy locks. —J. M. M.

Latest High Class Patterns for the Home

Please order the patterns you desire at least two or three weeks before you wish to use them. Desiring to obtain the latest high-class patterns for its readers, THE FARMER has made arrangements to have them sent direct from the east, and under present mailing conditions it takes about that time for them to reach you.

4476. Girls' Cape. Cut in 5 sizes: 4, 6, 8, 10 and 12 years. A 10 year size requires 2 3-8 yards of 40-inch material. Price 10c.

4452. Misses' Dress. Cut in 3 sizes: 16, 18 and 20 years. An 18 year size requires 5 3-4 yards of 40-inch material. The width of the skirt at the foot is 2 yards. Price 10c.

4477. Girls' Dress. Cut in 4 sizes: 8, 10, 12 and 14 years. A 10 year size requires 3 7-8 yards of 36-inch material. Price 10c.

4457. Ladies' Dress. Cut in 7 sizes: 36, 38, 40, 42, 44, 46 and 48 inches bust measure. To make the dress as illustrated requires 2 1-8 yards of figured and 4 3-8 yards of plain material. The width of the skirt at the foot is 2 yards. Price 10c.

4454. Ladies' House Frock. Cut in 4 sizes: Small, 34-36; medium, 38-40; large, 42-44; extra large, 46-48 inches bust measure. A medium size requires 5 yards of one material 32 inches wide, or 1 3-4 yard of plain material for waist portion and belt, and 3 1-4 yards of figured material. The width at the foot is 2 1-2 yards. Price 10c.

4243. Child's Dress. Cut in 4 sizes: 2, 4, 6 and 8 years. A 6 year size requires 2 1-2 yards of 32-inch material. Price 10c.

4276. "Easy to Make" Apron. Cut in 4 sizes: Small, medium, large and extra large. A medium size requires 2 1-8 yards of 36-inch material. Price 10c.

4471. Girls' Dress. Cut in 4 sizes: 6, 8, 10 and 12 years. A 10 year size requires 3 1-8 yards of 27-inch material. Price 10c.

4122. Ladies' Dress. Cut in 6 sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. A 38-inch size requires 4 5-8 yards of 44-inch material. To trim as illustrated requires 5-8 yard of 44-inch material. The width at the foot is 2 1-4 yards. Price 10c.

4372. A Practical Model. Cut in 4 sizes: Small, 34-36; medium, 38-40; large, 42-44; extra large, 46-48 inches bust measure. A medium size requires 2 3-8 yards for the lining and 5-8 yard for the yoke of 36-inch material. Without sleeves the lining requires 1 5-8 yards. Price 10c.

4067. Ladies' Under Garment. Cut in 4 sizes: Small, 34-36; medium, 38-40; large, 42-44; extra large, 46-48 inches bust measure. A medium size requires 3 3-8 yards of 27-inch material. Price 10c.

3922. Child's Romper. Cut in 4 sizes: 1, 2, 3 and 4 years. A 2 year size will require 2 1-8 yards of 36-inch material. Price 10c.

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NATURES GREATEST CLEANSER

Every day Daniel Ainardi goes swimming in the Yakima river near his home. Daniel is 9. He has three kittens, three ducks and a cow. School will start soon where he lives in Washington and Daniel says he likes to go to school. His teacher this year is to be Mrs. Van Syskle.

Mildred Wuorinen likes to go swimming and wishes there was a good place to swim near her home. She has only been swimming once this summer, but she is having a fine vacation just the same. Mildred is a southwest Washington girl. She passed into the seventh grade when school closed with an average of 90 per cent. She picked blackberries this summer.

Birthday Greetings

THURSDAY, August 16.—Carrol Cushman, 10 years old; May Fassett, 11.

FRIDAY, August 17.—Alma Cook, 11 years old.

SUNDAY, August 19.—Clara Engelson, 11 years old.

TUESDAY, August 21.—Fay Cochrane, 8 years old; Marie Townsend, 11.

WEDNESDAY, August 22.—Sylvia Nasi, 11 years old; Beryl Snyder, 11; Paul Ylonen, 10.

LETTERS WELCOMED BY AUNT NELLIE.

Among recent letters received by Aunt Nellie are those from cousins whose names follow. A few of these will be published each week in the regular edition of THE FARMER and others will appear from time to time in The Junior Farmer:

Gladys Hartzell, Mildred Gerber, Harriet and Elizabeth Cook, Hulda Pouttu, Esther Pasche, Lila Hill, Hilda Pietila, Geraldine Bee, Septema Bee, Elizabeth Watkinson, Verla Dyer, Alice and Irvin Faber, Frances Fishback, Astrid Rusdal, Thelma C. Gentis, Helen Werttemberger, Etta Rochester, Lillie Puffert, William Goetzenberger, Daniel Ainardi, Josephine Sanders, Evelyn Olsen, Esther Simila, Rosale Staehell, Martha Keiski, Laverne Cox, Lillian Ward, Billy Watson, Lueen Marie Herndon, Doris, Reta and Bernis Godsey, Edith Puckett, Eugene Kanta, Senvi Naranen, Esther Schorzman, Vera Bice, Helena Reiche, Helen D. Top, Pieona K. Johnson, Matilda Louise Guler, Irene Swegle.

BEDTIME STORIES

By THORNTON W. BURGESS.

DECIDE TO LEAVE THE ORCHARD.

Have you ever noticed now some people seem born to make trouble for others? Bully, the English sparrow, and his wife, Mrs. Bully, are not very big. In fact, they are small. But they can upset an entire neighborhood in less time than it takes to tell about it. They seem to just delight in a fuss, and when they can not stir up a quarrel among their neighbors they quarrel between themselves, so that where they are there is very little peace.

At first the other people had hoped that after a little Bully and Mrs. Bully would settle down and things would be as peaceful as before. When matters went from bad to worse they began to hope that something would happen to drive Bully out of the old orchard, and when Chatterer the red squirrel appeared and tried to get the six eggs in Bully's house for the first time in the history of the old orchard the other bird folk didn't offer to help drive the would-be thief away.

But Bully and his wife had needed no help from any one. They had been quite equal to giving Chatterer such a punishment as he had not had for many a long time, and then when they had made him run for the safety of the old stone wall how they did brag and boast! This was too much for their neighbors.

"Just listen to them!" cried Welcome Robin. "They are common, just the commonest kind of common people. I simply can not live in such a noisy neighborhood. This is my last season in the old orchard. I hate to do it, but next spring I shall look up another neighborhood in which to live."

"That is what I am planning to do," announced Winsome Bluebird. "I don't want to, but I simply must. I've spent every summer since I can remember right here and my parents lived here before me, but I can not stand such goings-on. Another year I shall not come back."

"I feel just the same way," sputtered little Jenny Wren. "I like my house. It is the best I ever had, but I am going to give it up and look somewhere else. This is no neighborhood for honest, quiet-loving people, and all on account of those upstarts from the city. It is an awful thing to say, but I do wish that Chatterer had got their eggs. It would have served them just right."

All the other birds living in the old orchard, including Drummer the woodpecker, Goldie the oriole, Pewee the flycatcher, Skimmer the swallow, and Chippy the sparrow, own cousin to Bully, agreed that this would be the last summer they would spend in the old chard. They would leave it to Bully and his family, for it was very clear to all that they could not live in the same neighborhood with them. And this is how it came about that the old orchard was in danger of losing the little feathered people who loved it so and whom it loved.

(Copyright by J. G. Lloyd.)

Cattle Ranch to College

(Continued from page ten.)

gazed at the old medicine man. He was seated before the fire, his tom-tom between his knees, his head bowed low, and his long hair hanging over his face (an uncommon condition, for the red men generally keep their hair most neatly parted). Crow Hat swayed to and fro in time with the slow beating of his drum, and as he swung he chanted, "Eeyuh! Eeyuh! Eeuuh!" raising and lowering his voice as the tom-tom was beaten loudly or softly. Long the boys watched him, fascinated by the weird sound. Suddenly he began to thump his drum furiously and his voice rose from a low half-grunt to a shriek. The "Eeyuh! Eeyuh!" was now like the wail of a fierce wind.

This was too much for the boys' strained nerves. They backed away hurriedly and made for home, and it was some time before the sound of that last frenzied cry died out of their ears.

Bill Cooper's end had a great effect on John, and he was glad of the first opportunity to get out of the black hole and into the open air. Indeed, both boys welcomed the work of cutting and hauling props for the mine, which fell to them soon after their night visit to the Indians.

The elder was busily working unloading props at the mine entrance one day when Ben came down to him excitedly: "Say, John," he cried, "a squaw just came down from the big flat and she says she saw some buffalo over beyond the camp. The Indians over the creek are saddling up to go for them. Can't we go?"

"I don't know," said John excited in turn. "You'll have to ask father. Go on up and see him while I finish this job."

The youngster went off on the run, and in a moment returned. One look at his face was sufficient to show John that he had the desired permission.

The mules were unhitched and turned out for the day. Baldy and Ben's horse were quickly saddled, rifles, belts and cartridges were slung on, and in a twinkling the two young hunters were off after the biggest game the country afforded.

When they got to the camp they found that most of the bucks had already started, but old "Wolf Voice," a minor chief with whom the boys had made friends, still remained.

"There's Wolf Voice; he'll let us go with him," said John. "Hello, can we go with you?" he shouted to the old man.

"You got good horse? Me go quick," grunted the brave.

"I guess we'll keep up," and Baldy danced as if to show his mettle. In a few minutes they were on their way up the slope to the plateau which surrounded the camping place. Baldy kept up easily with the Indian's pony and Wolf Voice turned after they had covered a mile at a round pace. "Heap good horse," said he.

"Yes," replied John. "He can beat anything around here in a half-mile run. Want to try now?"

The temptation was great, for the pony the chief rode was his best, but the thought of the chase restrained him. "Plenty ride soon," he said.

The level reached, the boys found that the great shaggy beasts were already surrounded, so they took a place in the circle and waited impatiently for a chance at the game.

With a yell the Indians rode toward the dazed animals, who now separated and began to run frantically in all directions. The party of hunters, of whom there were about 25, also split up into little groups, and each party chased a buffalo. One of the animals came toward the boys.

"Get out of his way," yelled John to his brother, "and let him pass between us. Then fire as he goes."

The great lumbering beast came nearer and nearer, and as they watched, ready to spring away in case he should charge them, noticed that he was being followed far off by an Indian.

"Now shoot," shouted John, as the quarry rushed by. Both rifles rang out, but the buffalo passed on without showing a sign of being hit. Immediately Ben's horse bolted with him, but Baldy stood his ground till his rider urged him after the fleeing game. John held his rifle ready to make a safe shot when opportunity offered. The horse was now gaining rapidly, but hearing the thump of hoofs behind him and then an Indian yelling, he turned his head and saw that Big Hawk, a young brave, was shouting something. He could not hear what it was, however, and paid no attention.

The race continued, and John's whole thought was to get in a good shot. Zip! it was the unmistakable sound of a bullet, and as the boy turned to see from whence it came, zip! another bullet went humming by: the Indian was firing from behind, and the shots were coming unpleasantly close. John drew Baldy to one side just in time to get out of the pathway of another leaden pellet.

This last shot caught the buffalo in the leg, and he lunged forward on his massive head. Big Hawk then rode up and riddled him with bullets.

John was angry clear through.

"The coward," he muttered. "Might have hit me—'twasn't his fault he didn't, either. Anybody could do up a buffalo from behind. 'Fraid I'd get him, I guess. See that?" he added as Ben camp up.

Ben was indignant, too, and both boys went up to where the young buck was skinning the scarcely dead beast, determined to have his share. The Indians protested against sharing the game, but Wolf Voice happened to come up at this moment, and, with the authority of a chief, soon settled the dispute by giving the boys a fine hind quarter. This they lashed securely with a lariat on Ben's horse. Then both rode off triumphantly on Baldy.

(To be continued.)

Kittitas County Sets Pace

(Continued from page three.)

boar in the community, according to Mr. Wipple's own statement, where there were at least a half dozen in use four years ago.

"There have been 50 per cent more sows brought to my place for service since the campaign started," said Mr. Wipple, "and I am sure the other breeders have noticed the same tendency of the stock owners to discard the use of inferior sires. As for rams, I don't know of one grade ram that is in use in the neighborhood, where there were several of them four years ago."

Ernest W. Wilson speaks for the Denmark district when he says that the campaign has resulted in at least 25 per cent increase in the use of purebred sires. There is only one grade ram being used and only one scrub bull. The boars, however, are all registered and even though kept by men who didn't sign the pledge, they have yielded to the influence of the campaign on the whole community.

"There were a few grade stallions in this part of the county, but there are none in use now," he said, "and I feel that they have come to realize that the horse owners want the best and are willing to pay for it."

In the district just east of Ellensburg where J. Alva Bull is the project lealer, the people have gone a step farther, and are taking to the use of purebred herds as well as the use of registered sires.

The history of the live stock industry in the Kittitas district really started in 1893 when the farmers began to realize that they could not sell all of the hay that they had been raising for the prices that it had been bringing. The country was overstocked with hay and the growers were left and there was nothing to do but hold it. They had all gone into the game and had been left holding the sack.

It was but natural that they then turned their thoughts toward some means through which they could dispose of their hay. The solution was live stock and they all got the idea at the same time. Most of them took to dairying, since at that time there seemed to be a better prospect for the sale of butter and butterfat than for some of the other products. Consequently it was but a few years until there were three creameries in Ellensburg and there was a large amount of cream shipped to other towns.

True it was that there were some who took up beef cattle, but these did so largely because they preferred them to milk cows. For similar reasons there were others who began with sheep and they found that even a small band of feeder lambs would consume much of the surplus hay and return a profit to the owner. There were a few who went a step farther and took to raising registered sheep with the idea of selling ram lambs to the range men and ewes to others who desired to get started with registered sheep.

As time went on and there was a growth in population in some of the larger cities of the Puget Sound country and other parts of the state, there was a stronger demand for hay. This demand has grown and has caused a tendency for the growers to sell as much of their hay as possible and still have enough left to feed through the winter.

From all appearances the purebred sire campaign is already having an influence on the type of farms that are being built up in this district. Farm owners are coming more and more to the realization that their farms must be built on a more permanent basis and there must be a better balance in the kind of crops raised. They can readily see that they can not expect to sell hay in as large quantities as they did when there were fewer farms and a smaller acreage of alfalfa.

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Pasture Crops

Sweet Clover Becomes Popular

Sweet clover is gaining in popularity as a pasture crop, and many are finding it to be superior to bluegrass. A. F. Bernard of the McKinley district, west of Toppenish, believes that sweet clover has three times the carrying capacity of bluegrass, and besides has many advantages over that grass for pasture purposes. It lends itself better to rotation; it can be grown in ground that is slightly alkaline, and does not require so much irrigation.

Having had experience with sweet clover for pasture purposes for four years, Mr. Bernard does not hesitate to recommend it. Late this summer he seeded 10 acres of corn land to sweet clover. That amount will take 75 pounds of seed. Sweet clover will carry two head of cattle to the acre the first year and the second year three head. At one time he kept as many as 20 head of cattle of different ages, mostly yearlings, on four or five acres of sweet clover pasture. The maximum capacity is secured the second year from seeding.

"Sweet clover has three times the carrying capacity of bluegrass pasture," said Mr. Bernard. "The philosophy is this," he continued, "it will take a cow all day to eat 60 to 100 pounds of bluegrass. A cow will eat that much in a day of green feed in a pasture. The bluegrass is short and the cow, cropping it, takes all day in getting what she requires.

"The sweet clover, however, grows higher when pastured, even 10 to 12 inches high, and the cow can get all she wants in an hour and then lie down and rest during the day. An hour in the morning and an hour in the evening is all she needs for feeding.

"Bluegrass is very shallow rooted and, therefore, requires irrigation often. My experience is that bluegrass pastures have to be kept continuously moist. One has to irrigate once each week. With me that used to be Saturdays and Sundays. Sweet clover, however, roots deeply, and if it gets four to five irrigations each season it will make a satisfactory pasture. Although the surface of the ground may get a little dry, it is drawing moisture from the deeper soil and will keep on growing.

"Bluegrass is hard to seed and it often takes two years to get a stand. Then it is hard to plow out, if one wants to grow some other crop on that ground. Sweet clover, on the other hand, is readily seeded and it makes good pasture even the first year, and the next year it affords a great deal of pasture.

"It is easy to plow up and it leaves the ground clean, for it soon overcomes the weeds that start along with it when it is seeded. I am trying it this year in corn, and I believe that it will work out all right. It is a pasture crop that one can sow in grain and get pasture the same year following the grain harvest.

"It is much more satisfactory for pasture than alfalfa because it is nonbloating. While it is true that every kind of feed at some time may bloat some animal, yet I have never in my four years' experience with sweet clover had an animal bloat on it."

While Mr. Bernard's experience is very similar to results which other eastern Washington growers have had with sweet clover it should be remembered that it is not the best crop for west Washington farms, since alfalfa has shown better results for both hay and pasture crops.

GRADE GUERNSEY MAKES GOOD.

It is unusual that an animal in a grade herd makes a production of 110 pounds in 30 days, but A. E. Moore of Falls City has a grade Guernsey cow that reached that figure for the month of May. She was on pasture and received a balanced grain ration in addition, and was given the best of care in the meantime. In the month of June she produced 104 pounds. She is sired by Paddy, Mr. Moore's former herd sire, who was butchered before any of his daughters were tested and his true worth realized.

The entire herd averaged 62.2 pounds for May and 50 pounds for June in the local cow testing association. Mr. Moore has an interesting example of the value of a good herd sire in the production of two cows, one of which made 444 pounds of butterfat at the age of 7 years, while her daughter produced 458 pounds as a 2-year-old. The increase was due, he believes, to the improvement from the blood of the better herd sire.

POLL EVIL

FISTULA OR SWEENEY

THE reliable remedy is Gombault's Caustic Balsam. Used for over forty years. Supersedes firing and cautery.

Symptoms and treatment of most horse ailments fully explained in direction book with every bottle. $1.50 at druggists or direct upon receipt of price. Good for humans too. The Lawrence-Williams Company, Cleveland, Ohio.

GOMBAULT'S Caustic BALSAM

TRACE BACK TO ROYALTY.

Harvey R. Shoultes of Edna, Lewis county, president of the Washington State Holstein-Friesian association, has 19 granddaughters of King of Pontiac's. They are all calves of his former herd bull, a son of the only double century sire. The picture herewith shows one of these descendants of King of Pontiac. Her sire started a weight-guessing contest among the breeders who visited the farm during the recent northwest tour. She tipped the beam at 1780 pounds.

HOLSTEIN BUSINESS GROWS.

The Holstein business is better than it has been for several years in the northwest, and Holstein breeders generally in this territory are feeling extremely optimistic. Sales made through the efforts of the Washington Holstein Breeders' association in two months reached the total of $9000, and W. E. Meyer, northwest fieldman, reports that orders are coming in faster than ever. Four carloads of grade and purebred black-and-whites went into Idaho and Utah, one of grades being selected from Whatcom county herds by R. T. Davis, Weiser, Idaho, and one of purebred bulls and heifers by R. P. Greenwood of Roy, Utah, from the herds of Ed Hoem, Snohomish; Lee Brothers and Youngquist Brothers, Mount Vernon; Hollywood farm, Hollywood, and Carnation Stock farms, Seattle. The Teton valley, Idaho, which is in the shadow of Yellowstone park, took two full carloads selected by Dr. M. H. Knudsen from the herds of Hoem, J. C. Burnham of Kirkland, Yarr Brothers and R. A. Anderson of Chimacum, T. R. Yarr of Dabob, Chris Hendrichsen of Onalaska, Elmer Sanders of Forest and E. M. Moses and E. W. Klaus of Chehalis.

HEADS SKAMOKAWA HERD.

This is a picture of Spozza's St. Mawes Poppy, the herd sire of the H. L. Weister Jeersey farm at Skamokawa, in Wahkiakum county. Mr. Weister is one of the leading dairymen of that section.

WESTERN GUERNSEY EVENTS.

August 17 Pierce county Guernsey breeders hold their annual meeting at the western Washington experiment station at Puyallup, Wash.

September 19 will be Guernsey day at Washington State fair, Yakima, Wash., at which time the Guernseys will be judged. On the evening of that same date the Yakima Guernsey breeders will have their dinner and meeting at the Hotel Commercial.

October 3 will be Guernsey day at western Washington fair at Puyallup, at which time the Guernseys will be judged. The Washington State Guernsey Cattle club will have their annual meeting at Puyallup this year. On the evening of October 3 there will be a dinner for Guernsey breeders and their friends at Paul's Pantry, Puyallup.

WITH SEATTLE MILK SHIPPERS.

The Seattle Milk Shippers' association has secured the services of A. O. Young, who will act as field man and licensed tester and will cover all territory where there are members. He took up his work August 1. Mr. Young was formerly employed by the Carnation Milk company

GALLOWAY'S 63 BARGAINS

Before you buy an Engine, Spreader, Separator or any other machine get Galloway's new prices, save one-fourth to one-half. Satisfaction guaranteed to you.

Catalog FREE

Don't buy any farm necessity before you get this Bargain Book. Write to Wm. Galloway Co. Box 2457 Waterloo, Iowa

We Buy and Sell
Grade and Pure Bred Dairy Cattle.
We can save you money whether you wish to buy or sell. One or a carload.
Graham Livestock Co.
E2605 Broadway, Spokane, Wash.
NEAR CARSTENS' PACKING PLANT.

Read the "Want Ad" page this week for good offers of all kinds.

Breeders' Dept.

American Hampshire Sheep Association
has a valuable booklet with illustrations telling you the superiority of this breed. We believe the Hampshire to be the best all round sheep in the world. Also have list of breeders; some near you. This literature is free. Write
COMFORT A. TAYLOR, Secretary.
72 Woodland Ave., Detroit, Mich.

Shropshire Sheep
Yearling and lamb rams, ewes of all ages. Sired by best rams obtainable.
FELZER BROS., Tangent, Ore.

Shropshires, Oxfords and Dorsets
Fitted show rams for good registered flock headers; range rams in lots to suit.
20 Shropshire ewes, sired by imp. Brewin 92; 20 Oxford breeding ewes, 40 Dorset breeding ewes and ewe lambs. All priced according to value.
FLOYD T. FOX, Silverton, Ore.

Shropshires and Berkshires 12 yearling rams, good size, blocky, good condition, well bred. Few Berkshire early spring pigs.
J. H. McCONNEL, Shedd, Ore.

BRED GILTS
Modern type and good blood lines.
Poland Chinas, Duroc Jerseys, Berkshires.
Bred to farrow in September.
ANIMAL HUSBANDRY DEPT. OREGON AGRICULTURAL COLLEGE.
Corvallis, Ore.

Poland China Boars
About 25 "tops" out of 100 head, sired by Kin-Son Fashion, full brother of The Monarch, and by Paramount, the boar whose get has never been defeated, from 800 pound sows, every one a breeder. Every one of these is a herd boar prospect. Priced so that farmers or breeders can buy them. First come, first served. KIN-SON LIVE STOCK CO.
A. L. Wilson, Mgr., Route 5, Nampa, Idaho.

Whitman County Poland China
Breeders' Association, offers you real big type boars or sows, young or matured stock of the very best blood lines obtainable. Satisfaction guaranteed or money back.
A. H. HALLING, Secy., Colfax, Wash.

O. I. C. Swine High class, quick growth, large type, large litters, easy fattening at all ages. Choice weaned pigs at reasonable prices. Register free. Will ship C. O. D.
RINGGOLD FARM.
J. H. WEST, R. 1, Centralia, Wash.

Choice Duroc Jerseys
Gilts, bred to farrow in September. Service boars. Sensation breeding.
GEO. DEBOK, Oregon City, Ore.

Richly Bred Holstein Bull
Corda Prince Pontiac 241,002
Calved March 16, 1918; great grandson of King of the Pontiacs. Dam, Corda 95347, has record of 22.15 lbs. butter and 549.2 lbs. milk in 7 days. Sire's dam, Bovud 159692, made 22 lbs. butter, 452 lbs. milk in 7 days. Weighs 2130 lbs. Tuberculin tested under federal supervision. His daughters that have freshened with the first calf are averaging 5 gallons milk per day.
$400 F. O. B. GOLD HILL.
G. W. JACOBS, Gold Hill, Ore.

Linn County Holsteins
Cows, heifers, bulls and calves.
LINN CO. HOLSTEIN ASSOCIATION.
GEO. A. McCART, Sec. Harrisburg, Ore.

Hollywood Holsteins A well-marked, fine individual heifer calf, reasonably priced.
HOLLYWOOD FARMS, Hollywood, Wash.

Milking Shorthorns
FARMERS! Why not diversify, work from both ends? Produce beef as well as milk at a minimum cost. We are offering bull calves from profitable milking cows of approved Shorthorn type. Herd headed by Gretna Challenger, grand champion Washington state fair and Western Royal, 1922. Visit the herd or write
NORTHWOOD FARMS. Redmond, Wash.

Richly Bred Guernsey Bull
Red Wing Jennie Van Yeksa Starlight, four years old last May. Sire, May Rose Yeksa Starlight; dam, Jennie Van, 664 lbs. fat. His three nearest dams average 748 lbs. fat. A show bull; was second at Pacific International in very strong competition. Would consider calf of good breeding in part pay.
F. H. STANGLE, Sherwood, Ore.

May Rose Pure Bred Guernseys
Calves, both sexes. Heifers and cows at prices farmers can afford to pay.
NOBLES BROS. Bow, Wash.

Registered Ayrshire Bulls Sired by Willowmoor Peter Pan 16th; dams of excellent breeding. Attractive prices.
J. U. Smith, Rt. 1, Box 135, Newburg, Ore.

Brown Swiss Stock Farm
Breeders of Brown Swiss cattle, the farmers' dairy cow. Young stock for sale.
THEO BRUGGER, Route 3, Gresham, Ore.

Jersey Type and Production
Two medal sires in service. Young bulls out of dams of heavy producing families.
J. M. DICKSON & SON. Shedd, Ore.

Entire Jersey Herd
Seven cows, four heifers, two calves, and two bulls; cows to freshen early this fall.
J. H. McCONNEL. Shedd, Ore.

Graymere Jersey Heifers Bred and open, from 6 to 18 months old. Myra's Missionary, Plymouth Lad and Oxford Majesty breeding.
WARREN GRAY, Box T, Jefferson, Ore

Jerseys Allandale register of merit bull, as well as good show animal. Now is the time to prepare for winter breeding.
A. A. BIXBY, Freewater, Ore.

Hampshire Spring Pigs
Best blood lines, well grown, good individuals. Booking orders for fall weanlings. Would sell few good sows.
E. P. CANFIELD, Carlton, Ore.

Quarjo Hampshires
for sale now. Bred sows and gilts; spring pigs.
W. B. LINDSAY, Quarjo Ranch, Merlin, Ore.

Have you glanced over the farm bargains on the "Want Ad" page?

Double Your Money in Less Than a Year
$7000 Cash and 8 Pairs Foxes from 3 Pairs of Our Breeders in 15 Months
This was done by some of our purchasers.
Ask about it. Raise ROOSEVELT STRAIN Mormon Foxes and you can do as well. All breeders purebred, registered, guaranteed.
UNITED STATES SILVER FOX FARMS CORPORATION
200 Hutton Building, Spokane.

Garrett & Robinson
POLAND CHINA DISPERSION SALE, AUGUST 24TH
Nampa, Idaho

THIRTY HEAD—14 bred sows to farrow in September and October, bred to Ambition Equal 2 Young Cycicotte, by the World Grand Champion The Cycicotte, dam by Chi Hit, by Rainbow Big Peter, by Peter Pan and Designer Giant, by The Designer.

Eight fall gilts, open, by Cycicotte and Designer Giant; four fall boars by Cycicotte and out of a Hit dam. These are real herd boar material; one yearling herd boar, sired by Ambition Equal, by Big Bill. If we were not dispersing you could not buy this boar.

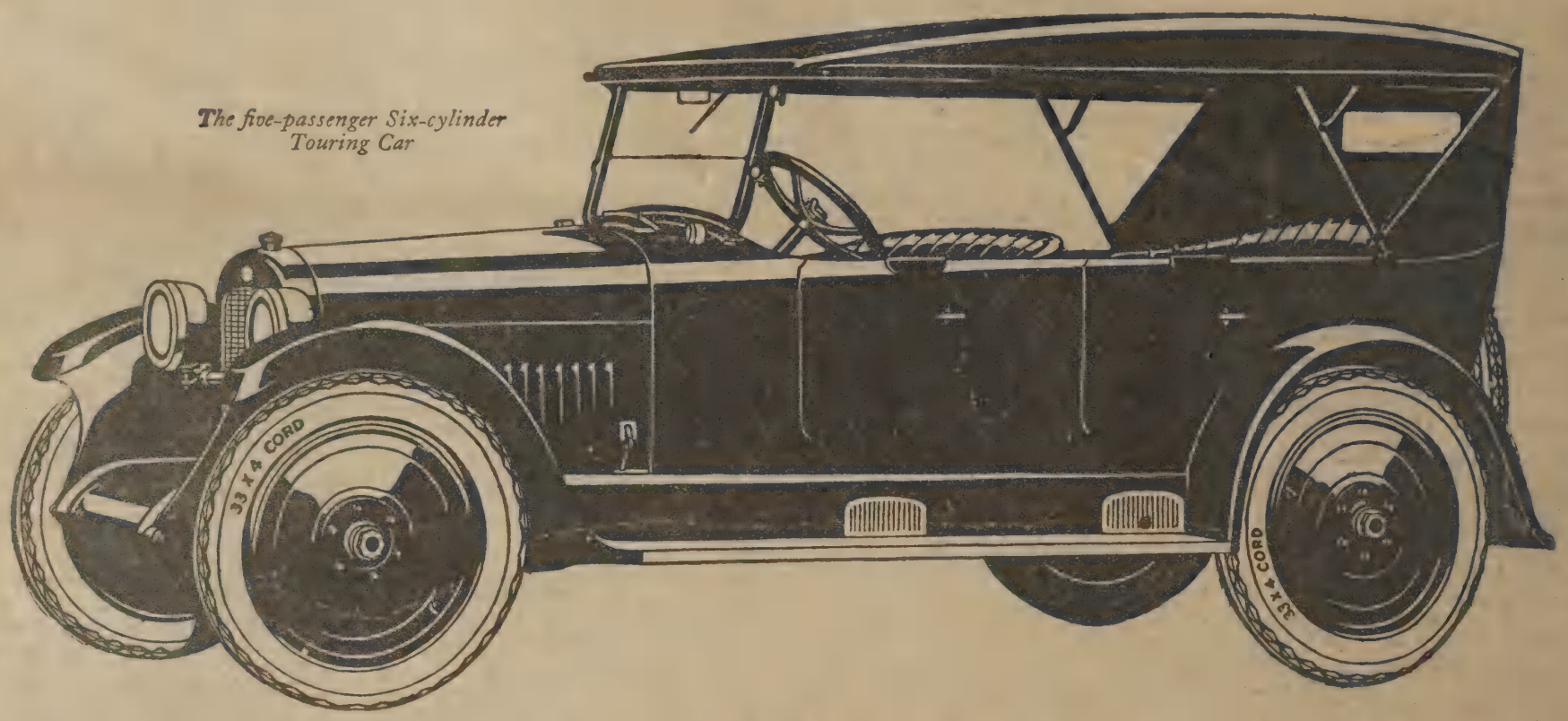
Write for catalog giving full details.

Also several spring boars by above boars.

Remember the date, August 24, Nampa, Idaho, in the Sale Pavilion. If you can not come send in mail bids to A. L. WILSON, Sale Manager.

BERT M. WILSON, JOE DICKINS, Auctioneers.

NASH



The five-passenger Six-cylinder Touring Car

ANNOUNCING

A Wonderful Group of New Fours and Sixes

Never before in a long history of fine achievement has Nash resourcefulness and creative originality revealed itself with such downright decisiveness as in this *complete new line of open and enclosed models.*

They offer in point of appearance a dignity and beauty of body line that is of arresting and distinctive individuality.

They provide a performance so brilliant and so remarkable as to engage your immediate and unqualified admiration.

And from the seriously practical investment viewpoint they can truthfully be said to set a new and far higher standard of motor car value.

All that Nash engineering stands for, all that Nash factory practice represents in the way of accuracy and excellence, is embodied in these new cars in advanced and distinguished degree.

The new Six group includes the *Roadster*, five-passenger *Touring*, seven-passenger *Touring*, *Sport* model, *Victoria*, five-passenger *Sedan*, Four-door *Coupé*, and *Sedan* for seven.

And the new Four line embraces the *Roadster*, the five-passenger *Touring*, the *Sport* car, the *Carriole*, and the *Sedan*. (1830)

The Nash Motors Company, Kenosha, Wis.

THE WASHINGTON FARMER
SPOKANE. SEATTLE.
ESTABLISHED 1894

Education and Fun Mark Club Tour

By RALPH ERSKINE

A few weeks ago the club boys and girls of Kittitas county got their heads together and, with the aid and leadership of County Agent W. L. Davis, laid plans for what was destined to be one of the best club events ever held in this state. The affair was scheduled for August 3, and on that date about 130 boys and girls and their parents toured the county, visiting several of the club members' homes and enjoying a picnic that was a real one.

One of the purposes of the tour was to give the members practice on all kinds of farm animals in order to prepare them for the club contests at the fall fairs. Mr. Davis had arranged for four judging demonstrations, one each with dairy cattle, swine, sheep and beef cattle.

The first contest was in the R. L. Rutter Jr. herd of Holsteins on the Mrs. Olive Sanders farm, northeast of Ellensburg, where Mr. Davis had arranged a class of three milk cows, and, with the assistance of C. M. Hubbard, extension live stock specialist of the state college, gave the members an interesting demonstration on dairy judging. They were then asked to place the three animals according to their own judgment and afterward explain their placings.

A class in fat swine was judged at the Steve Woodhouse farm near Thrall, southwest of Ellensburg. Two pens of four

Continued on page six.

The upper left-hand picture in this group shows a flock of purebred Hampshire ewes on the farm of Mrs. Olive Sanders, near Ellensburg. The sheep picture at the right shows some of the ram lambs of the same breed on the Peter Wipple & Son farm. Some of them were being held for the club boys and girls to judge. The club group at the lower left shows, from left to right: Front row—Leonard Newman, Marie Skiffington and Florence Robinson. Back row—Steve Woodhouse (local leader), Ray Bronson and Ivan Hutchinson. With Elmer Harvey, president, who is absent, they form the Kittitas County Chester White club. At the lower right is shown Marie Skiffington and her Chester White sow and litter. In the center are shown Mr. Woodhouse's 10 pigs entered in the state college 10-ton litter contest.

Farming State of Mind Is the Same, East and West—Page 5

Can Grow a Crop Every Year

Legume Crops Make Entry Into Palouse Farming System

In attempting to work out a system of continuous cropping and of permanent agriculture for the Palouse country, the soils division of the college experiment station has developed many interesting facts, of which the following were demonstrated on field day at Pullman, July 11:

That the Palouse country receives sufficient rainfall to make it possible to grow a crop every year and that summer fallowing is not practiced primarily to conserve moisture, but to make plant food available.

That the soils are being depleted and that nitrogen is already so limited in the soil that pronounced increases in yield of wheat can be produced by using a commercial nitrogen fertilizer on wheat when grown on poor summer fallow.

That effective summer fallow conditions can not be developed unless the tillage is practiced early in the summer fallow year. The type of tillage makes little or no difference, provided the work is done early in the spring.

That the organic matter or humus in the soil can not be maintained unless the nitrogen is also maintained and the present practice of cropping where no attempt is made to return anything to the soil will not only exhaust the fertility, but is rapidly developing an unsatisfactory physical condition in the soil.

That legume crops can be grown in place of summer fallow and that alfalfa, sweet clover, red clover or peas when so grown will not only maintain the soil fertility and develop a good physical condition of the soil, but will also assure as good a yield in the succeeding wheat crop as is obtained on average summer fallow land.

That the small amounts of straw and strawy manures at present returned to the soil can not be depended upon to maintain soil fertility.

That wheat can not be grown after a legume without danger of "burning," and that this "burning" can be almost entirely controlled if straw is applied on the legume sod just before it is broken up before the next wheat crop. This fact is important from another standpoint, viz., the farmer has learned from experience that he invariably gets a decreased yield of wheat after heavy amounts of straw have been turned under when practicing a summer fallow system of cropping. By returning the straw in combination with a legume sod he eliminates the depressing effect on the yield as well as the danger from burning while he is providing for the maintenance of soil organic matter.

That peas can be used as a very satisfactory nurse crop for alfalfa, sweet clover and red clover, thus making it possible to get the full return from a profitable crop during the year that the legume is started.

That the milling quality of wheat is directly associated with the nitrogen content of the soil and that a depletion of this element of plant food will not only cause decreases in yield, but will also have a pronounced detrimental effect on quality.

That the tillering of wheat is directly influenced by the available nitrogen in the soil and that a clear understanding of soil fertility should play a very prominent part in deciding on the rate of seeding.

That harrowing of winter wheat in the spring is a loss of time and labor and the practice should be discouraged.

Result of Treated Potato Seed

Albert Hansen of the Renton district has some outstanding results from the use of corrosive sublimate on six rows of Beauty of Hebrons. The entire patch consists of one acre, but the seed from the first six rows were given thorough treatment with corrosive sublimate solution before planting, while the rest of the field was planted with untreated seed. The plants from the treated seed showed up fully 50 per cent better when the plants reached full bloom during mid-summer.

The patch was planted on the 8th of May and cultivated thoroughly in order to keep free from weeds during early growth. The rows were hilled as soon as the plants became too large to allow excessive cultivation, and will be left in this manner until digging time. Mr. Hansen is well pleased with the trial, and intends to treat all of his seed next year and will possibly put out a seed plot for growing his own seed next year. This plan is strongly recommended by the extension service of the state college to secure clean seed potatoes.

FOR COOPERATIVE SUCCESS.

Organize the commodity, not the community.

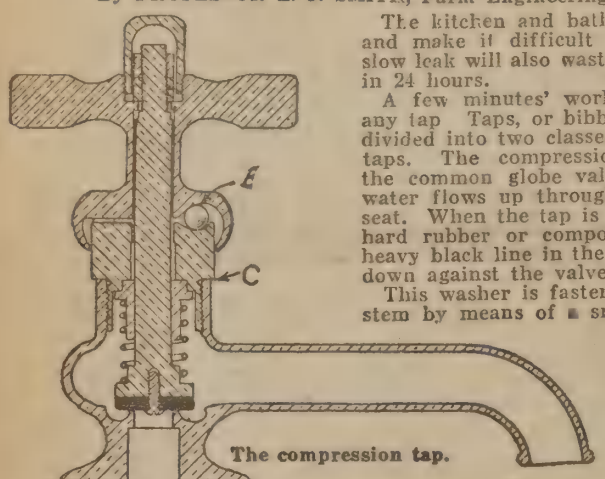
How to Keep Taps From Leaking

By PROFESSOR L. J. SMITH, Farm Engineering Department, W. S. C.

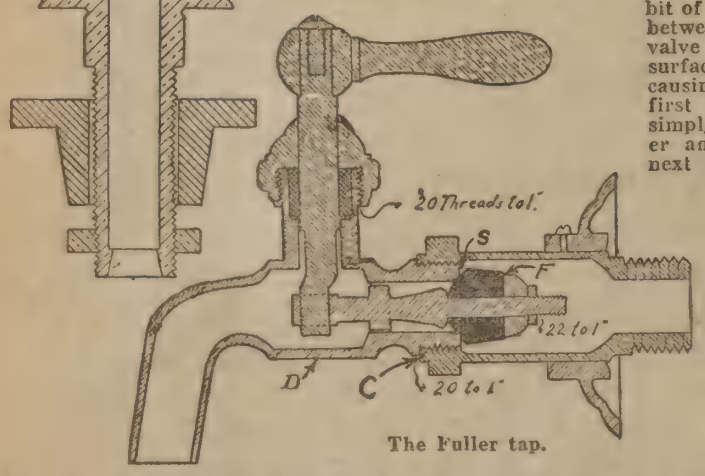
The kitchen and bathroom taps often start leaking and make it difficult to keep the enamel clean. A slow leak will also waste a surprising amount of water in 24 hours.

A few minutes' work will be sufficient to repair any tap Taps, or bibbs, as they are often called, are divided into two classes—compression taps and fuller taps. The compression tap is a good deal like the common globe valve used on pipe lines. The water flows up through an opening called the valve seat. When the tap is "shut off" it is because a flat, hard rubber or composition washer (shown by the heavy black line in the illustration) has been screwed down against the valve seat.

This washer is fastened to the bottom of the valve stem by means of a small screw. At the top of the valve stem is a handle which is turned to lift the black washer from the valve seat. If this type of tap leaks it is because the washer no longer fits smoothly down against the seat. Sometimes a bit of scale or sand lodges between the washer and valve seat and nicks the surface of the washer, causing a slow leak. The first time this occurs simply take off the washer and reverse it. The next time a new washer should be put in the tap. To make this repair, unscrew the upper part of the tap at "C," having first turned off the water in the basement or at the valve under the sink or bowl, if one is there.



The compression tap.



The Fuller tap.

The compression tap shown is an "automatic closing tap" and operates as follows: When the handle is turned to lift the washer from the valve seat three small balls (one shown at B) roll up little inclines and lift the value stem and washer. When one releases the handle the heavy spring below "C" twists the valve stem back, the balls rolling down their respective inclines and closing the tap. Automatic closing taps save thousands of gallons of water annually.

The Fuller tap operates upon an entirely different principle. The valve stem is really a small eccentric. To the lower end is attached a horizontal rod which has a fuller ball, "F," at the right end. This round fuller ball presses against the valve seat, "S," thus shutting off the water. To replace or tighten up the fuller ball unscrew the tap at "C," applying the wrench on the six-sided portion of the valve at "D."

Either tap is easy to repair. Every householder should have a few proper sized washers and fuller balls on hand for this purpose.

GENERAL ADVERTISING. GENERAL ADVERTISING.

Farmers Should "Stop, Look and Listen"

Many Farmers in western states are suffering because the prices of their products are lower in proportion than the prices of things they buy. As a remedy they are being urged to support a radical and revolutionary policy of regulation of railroads.

The conditions from which farmers are now suffering are **temporary.** Prices of farm products were low after the panic of 1893, and western farmers suffered severely. The bad conditions of that time passed away, the development of the railways made possible later a vast increase in production and wealth in western territory, and its farmers enjoyed a long period of great prosperity.

Thirty Years' Increase in Farm Wealth

In 1890 there were 1,809,471 farms in Illinois, Wisconsin and the states west of the Mississippi river. Their value was only $7,900,000,000, or $4,366 per farm.

In 1900, the 2,421,987 farms in these states had a value of $11,800,000,000, or about $4,900 per farm.

In 1910, their 2,734,924 farms had a total value of $27,000,000,000, or about $9,900 per farm.

In 1920, their 2,862,325 farms had a total value of almost $54,000,000,000, or about $18,800 per farm.

In the thirty years from 1890 to 1920 the increase in the value of all farm property in the western states was 575 per cent; the increase in the average value of each farm, 330 per cent.

Great Increase in Railroad Service

This great increase in the wealth of western farmers would have been impossible but for the great increase in railway trackage, locomotives, cars and other facilities.

Between 1890 and 1920 the miles of railways in western states increased from 86,000 to 146,000. Railroad freight business handled in 1890 was equivalent to carrying 26 billion tons of freight one mile. In 1920 it was equivalent to carrying 145 billion tons of freight one mile, an increase of 457 per cent. The vast increases in the facilities of the railways and in the business handled by them for the people of the western states was made possible solely by the investment of billions of dollars of new capital in the railroads.

Western Railways Not Prospering

Advances in wages, in the prices of fuel, materials and supplies and in taxes—most of which occurred under government operation during the war—made it necessary to advance railway rates in 1920. The freight rates of the western railways have been reduced an average of 16 per cent since then, the largest reductions having been made in freight rates on farm products. **The reductions of rates on the western railways alone since 1921 are costing them and saving the public $320,000,000 a year.**

Freight rates are still higher than before the war. But operating expenses and taxes still remain so much higher very few western railways are earning anywhere near a "fair return." The average earned by the western railways upon the valuation by the Interstate Commerce Commission, was, in 1921, only 3.59 per cent; in 1922, only 4.03 per cent, and in the first five months of 1923, only 4.20 per cent.

If their rates had been 12 per cent lower, they would not, as a whole, have earned a dollar in the first five months of 1923 with which to pay interest on their bonds, much less dividends on their stock.

These facts show that a large majority of the western railways are suffering with the western farmers from adverse conditions.

A Permanent Destructive Policy to Remedy Temporary Condition

As a remedy for the **temporary** conditions from which the farmers are suffering they are being urged to favor a policy of regulation which would **permanently** reduce and restrict the net return of the railways to less than it ever has been, even in years of panic and profound business depression. This would be the effect of the arbitrary reduction of more than one-third in the valuation placed upon the railways by the Interstate Commerce Commission which is advocated by certain public men.

If such a radical and confiscatory policy of regulation had been adopted a quarter of a century ago it would have stopped the development of the railways. Stopping the development of railroads would have made impossible the great prosperity and increase in wealth the farmers enjoyed in the twenty years between 1900 and 1920.

If this policy should be adopted now it would frighten all investors away from railway securities. It would immediately stop all railroad development. And, it would prevent railroads from increasing their capacity to haul your freight.

Then, when the **temporary** conditions from which the western farmers are now suffering had passed, they would find there had been adopted as a **permanent** policy a scheme of regulation, which, by preventing an increase in the railroad service that could be rendered, would make it impossible for the farmers or any other class of people to prosper and increase their wealth as they did for a quarter of a century prior to 1921.

"Stop, Look and Listen!"

It is high time the farmers of western territory should "Stop, Look and Listen!"

They will need increased transportation in future as much as in the past. The radical, confiscatory and destructive policy of regulation of railways now being advocated is a deadly menace to the future prosperity of every farmer in the western states.

WESTERN RAILWAYS' COMMITTEE ON PUBLIC RELATIONS

E. M. FELTON, President, Chicago Great Western Railway,
J. E. GORMAN, President, Chicago, Rock Island & Pacific Railway,
H. E. BYRAM, President, Chicago, Milwaukee & St. Paul Ry.,
W. H. FINLEY, President, Chicago & Northwestern Railway,
HALE HOLDEN, President, Chicago, Burlington & Quincy Railroad,
C. H. MARKHAM, President, Illinois Central Railroad,
C. E. SCHAFF, President, Missouri-Kansas-Texas Lines,
RALPH BUDD, President, Great Northern Railway.

650 Transportation Building, Chicago, Illinois

The department editors of this paper are anxious to be of service to you Do not fail to write to us if they can be of help to you.

How to Borrow From Agricultural Credit Banks

Northwest Manager Gives Instructions for Those Who Want to Take Loans

The manager of the Federal Intermediate Credit bank, operating in the four states of Washington, Oregon, Idaho and Montana, W. M. Buckles, gives The Washington Farmer assurance that this new rural credit system is now in operation with headquarters in connection with the Federal Land bank in Spokane, Wash., and that the Intermediate Credit bank is ready to give any information desired regarding the method of obtaining credit

The agricultural credits act of 1923 permits the Federal Intermediate Credit bank—

To accept loans from banks (state or national), live stock loan companies and agricultural credit corporations, with their indorsement.

To make direct loans to cooperative associations, secured by STAPLE agricultural products or live stock.

The operations of banks and live stock loan companies are generally understood.

The organization and operation of cooperative associations present many complex and technical questions, and it is the advice of the Federal Intermediate Credit bank of Spokane that those desiring to engage in such enterprises should obtain the services of a competent attorney, and, if possible, one who has had special training along these lines.

Agricultural credit corporations are little understood, but comparatively simple in their organization and operation.

Suggested forms of articles of incorporation, by-laws and stock certificates, which are drawn to meet the requirements of the general laws of Washington and which, if followed, will aid in perfecting the organization of such corporations in a manner that will make them easily operated may be obtained by addressing the Federal Intermediate Credit bank, Spokane, Wash.

The following suggestions are made as to organization of an agricultural credit corporation:

When it is desired to form an agricultural credit corporation, the incorporators should meet and formally execute articles of incorporation.

It should be borne in mind that the investment of these incorporators should not be less than $10,000, since under the regulations of the federal farm loan board, which board has general supervisory powers over federal intermediate credit banks, such banks may not accept rediscounts until it has a paid-up capital of at least $10,000.

The state of Washington has a so-called "blue sky law" and should the company after incorporation desire to sell additional stock, it will be obliged to secure permission from the secretary of state Therefore, if you place your stock on the market, it will be necessary for you to communicate with the secretary of state, and secure the necessary permission to do so.

The procedure necessary to execute the articles and adopt the by-laws is as follows:

The articles should be executed in triplicate by the incorporators, and duly acknowledged. (Remington's Compiled Statutes of Washington, 1922, Section 3803). One original of the articles should be filed in the office of the secretary of state, and the necessary filing fee paid ($25 for filing fee; $15 annual license fee for corporations organized with a capital of $50,000 or less). Another original should be filed in the office of the county auditor in which the principal place of business of the corporation is located. The third copy of the articles should be retained in the possession of the corporation.

As soon as the secretary of state has notified the incorporators of the filing of the articles, then the first meeting of the stockholders should be held. Notice of this meeting should be given in case consent to the holding of the meeting can not be secured by all the stockholders of this corporation.

The better practice, however, is for all the stockholders to sign a waiver of the notice of this meeting.

At this meeting the general plan of business should be determined upon and by-laws adopted.

Immediately following this meeting the board of trustees should meet. Notice of the meeting should be signed by one or more of the persons named as the trustees, setting forth the time and the place of the meeting, which notice shall be delivered personally to each trustee, or published at least 20 days in some newspaper in the county in which the principal place of business of the corporation is located; or if no newspaper is published in the county, then in some newsaper nearest thereto in the state. (We furnish herewith a waiver of this notice, which should not be used unless signed by all the trustees.)

Officers should be elected at this meeting by the trustees, as provided by the by-laws.

A corporation minute book should be secured, and all the papers, together with the minutes of all meetings of the stockholders and trustees, should be securely fastened in same.

It would be well when mailing the original articles of incorporation to the secretary of state to send an additional copy to be certified to by the secretary of state and returned to the company, so as to avoid delay when application is made to this bank for rediscount privileges.

The following points should be remembered in incorporating:

1. That two or more persons may incorporate.
2. That all the stock must be subscribed before transacting business.
3. That one of the trustees at least must be a resident of the state of Washington, and that the trustees must take and subscribe an oath of office.
4. The law requires two or more trustees. We recommend five as being a workable number for the average corporation of this character.

Growers Continue Demand for Wheat Price Stabilization

In the better slogan contest carried on by THE FARMER recently, the prize was awarded to "Balanced Farming," in place of the commonly used, "Diversified Farming." This idea was thrust upon one as he listened to Senator Frank R. Gooding's talk to the wheat growers at Moscow last Saturday. He was referring to the unbalanced condition of affairs throughout the world today, the unbalanced condition in America, and especially the unbalanced condition of those engaged in the farming industry.

The greatest need in the world today is more balance in its affairs, more balanced thought in industry, more balance in the world politics, more balance in the world's every day talk.

Must Organize.

The senator also contended that the farmers must meet organization with organization, that the industries organize, labor has its great organization and these must be balanced by equally effective organization by the producers. Only by organization can the scale be lightened which holds down prices paid the farmer, or the scale be weighted to bring down the prices paid for things which the farmer buys. It does not matter much how you restore the balance provided the balance is restored.

The gist of the Moscow, Idaho, meeting was the same as that of the wheat growers' meeting at Spokane the previous Monday—stressing the need of emergency legislation by a special session of congress providing a fixed price of $1.75 for this year's crop of wheat according to the provisions of the Gooding bill.

Emergency Measure.

Senator William E. Borah emphasized the emergency nature of the remedy necessary to send other poisons into the system to get it. The senator insisted, however, that this emergency legislation should be hooked up with measures to prevent a return of the calamitous conditions now present in the wheat marketing situation.

Permanent Remedies.

One remedy of a permanent nature suggested by Senator Borah was to take away from the federal reserve board the power of increasing or decreasing the currency of the country, that this is a sovereign power which should be zealously and exclusively exercized by the government itself.

Both Senator Gooding and Senator Borah reviewed the secret meeting of the federal reserve board May 18, 1920, at which it was decided to call in farm loans with a consequent deflation of farm prices to pre-war levels and in some cases even lower. Senator Borah declared in this connection that the stenographic notes of the secret meeting of the federal reserve board in 1920 has been published. There can therefore be no doubt of the nature of the action taken at that meeting.

Effective Water Competition.

Another remedy of a permanent nature mentioned by Senator Borah was more effective water competition by the Panama canal. He declared it to be an astounding masterpiece of diplomacy by the British government to obtain passage for its vessels through the canal with the same tolls charged American coastwise shipping from coast to coast. After paying $400,000,000 in the building of the Panama canal, $25,000,000, to the Colombia government and other payments bringing the total up to $500,000,000, citizens of the United States are certainly entitled to the use of this property on terms more favorable than other countries who paid nothing in its construction and have no share in its ownership.

As to Over Production.

Still another remedy of a permanent nature mentioned by Senator Borah was in accordance with his well known views regarding the opening up of world markets. He said he could not subscribe to the doctrine of overproduction of wheat, dairy and meat products when millions of people were having meat only once a month, seldom wheat flour and when children were becoming subjected to tuberculosis because of undernourishment.

As to the emergency legislation desired by out and out wheat growers, both of the Idaho senators declared that precedents abounded. The price of silver was stabilized for five years under the Pittman act. On the same principle the returns to the railroads were stabilized to a large degree, and it was added that the advocacy of ship bounty was based on the same doctrine.

The Moscow meeting was strikingly similar to the one held in Spokane in the fact that most of the audience was composed of men directly from the harvest fields, the number estimated as between 700 and 800.

Dean E. J. Iddings of the university, presided and Dr. A. H. Upham, president of the university, delivered a brief address of welcome.

Much applause greeted Herbert Egbert of The Dalles, Oregon, president of the Farmers' Union of Oregon and Southern Idaho, when he insisted that the Gooding bill should be named in the resolution as the gist of what the farmers wanted, because that bill is knowa to the country, having deceived favorable action in the senate in the last congress.

Ralph D. Nichols, special representative of the Port of Seattle, made a stirring speech and the farmers greeted his utterances with much applause when he declared that it was up to the farmers to organize and help themselves and see that they obtain what they want.

Ward M. Buckles, manager of the federal intermediate credit bank of the northwestern district was present and explained the new method of affording credit to the farmers, answering several questions asked by Senator Borah and others in the audience.

The Resolution.

"We, 1000 representative farmers and business men of the states of Oregon, Washington, Montana and Idaho, assembled for special consideration of wheat price stabilization, call your attention to the fact that the present price offered for wheat is far below the cost of production; that wheat, the most generally grown farm product in America, has been marketed below cost of production for five years in succession; that this continued loss and drain on the farmers' resources has brought a crisis that means disaster to both farmers and business men of these states unless immediate and drastic measures may be adopted for relief. We call attention to the fact that 2,000,000 people left the American farm last year and it is estimated 3,000,000 will leave next year. This presents a national problem in which all, regardless of avocation or profession, must be deeply concerned. This demands federal intervention in this emergency to save the wheat growing and related industries:

"Since immediate action is necessary we request with all the power at our command that you immediately call the congress of the United States into special session to take action to meet this great emergency. While federal intervention is necessary as the only method to meet this emergency for immediate relief, we recommend as a permanent solution that all farmers, business and professional men organize a national body for the purpose of stabilizing the agricultural industry; that we may avoid for all future times a recurrence of the present critical situation; and that this organization should be for the purpose of constructive action and not for the purpose of opposing any other legitimate industry.

"We recommend that congress shall enact legislation establishing a federal corporation with $500,000,000 capital stock, $50,000,000 paid in and the balance subject to call; that it shall have the power and authority to purchase and sell wheat in any quantity at any time or place at a basic price of $1.75 per bushel at primary points, along the lines of the Gooding bill. The fixed price shall be available as of a certain date and sufficient variation may be announced from time to time to provide for carrying charges and to control distribution. The fixed price shall be on the basis of clean wheat tested 58 pounds per bushel, and the corporation shall establish a schedule of discounts and premiums in accordance with the milling value of wheat of various subclasses, test weights, mixtures, percentage of moisture and foreign content, as embodied in the Gooding bill.

"In order to take care of any loss that might accrue in selling the export surplus, the corporation may retain from the original sale price not to exceed 10 cents per bushel in addition to the amount estimated to be necessary to pay operating costs and interest at a rate of 4 1-2 per cent per annum on capital stock actually used. Wheat may be purchased or resold only by the corporation or by concerns licensed by the corporation and operating under rules, regulations and restrictions imposed by the corporation. Every licensed concern shall make reports of its purchases, and resales in such forms and at such time as the corporation may direct.

"We further request that all wheat growers cooperate throughout the United States in furthering this united effort by selling no wheat nor offering none for future delivery until this or some other definite action is taken for the handling of this crop at a cost plus a reasonable percentage above expenses and also ask the bankers and merchants and the public in general to give us their sympathy and support for a square deal that the wheat growers may not be driven to serfdom or leave the farm for other occupations, thereby crowding the laborer from his job.

"We deplore the attitude of many of our great papers who have built up to their present power and standing by the support of the farmers in general and now at this time when every assistance possible is needed that we might again return to a normal condition we find these papers using every argument at their command to defeat the lines of legislation which the farmers themselves desire and have every reason to believe would restore their industry and help them solve their problems."

The resolutions were signed by G. P. Mix, Moscow; P. C. Jensen, Lewiston J. M. Reed, Pullman; George Sievers Moscow; Jack Collins, Palouse; Mark Greene, Orofino; G. W. Jewett, Pomeroy

Tells How New Wheat Is Produced

There is nothing difficult or mysterious about the production of a new variety or wheat hybrid. A few simple instruments and a little patience are all that is necessary. A small pair of forceps, some porous tissue paper and a box to sit on will do. Two or three days after the wheat begins to head out it is easy to find the flower parts in the right condition. By prying apart the chaff with the forceps the three anthers or the male elements of the flower are seen just beginning to turn yellow. All flowers not in this condition should be broken off, and the three anthers in each of the remaining ones removed. From 4 to 20 of the flowers on a wheat head are in this condition at one time. The entire head should then be wrapped in tissue paper and left for a day or two, until the stigmas, or female elements, develop and are ready to be fertilized. Then a head of the variety of wheat to be used as the male parent in the same stage of development should be brought and the anthers taken out and put into the treated flowers in the place of the ones that had been taken out the day before.

The treated head may then be wrapped up again and left for a month or until the straw turns yellow. When it is collected any seeds that have grown inside the wrapper should be hybrid seeds. They may be shriveled or shrunken, but probably will show some characteristics of both parents. The plants arising from such seeds will also show the dominant characteristics of each parent. If these plants are allowed to produce seed by self-fertilization in the natural way all the possible variations in seed between the two parents will appear.

The second generation plants arising from them will also show all possible recombinations of the parent characteristics. This is known as the "wild generation" because of the great variability found. Some of these types will breed true in subsequent generations, and it is from the best of these that a new variety may evolve having the desirable characteristics of both parents.

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More Winter Wheat Next Year

It takes courage to keep on producing when little or no profit results from one's efforts. It takes exceptional courage to increase production under such circumstances. Yet the United States department of agriculture makes an informal forecast that the wheat growers of Washington will increase their winter wheat acreage this fall five per cent over last fall's seeding. It is especially noteworthy that this is true when other states are expected to reduce their acreage an average of over 15 per cent, and no other state is expected to seed as large an acreage as a year ago.

New Fair Grounds for Kittitas

Downright self-help does much for the people themselves as well as for the community. Kittitas county folks wanted a fair this fall. Naturally, Ellensburg and the surrounding community were immediately interested in its success and they gave practical evidence of their interest. A field day was held on June 14 and also on June 15. "The entire town closed its doors and every one turned out and reported in organized gangs and willingly did any work that was assigned to them."

In the two days the 500 men with 220 teams cleared and leveled off an area large enough for the one-half mile race track and two football gridirons in the center. This will be used for the racing program, while two large exhibit buildings and some cattle sheds are being erected for the main exhibits of the fair.

It is needless to say that the Kittitas county people will be proud of their first fair to be held on their own grounds which was prepared with their own hands.

Help Yourself, Mr. Beetle

There are just lots of bugs and things in our orchards and on our farms that deserve to be slain by any method that our experts can devise. Not so every bug, however. The gay little ladybug has long been recognized as a valuable aid to the farmer because of its warfare against such pests as aphis. A fly of a certain family has been imported from foreign lands in the hope that it will combat for the alfalfa growers the weevil that menaces the production of this important crop. Comes now M. A. Yothers of the United States department of agriculture, who has been working in the Yakima valley, with the report that a small beetle has been discovered feeding upon the larvae and the adult of the red spider, one of the orchardist's troublesome pests. No doubt many a farmer has heartlessly swatted or put his foot upon members of this beetle's family, fully convinced that here was just another bug that ought to be killed.

Irrigation Settler Must Be Enabled to Succeed

It was significant action that Secretary Hubert Work of the department of the interior took recently in reorganizing the United States reclamation service when he accepted the cabinet position through appointment by the late President Harding. It is too early to say how the service will succeed under the new plan, but certain fundamentals set forth by the secretary of the interior as his reasons for the reorganization are worthy of thought.

It will be remembered that Mr. Work accepted the resignation of Director A. P. Davis and created a new office, to which he appointed D. W. Davis, former governor of Idaho, under the title of commissioner of reclamation. He explained this action about as follows:

That when reclamation first began in this country it was largely an engineering problem—the surveying of land and the construction of dams, canals, laterals and so forth; that, as soon as this engineering work had progressed to a certain point, the problems became one not only of engineering, but of business administration designed to insure to the thrifty settler success on his irrigated farm; that the government must be reimbursed for the money which it has spent for reclamation development, and that settlers can not so reimburse it unless they are truly successful in their farming operations.

The Washington Farmer can wholeheartedly indorse the secretary's basic principle that the settler must be enabled to succeed if reclamation as a whole is to succeed. Any system of land development that does not contain within itself the elements that reasonably insure the thrifty farm family a reasonable degree of prosperity is inevitably doomed to fail.

As Secretary Work says, not all the farmers on irrigation projects in the United States are prosperous. In fact, on some projects prosperity is all but a stranger. Unquestionably the secretary is justified in exercising his best judgment and devoting his best energy to the operation of the reclamation service with a view to increasing the prosperity of the deserving settler on reclaimed land, even though a sweeping reorganization be necessary to the undertaking.

Fifteen Months of Work

The farmers of Washington, especially the dairy farmers, have 15 months of hard work ahead of them educating their brothers and sisters in the towns and cities. On the first Tuesday after the first Monday in November, 1924, the voters of the state are going to say whether or not real honest-to-goodness cow butter or a make-believe product shall dominate the markets of the state, and what the city folks learn between now and then will decide the issue.

The measure that is to be voted on then was adopted by the last legislature and referred to the people through a petition fostered largely by dealers and others interested in the sale of the various forms of vegetable oil margarines.

There is a misunderstanding of this bill in the minds of many. They think it prohibits the manufacture and sale of butter substitutes, but this is not necessarily true. What it does do is prohibit the adulteration of butterfat or milk by mixing cocoanut oil or some other vegetable fat into it. Any manufacturer who can invent something that people will be willing to spread upon their bread in place of good, clean, wholesome dairy butter is entitled to do so under the bill if he does not use milk or a milk product in the making of it.

Isn't that fair? Hasn't the dairyman a right to protect his product and its well-deserved reputation? And have not the people at large a right to be protected against a product that is made to look and taste like butter, but which is very different from the genuine article?

As we said at the outset, the dairymen and their friends have 15 months in which to lay the truth of this butter substitute matter before the people in the towns and cities where the voting strength of the dealers in the imitation product lies. Not an opportunity should be lost to make some voter see the light.

Washington State Gleanings

Among the big ranch deals reported this month is the sale of 20 acres of full bearing apple orchard by Dr. H. J. Whitney to Mrs. J. L. Parsons for $40,000. The place is one and a half miles west of Cashmere. The varieties are Jonathans, Winesaps and Rome Beauties.

UNIQUE FAIR FEATURES.

Some rather unique features will be carried out at the Burley Valley Fair, at Burley, Kitsap county, Washington. Each day all persons over 65, as well as ministers of the gospel will be admitted free. A special tax of twenty-five cents will be charged for bachelors. A special ribbon will be awarded every day to the oldest person on the grounds, the couple that has been married longest, the smallest baby, the largest baby, the tallest person, the heaviest person, and to the young lady who can pump up a tire in the shortest time.

SPECIALISTS VISIT FARMS.

Two important meetings were held near Chehalis recently by state college specialists. At the J. O. Wallace apiary 19 bee men attended demonstration by B. A. Slocum. Near Napavine W. D. Buchanan gave a chicken culling demonstration to upwards of 50 practical poultrymen.

The week-end district horticultural inspector, Theodore Albert, and County Agent R. G. Fowler, with State Seed Inspector J. E. Curry and Dr. Link of the federal government, inspected potato and berry fields in the Chehalis section. Dr. Link's special search is to locate mosaic diseased plants.

TO STUDY DUCK HABITS.

The migratory habits of wild ducks in the northwest are not understood as thoroughly as it is desired and in order to check up on the extent of their wanderings and choice of habitat the game farms of Washington have raised 100 mallard ducks and will release them soon. The Portland office of the biological survey will supply leg bands on which are printed numbers and "Notify biological survey." These bands will be placed on these birds. Ray C. Steele, in charge of bird control of the biological survey, is very anxious that sportsmen who kill ducks bearing such bands should comply with the request printed thereon.

GROWERS SELL LOGANBERRIES.

According to Charles J. Young, president of the Stanwood local North Pacific Cooperative Berry Growers, the National Packing company has contracted 800,000 pounds of raspberries and all loganberries from the Stanwood district as far north as the British Columbia line. The packing company is using the Burlington plant of the association to can and barrel the fruit.

This purchase comes at a time when the marketing of the loganberry was questionable. The packing company will pay growers an advance of 2 cents a pound and the balance in 90 days.

The North Pacific association is to build a cooling plant in Burlington next year to take care of the fruit for shipping.

PRIZES FOR PIG BREEDERS.

Prizes of $75 will be offered to boys' and girls' pig clubs at the La La Palouser, September 6, 7 and 8, says a Colfax report. Besides the general prize of $5 offered by the Whitman county commissioners to every boy and girl showing a litter of not less than three pigs, there will be individual prizes offered by interested men.

Ben Kammerzel, breeder of purebred Poland China hogs, will give a purebred Poland China boar pig to the boy member of a pig club displaying the best litter of pigs of that breed. Colonel L. Strobel, auctioneer, of Colfax, is offering a cash prize of $25 to be distributed in smaller amounts for the best individual pigs shown. The La La Palouser management offers merchandise prizes to any boy or girl in the county who does the best work in the swine judging contest.

ORGANIZATION GETS RESULTS.

During the last two years the price of butterfat in the Seattle market has averaged 2.3 cents higher per pound than in Portland, according to J. A. Scollard, president of the Lewis-Pacific Dairymen's association, in an address delivered at the annual picnic of that organization Sunday, August 5, at Claquato, three miles west of Chehalis. This higher price, Mr. Scollard averred, was due largely to the fact that Washington dairymen have an effective organization, whereas Oregon dairymen are not thus organized. In a year this difference means $836,000 to Washington dairymen, sufficient in a two-year period to build all their utility plants.

J. M. Humphrey, manager of the Skagit county association; W. G. Grim, president and manager of the Snohomish county association, and E. M. Sorensen of Chehalis, manager of the Lewis-Pacific association, were also on the speaking program.

Music for the occasion was furnished by the state training school band.

POULTRY BREEDERS MEET.

More than 2000 poultrymen or members of their families gathered in Cornwall park in Bellingham August 4 to enjoy the annual picnic of the Whatcom county branch of the Washington Cooperative Egg and Poultry association.

At 10 o'clock the poultrymen began to gather from all parts of the county. A program of varied sports was indulged in before noon, which most every one took part in and enjoyed the fun. The folks then had a basket luncheon.

After dinner Mayor E. T. Mathes welcomed the poultrymen and told how glad the city was to offer them the playground for the day's outing. S. D. Sanders, state president, told how vital it was for the egg and poultry producer to take a serious interest in the marketing of his product.

R. T. Hawley, manager of the poultry feed association, described how the industry had grown in the country from the small flock in the farmyard, from which the farmer occasionally sold a few dozen eggs to his neighborhood store, to the present big poultry farms with their thousands of layers and the big correlated plants at Lynden and Bellingham, that prepare the product for the market.

How to grade poultry products was explained by H. E. Wills, state sales manager. R. P. Loomis of Bellingham told of how to handle the finances of a business such as poultry raising has become in the county. D. S. McDole, state secretary, told how necessary cooperation was.

Farming State of Mind

Found Practically the Same From New York State West

Crop prospects from Montana to New York are just as bright as in the Pacific northwest, but conditions surrounding farming, and the farming state of mine, unfortunately are the same also, was the observation of George N. Angell, staff representative of THE FARMER, who recently returned from a visit to his old home in the Empire state. "There is prospect everywhere of good crops this season," he said, "but there is also shortage of labor to harvest them, prospect of low prices, and much discussion of the advisability of curtailing production by the comparatively painless method of laying off all help and doing only such farm work as can be handled by the farmer and his immediate family. The latter is a course to which many an eastern and middle western farmer will be forced to resort."

In the section of New York state where he visited, the production of market milk for the metropolis, 200 miles away, is the principal industry and the one around which all other farm operations are arranged. It might be expected, he said, that farmers so close to this greatest of markets could hardly fail to prosper, but a long-drawn-out fight between the dairymen's league and the big private corporations, together with other conditions prevalent everywhere since the war, has left room for little profit on raw milk production. The league now appears to be solidly established, however. It does an enormous business in handling fresh milk in New York, and recently has undertaken a very attractive advertising campaign covering its manufactured products. Milk prices are higher than a year ago, and altogether the outlook is more encouraging.

"My own father and brother, however, are seriously considering selling the milking members of their purebred Holstein herd, giving stricter attention to the poultry flock, which has furnished the only real farm profit for three or four years back, dismissing all help, and themselves getting out railroad ties from the wood lot or cleaning up pastures during odd moments next winter. This because they are never more than one or two jumps ahead of the feed bill, and because they begin to feel underpaid for such acrobatics. If they carry out this program, some one else will have to increase their output or Gotham will be short about a ton of milk daily, and decreasing rather than increasing is 'the vogue' upstate right now.

"Rich harvests of grain were being garnered as I drove through western New York, but I talked with a miller from near Rochester who said that, because of the low price of wheat, at least half of the farmers with whom he did business would not produce a kernel more than they need for their own use, in 1924, and he was wondering just where he would 'get off.' That is one very prevalent topic of conversation in the east this summer—the plight of the farmer and how it will affect the city or small-town business man. Even doctors, engineers, professional men, are interested, and many theories are advanced as to what can be done about it.

"Crossing Michigan I was impressed by the apparent vastness of the grape-growing industry, and it struck me that, as with our northwestern apple growers, it will be extremely difficult for our northwestern grape growers to overcome the handicaps of distance from big markets and high freight rates under which they now labor, sufficiently to meet the competition of a product grown almost in the consumer's back yard, unless quality and efficient marketing methods are kept to the front.

"A blistering hot day in Chicago, succeeded by one almost chilly, in St. Paul, and by reports of a near-frost and summer snowstorms in near-by states, reminded me of the story of the Dakota farmer whose hired man suffered from sunstroke in the midst of August harvest operations. 'We rushed him to the hospital in an automobile,' said the Dakotan, 'but the son-of-a-gun wasn't used to the climate and froze both of his hands on the way.'

"Wisconsin, Minnesota and North Dakota could scarcely have looked better, but here too the low price of wheat was a source of discouragement and there was much apprehension over the threatened harvest strike. Every freight train carried its quota of transients, apparently traveling in too great numbers to be interfered with by trainmen. One train in the Dakotas must have carried 30 'vags,' most of them riding

(Continued on page sixteen.)

Be Fully Persuaded

Allow Your Neighbor Same Privilege You Claim for Yourself

Let every man be fully persuaded in his own mind. Romans 14:5.

Persuasion gives life to decision. Without persuasion decision is only a matter of knowledge. You may decide that it is right for you to do a certain thing, take a certain position, help a certain laudable undertaking, and not be persuaded to action. But if you are fully persuaded, then that not only ends all doubt and hesitation, but your heart has been enlisted and nothing can keep you off the job.

St. Paul was making a plea for individual freedom of thought. "One man esteemeth one day above another; another esteemeth every day alike. Let every man be fully persuaded in his own mind."

Do not dictate to another what he shall do in the matter of observances. It is up to you to be persuaded, to be fully persuaded in your own mind what you should do, and then you will do it. Let your neighbor be fully persuaded in his own mind as to his observances, even if they do not coincide with your own observances.

Then there is the question of eating and fasting as a religious rite. Shall you fast as often or as long as your neighbor fasts? That, again, is for each one of you to be persuaded in your own mind, and follow your own conviction.

There is, however, one condition for both to submit to, one limitation of your freedom, that is whatever course you take you do it "unto the Lord."

"He that regardeth the day, regardeth it unto the Lord; and he that regardeth not the day, to the Lord he doth not regard it. He that eateth, eateth to the Lord; and he that eateth not, to the Lord he eateth not, and giveth God thanks."

There you have the whole philosophy of united purpose and individual action; there you have the whole philosophy of essentials and non-essentials, of cooperation, without coalescence.

The big trouble in the world has been in telling the other fellow what he should do in the matter of all these observances and trying to make him do it.

FARM BUSINESS AND MARKETS OUTLOOK

CATTLE MARKET ADVANCES.

Cattle prices at the main points of the market compass were marked upward in the last ten days. Better grades of all sexes and ages advanced 25 to 50 cents at Chicago with prime mature steers at $12.60 and yearling at $12.50, while intermediate grades of steers shared in the rise to an unexpected degree. Low grades have held practically unchanged but with the tendency downward.

Broader feeder trade played a large part in the upturn as total receipts were relatively heavy compared with the recent past or with the corresponding period in preceding years.

Recent rains which have given assurance of a good corn crop and excellent fall pastures, as well as the passing of the harvest season and the advance in the fat cattle market have roused interest in feeder cattle. Well fattened grass steers are being bought at Missouri River markets at prices as high as 10 cents to be short-fed with new corn in an effort to take advantage of the present premiums for choice and prime cattle.

HOG RECEIPTS DECLINE.

Receipts of hogs at the eleven leading markets in the last two days were the smallest for any like period since early November and prices have advanced to a top of $8.70 at Chicago, the highest since last April. The top for the year was $9 paid last January. The run has not expanded on this upturn as it has done heretofore, suggesting that the pressure may be lifted for the next few weeks. After that interval the spring pig crop will be due to start marketward.

The precentage of good hogs is dwindling and the spread between prices of butcher and packing grades is widening. Domestic consumption of hog products remains enormous and exports have picked up slightly, confirming to some extent reports of larger sales.

Lamb Supply Below Normal.

Receipts of lambs are not expanding in seasonal fashion as the total at seven markets last week was the smallest for the corresponding period with one exception in a dozen years. Taken in connection with the light movement for the preceding few weeks, it seems to herald a relatively small run during the fall. Range lambs are not moving freely as yet and the supply of native has diminished. Dressed lamb markets have recovered from their recent indigestion and prices on the hoof advanced last week. Feeder lamb values moved with the fat lamb market and breeding ewes rose about $1, yearling ewes now being quoted up to $11 at Chicago. The number of both feeder lambs and breeding ewes going to the country is small because of inability to fill orders.

Wool Market Still Sluggish.

The wool market is still rather sluggish as the response to buyers to opening prices on spring goods by mills has not been such as to stimulate large purchases of raw material by the latter. Buying in both the range and bright wool sections is still slack. Foreign markets also are inactive, but prices are steady. Raw wool is low-priced compared with goods prices, mills are still consuming at a relatively high rate and there are no heavy supplies of wool to make trouble. The shortage of fine wools, especially from Australia, has stimulated more buying of that grade than of other kinds. The program for selling the new Australian clip estimated at 1,610,000 bales provides for beginning the season on September 17 and distributing sales over the following eight months.

Will Sow Less Winter Wheat.

A survey by the department of agriculture of intended plantings of winter wheat indicates a total of 39,200,000 acres compared with 46,379,000 acres reported last December, a reduction of 15.5 per cent. Assuming average yields per acre, the decrease would be about 100,000,000 bushels or over half of our apparent exportable surplus for the present crop year and would leave a surplus next year smaller than the pre-war average.

Conditions in the next two months will have something to do with the way these intentions will be executed. Rains in the middlewest and southwest have done a great deal of damage to wheat in the shock, increasing the percentage of low grades which are likely to be fed in large amounts.

The Cannadian crop was officially estimated as of July 31 at 382,514,000 bushels compared with 399,782,000 bushels from last year's record yield.

Mills are doing a fairly thriving flour business and are competing for the good wheat as it comes into sight. Prices advanced slightly last week to the highest point in over a month. Clearances from North America are averaging about 1,000,000 bushels for each week day in spite of the fact that foreigners have been cancelling moderate quantities during the last few weeks.

Cash Corn Continues Scarce.

The demand for corn keeps the supply entering commercial channels closely swept up and prices are still near the season's high point but they have not been able to break into new high ground during the last three weeks. Receipts are above normal for this time of year but the visible supply was down to such a small figure that the slight additions made recently have not removed the tension.

Oats prices have become adjusted to the new crop movement which thus far is not up to normal for this time of year. Demand has increased to some extent at the lower prices prevailing.

The range of cash grain prices for the week ending August 15 was as follows: Chicago—Wheat: No. 2 red, $1.00@1.02½; No. 3, $1.00@1.02½; No. 2 hard, $1.00¼@1.04½; No. 3, $0.99@1.02. Corn—No. 2 mixed, 87@88c; No. 2 yellow, 88@98c; No. 2 white, 87½@88 1-4c. Oats—No. 2 white, 36½@39c; No. 3, 36 1-4@38 1-3c. Rye—64½@67c. Barley—54@63c.

Clover Seed Market Higher.

Timothy seed prices have been practically steady during the past week but red clover seed has advanced again. Reports of yields in various sections are still mixed but on the whole indicate a smaller outturn of clover seed than last year. New timothy seed will begin to come on the market in volume before long. Chicago, per 100 pounds—Clover, $15@17; timothy, $5.85@6.05; Toledo, per bushel—Prime red clover, $11.60; prime alsike, $10.30; prime timothy, $3.15.

Advance in Wheat Feed.

Wheat feed prices advanced sharply last week, especially for bran. Mills have contracted with jobbers for their output and the latter have advanced quotations. Interior demand is only fair and flour mills are gradually expanding operations. Strength in the corn market is sustaining prices on gluten and hominy feeds. But little old cottonseed meal is available and prices maintain a large premium over new crop offerings.

Prices per ton (100 pound bags) in carlots: Chicago—Bran, $24.25; standard middlings, $27.75; flour middlings, $31.25; cottonseed meal, 36 per cent, $40.50; 43 per cent, $46.50; hominy feed, $32.50; gluten feed, $40.75; old process oil meal, $47.00; tankage, $55.00.

Timothy hay prices advanced 50 cents to $1 on the principal markets because of the light movement. Demand has not broadened a great deal. Alfalfa hay prices also are firm.

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Plan Is Considered to Coordinate Fruit Marketing

A second conference of bankers, fruit growers and representatives of cooperative organizations was held in Portland, last week.

"Can not the fruit growers' associations of the northwest get together on some common ground for their common good?" was the question that Vice President I. D. Hunt of the Ladd & Tilton bank of Portland, as chairman, put before the first conference several weeks ago. "They can and will," unanimously answered those present, who thereupon devoted their best energies toward working out a program for the development and encouragement of cooperative apple marketing organizations, and for the coordination of many of their activities. Mr. Hunt put the same question in a different form to the same men and others, at the conference August 14, and received a similar rejoinder, with the result that a plan for immediate coordination of many activities of cooperative associations and large independent growers, and for future coordination of others, was adopted. Many confidently predict it will be signed by the three associations necessary to put it into effect. Aaron Sapiro of San Francisco, attorney in cooperation who has had a hand in other similar undertakings in the northwest, was present at and addressed both meetings, and drew up the plan which was finally adopted practically as he presented it. Those present at the meetings somehow felt that eventually there will be effected a unification of northwest fruit growers' interests.

The first conference was called hastily by telegraph by a subcommittee of the agricultural committee of the Portland Chamber of Commerce and the Oregon State Chamber of Commerce: Charles R. Stewart, vice president of the Northwestern National; C. C. Colt, vice president of the First National, and Mr. Hunt. Notice of it was sent largely to bankers, but the invitation spread to fruit growers' associations and commercial organizations, so that there appeared in response to it representations from Wenatchee, Yakima, Hood River and the Willamette valley. Its being called was directly in line with the plan of state development for which a group of Portland leaders was even then planning the completion of a $300,000 fund; at least one of the men calling it will be a trustee in the expenditure of that fund, which is now complete; and the results from it were so outstanding that Emery Olmsted, chairman of the committee in charge of the drive, announced that development of cooperative marketing as a means to the revival of agriculture would take precedence over either land settlement or tourist advertising, when it comes to spending the money.

"Bankers and business men, as well as farmers, have found out during the past two years that the apple growing industry is not a profitable one, often returning to growers less than their cost of production," said Chairman Hunt, who formerly was connected with the Oregon growers. "This is not economic and it must cease or apple growing be discontinued. Cooperative marketing has had a very hard row to hoe, but it is now sweeping the country, and bankers' and growers' minds are coming to the point that it is the one thing which will make production profitable, increase the value of our lands, bring in new settlers for our farms, and put farming back on an attractive basis. Various associations are doing great things for their members, but they are doing nothing toward unified marketing. They seek to accomplish the same purpose, yet they compete with each other along many lines. This is not logical, it is not proper. Can they not get together on some common ground?"

Lessons of Experience.

Sapiro then presented what he called a "laboratory experience" in cooperative marketing—his observations on a score of failures to every success that has been achieved along this line. Defining terms, he said that cooperative marketing aims not to get better prices for the member than for the nonmember, not to create competition between the outsider and the insider, but to stop blind, unintelligent dumping of farm products, to substitute intelligent merchandising and so to raise the level of prices that both will benefit.

Many Give Opinions.

One after another those present offered their comment on the situation. Walton Peteet of Chicago, director of marketing of the American Farm Bureau federation, said he thought the task ahead was to coordinate. E. M. Gillette of the Wenatchee District Apple Growers' association said the grower was convinced that some kind of coordinated effort must be undertaken if the industry were to be saved. Robert C. Paulus, general manager of the Oregon Growers' Cooperative association, said that his association would be found ready to cooperate when the time came. A. W. Stone, traffic and extension manager of the Hood River Apple Growers' association, said that he "came to listen and remained to pray," and that the question lay wholly within "ourselves," whether the industry should survive or go to destruction. H. W. Steinhouser, independent grower of Hood River, believed that absolute control of all northwest and even northern California apples was the only way to save the orchards, but that coordination should be the first step. A. T. Dorsey of White Salmon, representing a $200,000 investment there, declared that the growers of his district wanted to see something done, and that he was ready to give two years to the task if necessary. President H. L. Hull of the Yakima County Farm bureau expressed the belief that the thing could be accomplished only by the absolute conviction, through education, of a great many association members, that it must be accomplished; and his reference to the opposition in some managerial quarters to any form of coordination brought a heated declaration from Chairman Hunt that "prima donna" management is not the type that a farmers' cooperative wants. "If we can get enough people to say that the cooperative type of marketing is the best one to tie to, then I'm one like Mr. Dorsey to contribute not only my time but my money to get this thing back to the producer. It is his problem and not the managers' in the slightest."

This plan embraced the provisions of the resolutions adopted at the first conference, and because of its length can perhaps best be described by quoting the essential points in those resolutions:

(a) The establishment of a more standard and uniform method for the organization of local associations and packing houses, including, particularly, methods for financing the same;

(b) The creation of local organizations in all of the unorganized sections;

(c) Development and increase of membership in all existing local associations;

(d) Immediate coordination between existing associations and other cooperative associations which may be hereafter organized on all rate and transportation problems, including, especially, the handling of all claims;

(e) Gradual development and establishment of uniform grading, with centralized supervision looking to the ultimate establishment of a brand for better-grade apples only, to be universally advertised as the brand for the best northwest apples, along with retention and development by each local or district association of its own brand and name for advertising to the trade or otherwise;

(f) Immediate and general coordination for all export business;

(g) Coordination in some form for all American sales (without removing at this time the plan of direct selling by each cooperative association, but particularly arranging for coordination on routing, exchange of information, plans for storage, date on sales, methods and arrangements for financing apples in storage or in process of marketing, with a plan for centralizing all sales offices at a convenient point, with constant conferences of managers on all of the above subjects, such coordination to be accomplished through the associations themselves as well as any sales or distributing agents with whom they may have made existing contracts.

The Northwest Apple Growers' exchange, the organization was tentatively called, and it would be managed by a board of trustees appointed by the associations signing the agreement, which would not be effective until three had signed. Public appointees to the board would be named through the clearing houses of Spokane, Seattle and Portland, and the number of carloads of apples shipped would furnish the basis of association representation. Twelve departments for handling the various matters of grading, storage, rates, sales, etc., were suggested, but the completion of the structure would be a matter of gradual development. Possibly only one or two would be attempted at first, as the trustees might decide. Spokane was suggested as the place for headquarters, but this was merely for purposes of discussion and the space finally was left blank, to be determined by the trustees.

Delegates Approve.

"I have no criticism of the plan except that as the industry now stands it is impossible for the growers to take on any additional expense, and whether or not the dollars-and-cents benefit to be derived from this would offset what it costs I don't know," said Manager C. H. Swigart of the Yakima Fruit Growers' association. However, he said that if the plan were adopted he would help work it out as far as he could. President H. P. James of the same organization said he believed the plan practical because the growers could go as far as they liked with it. "There is not a thing in it that would not, in same organization said he believed the plan practical because the growers could go as far as they liked with it. "There is not a thing in it that would not, in the end, be desireable for fruit growing interests. I am heartily in favor of taking the first step in the direction indicated here today." "The bunch I represent would be heartily in favor of the plan, and I personally will do what I can to get it started," asserted J. W. Shipley of the Underwood Growers' association, and William McGonagle, representing the Selah (Wash.) Farm bureau, declared that fruit growers of the northwest had pulled apart long enough, and that it was time for them to pull together under some such arrangement. President H. L. Hull and Secretary N. H. Massie of the Yakima County Farm bureau both concurred, and President Kenneth C. Miller of the Oregon Growers, A. W. Stone of the Hood River Apple Growers' association, and E. M. Gillette of the Wenatchee also approved. Manager A. R. Hayes of the Star Fruit company of White Salmon summed it up when he said: "I am an apple grower and my business is sick. I am not inclined to question the qualifications of the physician who has been called in, and I am strongly in favor of the plan outlined. If we get in and support it, nothing on earth can prevent it from working."

The conference voted unanimously to adopt the form of coordination outlined, and Messrs, Miller, Stone and C. J. Hurd of O. A. C., representing Oregon, and Swigart, Gillette and Hayes, representing Washington, were appointed to go over the plan in detail with Sapiro, to make such changes as seemed necessary, and with the continued assistance of the Portland committee which called the conferences, to campaign for its adaption throughout the northwest. To this end several hundred copies will be printed for distribution. Places were made on the committee, also, for one representative each from Idaho and British Columbit, and the conference adjourned with a vote of confidence in Mr. Sapiro.

Those Who Participated.

Others than those mentioned, who were present at the first conference, were Truman Butler, president, Butler Banking Co., Hood River; R. J. McIsaac, president; C. K. Benton, secretary; J. D. Guttery, director, and A. F. S. Steele, general manager, Hood River Apple Growers' association; C. L. (Farmer) Smith; J. F. Burton, district manager, American Farm Bureau federation; J. E. Nestor, Northwest Fruit exchange, Seattle; C. J. Hurd, extension specialist in marketing, Oregon Agricultural college; Arthur Goldsmith, attorney in cooperation, Portland; O. C. Soots, secretary, Yakima Commercial club; J. McPhee Ferguson and Ray Paddock, exporters, Seattle; E. E. Ullburg, Cunard line, Seattle; George A. Mansfield, president, Oregon State Farm Bureau federation; J. W. Brewer, secretary, Oregon State Chamber of Commerce; W. D. B. Dodson, manager, Portland Chamber of Commerce; Harold Sharkey, First National bank; G. C. Finly, Guarantee Trust company; Lyman Bunting, cash buyer; Alexander Miller, First National bank; W. N. Irish, Yakima Trust company, and M. A. Peacock, Yakima Growers' association, all of Yakima; E. O. Blanchar, First National bank, Hood River; R. G. McNary, sale manager, Oregon Growers' Cooperative association; Thomas B. Hill, assistant secretary, Seattle Chamber of Commerce; Frank E. Andrews, president, Portland Chamber of Commerce, and E. E. Faville, chairman agricultural committee, Portland chamber.

At the second conference there were present, in addition to those mentioned, Whitney L. Boise, who acted as secretary; Clayton L. Long, horticultural extension specialist at O. A. C.; Secretary J. E. Neston, Northwestern Fruit exchange; Manager J. O. Holt, Eugene Fruit Growers' association; Earl S. Coe, White Salmon, Wash.; Manager Lee M. Lampson, Three Rivers' Growers' association, Kennewick, Wash.; J. A. McLean, Yakima Fruit Growers' association, Kennewick; V. C. Follenius, Hood River; W. W. Rodwell, Hood River; C. E. Spence, Oregon State market master; H. W. Steinhouser, Hood River; A. J. Dorsey, White Salmon; E. L. French, director of agriculture in Washington; and representatives of various commercial organizations.

Extension Service at the Fair

By LINCOLN LOUNSBURY, Agricultural Extension Editor, State College.

People attend fairs to observe and learn. Realizing this fact, the extension service has tried to make its exhibit this year more practical than in former years. If a person can see a new device or a new method of doing something, and take the idea home, he or she may feel well repaid for going to the fair.

What will you see at the fair this year in the State College of Washington extension service exhibit?

The size of the fair will determine the size of the exhibit, but there will be exhibited at the fairs this year demonstrations in poultry, bees, dairy, potato diseases, clothing, home management, feeding live stock, berries, drainage, wheat production and foods.

What can I learn as a chicken raiser from poultry demonstration?

That it costs 29 cents for a hen laying 120 eggs per year to produce a dozen eggs. A hen laying 180 eggs will produce a dozen for 19 1-3 cents and a hen laying 240 eggs will produce a dozen for 15 cents.

When does a hen lay the most eggs?

Charts will be seen showing what months each one of the three hens above mentioned laid the most eggs and what month they laid the least. The average Washington hen lays 95 eggs a year, the best Washington hen laid 335 eggs in a year. You can learn from a study of the poultry booth how to secure more than the average.

Dairying is my business, what is there to interest me?

A picture of a good cow and an average cow will show the difference. The good cow gave 400 pounds of butterfat per year, or 16 quarts of milk a day. The average Washington cow gives 200 pounds butterfat per year, or eight quarts of milk a day. It cost 3 cents per quart for a good cow to produce a quart of milk and 4 cents for an average cow to produce the same amount.

Didn't it take a lot more feed for the good cow than it did for the average cow?

The exhibit shows by measured amounts that it took 6 1-4 pounds of grain more for the good cow than the average cow. There is also to be seen figures on how much profit the two cows made.

I started a couple of colonies of bees this year. Can I find out anything about them?

Can honey be adulterated in the comb, and what makes the different colors?

The honey bee is the only one able to make a wax comb filled with honey. There will be exhibited the four main honey producing flowers of Washington, showing the different colored honey from each flower.

A great deal will be seen on handling bees. All the latest and most simple methods and devices will be exhibited.

What have you to show the potato growers?

Washington potato growers raise 8,175,200 bushels of potatoes a year, but of that amount 1,638,507 bushels are lost each year from disease. How to help stop the invasion of the "disease army" will be seen.

You have told us a lot about the men's work; how about the home work?

There will be a special booth illustrating how the living room, dining room, hall, kitchen, bedroom and, in fact, every room in the house may be curtained and draped inexpensively and correctly.

What about clothing for women?

To the woman who has to do her own sewing there will be shown a method of

(Continued on page fifteen.)

Education and Fun Mark Club Tour

(Continued from page one.)

pigs each were arranged, and the members given a chance to study the animals before making their placings. The club members were also interested in seeing the 10-litter pigs which Mr. Woodhouse is fattening. He expects to have the entire 10 pigs weigh over one ton by the time the county fair opens.

The picnic dinner was enjoyed under the cottonwood trees at the home of Eugene Wilson, following which Roland Newman was elected temporary chairman of the club and Grace Jones temporary secretary-treasurer.

At the Ernest W. Wilson home the club members judged a class of ram lambs, while Shorthorn steers were ready for expert judgment at the Leslie Wilson farm.

On August 2, the day previous to the picnic and judging tour, the swine clubs had two tours, in which they visited most of the herds owned by the members. The forenoon was devoted to the Chester White herds, while in the afternoon the Berkshires were the center of interest.

Chester Whites were seen at the homes of the following: Ivan Hutchinson, Thorp; Leonard Newman, Thorp; Roy Brunson, Ellensburg; Elmer Harvey, Thorp; Marie Skiffington, Ellensburg; Aubrey Lynch, Ellensburg; Florence Robinson, Ellensburg and Steve Woodhouse, local club leader.

Berkshire owners whose pigs were seen by those making the tour included: Gilbert Mills, Arthur Dreyer, Irwin Mills, George Mills; John Tjoseen, Helen Wilson and Harold Wilson. The J. Alva Bull live stock farm was also visited.

Brand New Fall Merchandise at Lowest Prices in America

Send No Money

These prices for brand new fall styles will positively amaze you—They are ▬ low! But wait until you have seen the actual merchandise. Just make your selection now and order at our risk. Don't send one cent now. We cheerfully send your choice of these bargains for examination and approval right at home.

Just letter or postcard brings any of these astounding bargains. Merely give name and number of each article you want. Also state size and write your name and address plainly. Pay nothing till goods arrive. Then only the bargain price and postage. If not satisfied, you may return the goods and we refund your money.

For Stout Women

Popular Model Embroidered Gabardine for Stouts

$3.98

Sharood heartily recommends this attractive frock of good quality cotton gabardine. It is designed along slenderizing lines for stout women. The skirt is finished with two wide loose panels attached at waist and bottom. The edges are bound in black and embroidered in contrasting color. Collar is in the new long roll shawl effect, embroidered to match panels on skirt, as are also the vestee and tabs on the bell-shaped sleeves. Dress is gathered at waistline at back and finished with tie sash. Sizes 44 to 54 bust measure. State length desired. **Order navy by No. 52E7610; brown, No. 52E7612. Send no Money. Pay $3.98 and postage ▬ arrival. State size and length.**

Popular One-Strap One-Buckle Pump, Black Patent or Brown Calf Finish

$1.98

Always Mention Size When Ordering

A leading style in all the big cities for fall wear. One-strap one-buckle pump of rich black patent or brown calf finished leather. Is well made with perforated sewed tip and medallion toe. Fancy perforation on vamp, strap and quarter. One-piece medium extension oak sole; low flapper walking heel with rubber top lift. Sizes 2½ to 8; wide widths. **Black patent No. 52A20. Brown calf finish, No. 52A21. Send no money. Pay $1.98 and postage on arrival for either leather. State sizes.**

Pretty Black Velvet Egyptian Strap Pump

$2.48

State Size

An absolutely new and novel Egyptian style dress pump of rich black velvet. Medium pointed dress toe and patent leather trimming as pictured. Patent leather vamp, collar and instep straps fastened on each side by buttons. Neat perforations at sides. Fancy carved Egyptian slave ornament on vamp. Leather insole; genuine oak outsoles; medium height, rubber tipped leather heel. Sizes 2½ to 8; wide widths. **No. 52A257. No money now. Pay $2.48 and postage on arrival. State size.**

Richly Trimmed Gabardine Dress for Misses and Juniors

$3.48

No prettier frock has been designed in many seasons than this charming model for misses and juniors. The material is a fine quality cotton gabardine with collar and tabs at waistline of contrasting materials, attractively scalloped and embroidered. The front, vestee and sleeves are trimmed with rows of red and tinsel novelty braid. Skirt is finished with two panels and has self material sash tying in back. Sizes for misses and juniors, 14 to 20 years, 32 to 38 bust measure. **Order navy by No. 52E7650. Brown No. 52E7652. Pay $3.48 and postage on arrival. State size and length.**

Child's Middy Dress, Attractive Two-Tone Combination

$1.98

One of the most novel and attractive children's garments ever produced, and sure to be a big favorite for fall and winter. A charming two-piece middy dress, including snappy Balkan middy of all red flannel cotton warp with round collar and cuffs. The front, collar, cuffs and Balkan bottom are embroidered in exquisite contrasting colors. Rope girdle with tassels at waist. Skirt of navy blue serge in clustered plaited style hangs from a white muslin under-waist. Furnished in red blouse and blue skirt combination only. Sizes 7 to 14 years. **Order No. 52E8326. Send no money. Pay $1.98 and postage ▬ arrival. Be ▬ state size.**

Strap Pump of Rich Velvet and Patent Leather

$2.19

Be sure to Give Size Wanted

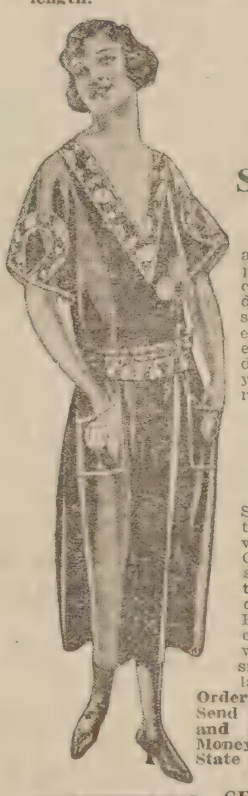
A wonderful shoe bargain in new one-strap, two-button dress pump. Has patent leather vamp and black velvet quarter and cross strap. Perforated velvet tip with medallion on toe. Neat perforations on vamp and also on patent leather piping which trims the quarter and strap. Medium extension oak sole with military rubber heel. Sizes 2½ to 8; wide widths. **No. 52A256. No money now. Pay $2.19 and postage on arrival. State size.**

Novelty Cross-Strap Model in Rich Black Patent Leather

$2.98

State Size

Every one will admire this early fall style cross-strap pump. The vamp and quarter are of selected black patent leather with rich black suede four-bar effect cross straps. Medium pointed dress toe has imitation perforated tip. Vamp and quarter neatly perforated. Straps fasten on each side with buttons. One-piece leather sole with Baby Louis leather heel and metal plate. Sizes 2½ to 8; wide widths. **No. 52A12. Send no money. Pay $2.98 and postage on arrival. State size.**



Pretty Sateen Dress Apron

Another shining example of Sharood super bargains. We claim this handsome dress apron at our special price is unequaled anywhere else in America today. Send and see for yourself. Order at our risk—not yours.

$1.59

Splendid quality black twill sateen which wears wonderfully. Graceful V-neck, sleeves and belt trimmed with gay colored cretonne. Pockets finished with crepe applique edged with piping. Sizes small, medium and large. **Order by No. 52E-6001. Send no money. Pay $1.59 and postage ▬ arrival. Money back if not satisfied. State size.**

Bulgarian Effect Gabardine Frock For Women and Misses

$2.98

An exceptionally attractive fine quality cotton gabardine dress for women and misses. Long roll collar in shawl effect, sleeves and belt piped in red. Entire front of blouse enhanced with exquisite allover embroidered design in Bulgarian effect with harmonious colors. Two streamers at both sides and front. Wide belt embroidered to match blouse. Sizes for women, 34 to 44 bust; for misses, 32 to 38 bust. State length desired. Colors, navy or brown. **Order navy by No. 52E7500. Brown by No. 52E7502. Send no money. Pay $2.98 and postage on arrival for either color. State size.**

Rich Black Satin Pump for Women

$1.98

Women's black satin dress pump, one-strap, one-button style, with fancy rosette and ornament on strap. Plain vamp with medium toe and close edge trim sole with low rubber heels. Genuine oak soles. A dressy, stylish new spring fashion that will be all the rage among the best dressed women. Sizes 2½ to 8; wide widths. **Order by No. 52A252. Send ▬ money. Pay only $1.98 and postage on arrival. State size.**

Men's, Boys' and Little Boys' Scout Shoes

Reliable, sturdy soles, low broad leather heels; leather insoles; reinforced leather back stay. Guaranteed to stand hardest wear. wide widths.

$1.59 Up

Be sure to give size. Order men's sizes, ▪ to 12, by No. 52A733. Send no money. Pay $1.98 and postage ▬ arrival. Order little boys' sizes, ▪ to 13½, by No. 52A565. Price $1.59. Order big boys' sizes, 1 to 5½, by No. 52A564. Price $1.79. Pay bargain price and postage on arrival. State size.

Women's Soft Kid One-Strap Slippers

$1.59

Always Mention size.

Soft kid leather slipper. Stylish strap model with two buttons. Medium round toe. Cushion insoles. Medium rubber heels. Solid oak leather soles. A bargain at our slashed price. Sizes 2½ to 8. Wide widths. **Order black by No. 52A365. Order brown by No. 52A366. Send no money. Pay $1.59 and postage on arrival.**

GUARANTEED! For Six Months' Wear

U. S. Army Work Shoe

For Men and Boys.

$2.98

State Size. Send ▬ Money

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LIVESTOCK AND DAIRY

Fresh Water
Is Important for Live Stock

By J. E. NORDBY.

More than one-half of the animal body is made up of water.
Animals will live longer without food than without water.
Fresh water stimulates the appetite and aids digestion.
Animals fed on a highly nitrogenous feed require more water than those fed on a carbonaceous ration.

All of our domestic animals will live longer without food than without water. This is especially true during the drier months of the summer and early autumn. The less permanent creeks and springs will dry up, and pools become stagnant, affording water that is very undesirable, if, indeed, they afford water at all. Around the farmstead, too, perhaps this busy season of the year fresh water for all classes of live stock may not be too freely applied. It always takes much special effort to provide enough when the spare moments for extra management are very few.

Fresh water freely applied stimulates appetite for solid foods, indirectly making possible a more thorough gastric and intestinal digestion and by facilitating absorption and assimilation. When the intestines are not properly flushed the body and food residues remain there too long and tend to cause poisoning to a greater or less degree. This sort of thing may not cause immediate death, but it very often asserts itself to a marked degree in the general tone of the animal's thrift.

Somewhat more than one-half of the animal body is made up of water, the percentage varying with the species, age and condition. One of the most important functions of water in the animal body is that of the physical regulations of heat, and we mean by this the emission of heat from the animal body through conduction, radiation and evaporation of water. During the hot summer more water is required in the process of heat regulation, for it serves as a cooling agent, inasmuch as a large amount of the heat of the animal body is absorbed in converting the water into vapor that is given off by the lungs and skin. Animals like the hog, for instance, that have no sweat glands, give off very little vapor from the skin, which explains why they overheat so readily.

In dry lot feeding, and much of that is done even in the summer months, the water supply becomes a very serious matter. No doubt every feeder has observed that animals fed on a highly nitrogenous feed require more water than those fed on a carbonaceous ration. This is due perhaps to the fact that starchy feeds yield a larger amount of water when entirely oxidized, while the nitrogenous or protein feeds are rarely so completely oxidized in the animal body and consequently yield a smaller amount of water. In addition to this the laxative nature of the protein feeds make a greater demand on the water supply than do those that are not so laxative. Under normal conditions domestic animals require a fairly uniform quantity of water for each pound of dry matter consumed. When conditions are not normal, however, such as is the case in the hot summer and fall, the thermal environment must be adjusted and this is done by regulating heat emission, which is greatly facilitated by a supply of fresh water.

If the temperature of the animal body is not above normal, as it may be after violent exercise, it is quite safe to allow the animal free access to water, as it is not likely that it will take too much unless it is fed salt irregularly or when it is forced to take large quantities through watery feeds.

Fresh and cool water, supplied in ample amounts, will serve the very useful purpose of eliminating many of the digestive disturbances often complained of by feeders of domestic animals. Unless the digestive agencies are properly functioning the best results can by no means be realized. Since water, which is one of the most abundant elements we have, serves so many useful purposes, it should be given serious consideration in our live stock management scheme.

VETERINARY

By DR. S. B. NELSON.

Milk Fever—Kindly tell me how to prevent milk fever in the care of cows and how to treat same if it can not be avoided? G. W.

Elk, Wash.

To prevent milk fever take your cow off from rich feed for 10 days before you expect her to calve. Feed her the poorest feed you have on the place. Give her one handful of epsom salts in a quart of water daily if she needs it.

The treatment for milk fever varies according to the conditions. One of the several treatments with modifications is to not milk out the milk when the cow first calves, and then if she still takes the milk fever, inject sterile air, or as near sterile air as possible, into the udder, leaving it there for some time.

Sore Foot—We have a cat that has been bothered for three months with a swelling on front leg. The leg swells up to twice its normal size, then breaks open and pus comes from it. Then it heals up and seems all right until the leg starts to swelling again. The cat is very thin.

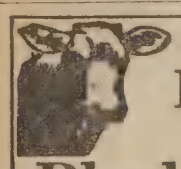
Lopez, Wash. E. M. H.

The cat has some foreign dead tissue in the foot. This tissue causes inflammation and pus forms, which seeks an outlet and the easiest place is through the skin. It breaks and discharges; then nature tries to heal it again.

The next time it tries to break, it would be well to fasten the cat in a sack, putting the front leg out through a small hole so that it can be handled without the operator being hurt. Carefully enlarge the opening of the abscess. If it is not near the joint it would be well to take a silver probe, or if you take one of your very large dull knitting needles and boil it, it can be used as a probe to see if you can find the foreign decaying substance. If it is there it will have to be removed or gradually sluff out through these constant series of abscesses. Take a small syringe and fill the opening with peroxide of hydrogen until it ceases to foam. After this you might touch up the inside of the wound with tincture of iodine and let her go.

Baby Beef

Baby beef shows an increased profit over older cattle, because yearlings can make 25 to 40 per cent more gain than mature cattle on the same feed. They are much the same as the milk fat lamb. The herd costs are smaller because the size is cut down because of earlier marketing. Open heifers will sell as well as steers and undesirable females may be then marketed. A greater marketing opportunity is afforded, as the finish and bloom may be held longer. The cuts are more desirable because they are smaller and meet the smaller modern family requirements. There is a premium for the product because of its scarcity. Baby beef may be profitably raised only in smooth, well bred up herds that have used pure-blood bulls for at least two or three crosses. Grain and concentrated feeds are necessary and calves suitable for baby beef feeding must be uniform, blocky and have quality and finish.



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There are two construction features in the Weber which combine with the high-grade materials and workmanship, and which make unusually long service possible. First of these is the *swivel reach coupling* [patent applied for], which prevents twisting and breakage of the reach; second is the *patented malleable fifth wheel*, which prevents breaking the bolster and sandboard. You will find these two features on no other wagon!

If you will go to the store of the McCormick-Deering dealer he will show you these two Weber features, tell you about the wagon in detail, and give you a list of Weber wagon owners in your community. Talk to these owners; you will find them anxious to praise the Weber—a fact which is insured by Weber design, quality, and construction.

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The department editors of this paper are anxious to be of service to you. Do not fail to write to us if they can be of help to you.

Bedrock of Cooperation in Denmark

By CHRIS L. CHRISTENSEN
United States Department of Agriculture

TO complete the picture there are the agricultural societies organized to promote the technical and educational side of agriculture, and which do not engage in marketing. Fully 90 per cent of the Danish farmers have membership in these societies, which have been an important influence in the production of standardized products.

Mr. Christensen returned early this year from a two years' study of cooperative marketing in northern Europe. He made a thorough study of Danish cooperation, which will be published in a bulletin by the United States department of agriculture. This and two succeeding articles present some of the more important observations, which are of special interest to American cooperators at this time.

FIRST ARTICLE.

In less than 50 years Denmark has changed from a nation of peasant agriculture to the most highly organized agricultural nation in the world. More than 92 per cent of the farmers in Denmark own the land they cultivate. Tenant farming is comparatively unknown, whatever tenantry exists being conducted on long-term arrangements calculated to promote the best interests of a permanent national agriculture.

On his farm, ranging from 5 to 60 acres in size, organized on an efficient business basis for the production and marketing of butter, bacon and eggs, the Danish farmer is not only self-sustaining, but is financially independent. Through cooperative marketing he places on the market a highly standardized product that finds ready demand. His marketing costs have been cut to a minimum, so that he receives the largest possible share of the consumer's dollar.

Of the 205,000 farmers in Denmark, approximately 100,000 operate farms of an average acreage of 40 to 60 acres; 90,000 farmers cultivate an area of between five and 20 acres each, and about 15,000 farmers between 75 and 150 acres. More than 86 per cent of the Danish farmers are members of local cooperative marketing organizations, which assemble and process the farmer's products.

High Priced Products.

The English markets consume the major portion of Denmark's surplus production of butter, bacon and eggs. These products bring high prices, for the consumer knows that any product with the Danish stamp is of high quality and that a regular supply may be depended upon. More than 80 per cent of the Danish butter production scores 92 or better, and by reason of the development of winter dairying a regular supply is available. The bacon is of the best quality that scientific agricultural and manufacturing skill can make it. Every egg is placed upon the market in the best possible condition.

Denmark's present position in the agricultural world is the more remarkable by reason of the comparatively short time in which it has been attained.

Was One-Crop Country.

Denmark has been an agricultural nation from the time of the Vikings. Grain was the chief agricultural product, but centuries of production had virtually exhausted the soil and grain production had become economically unprofitable. This condition had prevailed for more than 100 years and was one of the chief reasons for the agricultural reform in 1788, when the large agricultural estates owned by the titled and nobility classes and worked in common by the peasants were broken up and turned over to the peasants.

Unlike the agricultural reforms in other European countries, the landholders were mindful of the strong economic and social value of a land-owning population and they cooperated with the government in inducing the peasants to own their own farms. Some improvements resulted from the change, but modern methods of revitalizing the soil were unknown and its fertility became gradually depleted. Modern rail and water transportation also had begun to flood the principal markets of northern Europe with cheap grains from the Americas and Australia, and the Danish farmer suffered from their competition.

Turned to Dairy Cow.

Meantime, with the concentration of masses of people in cities, a demand for animal food products had developed and the Danish farmer turned to the dairy cow as the solution of his problem. Danish statistics showed that the price of animal food products such as butter and bacon had advanced faster than the price of grain. The loss of Schleswig-Holstein to Germany had affected trade relationships and had caused the Danish traders to turn from the German markets to the English markets. It was seen also that the dairy cow would have a beneficial effect in increasing soil fertility.

Although there was a definite English consumer demand for a high quality butter, the disorganized efforts of individual farmers to meet the demand resulted in the shipping of considerable quantities of mediocre products which affected the prices of the higher grades. There was not a sufficient quantity of one uniform standard grade to make proper merchandising possible. Conditions continued in this pass for several years until producers were forced to realize that if they were to obtain the high prices the markets were willing to pay for quality products concerted action to meet the demand was needed.

Credit Associations.

The Danes had already had 30 years of experience with cooperative principles through the credit associations organized in the '50s to lend money on farm mortgages, the money being obtained through the sale of farm-land bonds. A system of consumers' cooperative stores had also been inaugurated in 1866. The first cooperative creamery was started in 1882.

The organized effort to produce and market a uniform product regularly throughout the year met with large success, and by 1890 there were 600 cooperative creameries. The secret of the project was that every effort was devoted toward furnishing the consumer with the high grade of product that he demanded and for which he was willing to pay a high price.

There are now approximately 1335 cooperative creamery associations in Denmark doing an annual business of 500,000,000 Danish crowns. Of these associations 546 are federated into 11 export associations, the remainder of the creameries operating on an individual competitive basis.

In 1885 there were 250 cooperative organizations of various kinds doing an annual business of approximately 10,000,000 crowns, as compared with more than 5000 at the present time doing an annual business of over 1,500,000,000 crowns. These associations also own the controlling interest in the Danish Cooperative bank at Copenhagen, which last year had a clearance of over 13,000,000 crowns.

Skim Milk Profits.

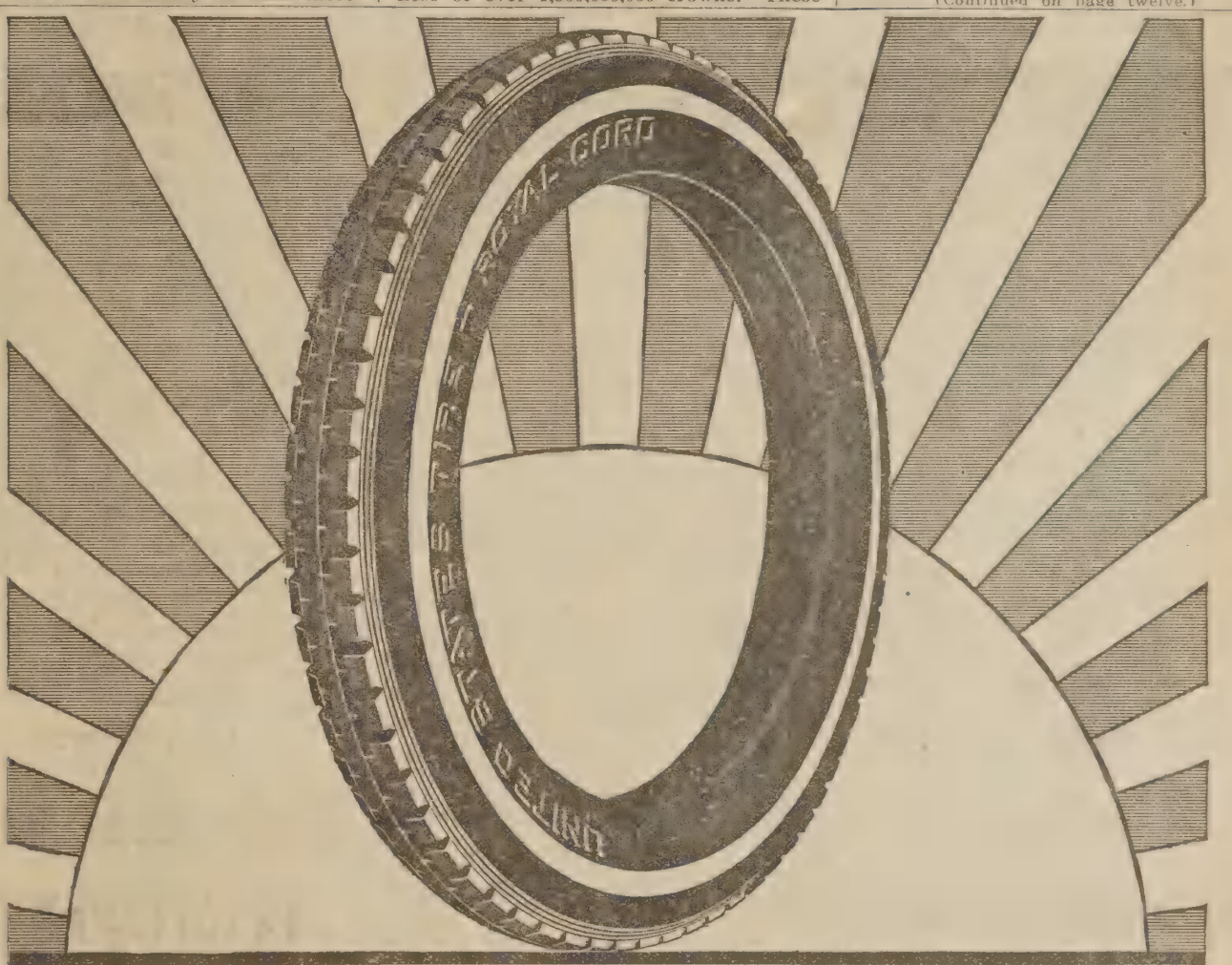
In their cooperative creamery movement the Danes were early confronted with the need for utilizing the large quantities of skim milk remaining after the cream was made into butter. The bacon-type hog was selected as the solution. In former days Germany had offered a market for the lard type of hog, but the economic upheaval wrought by wars had practically closed this outlet. On the other hand, urgent demand had developed in England for a high grade of bacon.

In meeting this demand for bacon, however, the Danes were forced to market their pigs in Hamburg, where they were slaughtered and the bacon shipped from Hamburg to England.

Bacon Factories.

To shorten the marketing lane and to receive more of the prices paid by the consumers, the hog raisers decided to assemble their products locally, combine the process of killing the pigs and curing the bacon in their own cooperatively owned plants, and send the finished product direct to the English market. The first co-

(Continued on page twelve.)



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POULTRY AND RABBITS

What Trapnests Did

By GEORGE N. ANGELL.

"Do I think it pays to trapnest? Say, I want to tell you something I found out as a result of trapnesting for a straight 15 months, from September, 1921, to December, 1922, 650 birds of my own raising, and let you draw your own conclusions as to what I think about it. You may think that I had a mighty bum lot of chickens to start with, but I don't care. I want you to get the figures."

Orin Belknap of Chinook, Pacific county, who started in the chicken business with the aforesaid 650 birds, who made up this season's breeding list from pens with records from 180 to 250 eggs, and who trapnested the highest pen again this year in order to get the individual records of all the hens in it, glared at me from behind the dining room table, where I had caught him in the act of going over some figures from these same trapnest records. I had visited his plant in the spring of 1922 and learned why W. D. Buchanan, extension poultry specialist, dubbed him the hardest working poultryman in the state of Washington. I had seen his name appear on the list of 20 or 25 poultrymen in the state whose trapnested eggs the state college would accredit for hatching, and now I was back again a year later to find that he hadn't a chicken on the ranch with a record of fewer than 230 eggs, and that they ranged from that all the way up to 257. Naturally I was very much interested to hear about the embattled 650, and I jumped to the advance conclusion that the thing Belknap could least understand was why anybody would think of raising chickens from hens that were not trapnested. I was right the first time, as subsequent developments showed.

"Among those 650 hens," Belknap continued, "I found only 96 which went above 200 eggs in a year, only 24 which went above 230, and only six—six, mind you—which went above 250. In round numbers, then, I had about one in seven which would be considered fair breeders, and anybody with a flock of common chickens—say as good as mine—in which the rooster runs with the hens and the hen lays in a box and after a while starts sitting on them—anybody with a flock like that would have only two eggs in a setting of 14 that were fit to hatch. The other 12 would better have been eaten up. My hens averaged only one in 28 that went above 230, so only every other setting in this imaginary flock would have produced one as good. Now suppose they wanted to hatch something pretty good, something that would lay 250 eggs in the course of a year. On the basis of my average they would have required 100 eggs to produce one such chicken.

"In the light of this, consider my experience. I have four pens from which breeding stock and eggs are offered. The hens in No. 1 produced from 250 to 264 eggs each, in No. 2 from 230 to 250, in No. 3 from 200 to 230 and in No. 4 from 180 to 200. Now then from which pen do you suppose I made the most sales? Never one until today from pen 1—those eggs cost 50 cents and the chicks $1. Never a chick, but a few eggs, from pen No. 2; a few chicks and a good many eggs from pen No. 3; but the bulk of the orders were from pen No. 4. They're white chickens, of course, and they eat wheat, like all other chickens, I suppose, but it's beyond me why people want to raise that kind!"

Belknap started with Tancred stock, and is staying right with it. First he bought the Tancred special mating, then the imperial, and this year he paid $5 apiece for eggs from the 302 to 311 egg mating. "And if that old Plymouth Rock hen that's sitting on them does a good job Tancred will be only one jump ahead of me next year. The wife and I needed that $25 for 1000 different things, but we decided that we'd spend it for hatching eggs, and our next notch is the $10 kind. Most people think we're crazy, and maybe we are, but I'm not quite ready to believe it."

Getting in Step

By W. D. BUCHANAN, Poultry Extension Specialist, State College of Washington.

Some poultrymen have lost step. They are waiting for the accredited hatchery to start. It is started, and going so fast that some people will have a hard time to catch up.

Every mail brings a letter or two asking where the writer can find cockerels of the required breeding. Your agent, if you have one, has a list of twenty-odd breeders who have this kind of stock for sale. Ask him for the list and get busy. Just now the supply is plentiful and the prices moderate. A little later they will be scarcer and the prices higher.

Another lot of letters in every mail ask: "How can I get in? To whom should I make application?" Answer: You can get in by deciding to meet the requirements—and by meeting them.

First, decide how many hens you are going to keep as breeders, and then buy, or contract for, enough cockerels to mate with them. You will need at least six for each 100 hens. If you buy at 3 months of age, and select carefully, you will need two for every one you wish to mature. If you are careless in selecting, you had better buy three.

This is the first step. Then cull your flock according to the standards fixed by the state college, or have it culled by some one trained by the college. Now you are ready for business.

If you want your flock so culled and ready to mate, accredited, send 2 cents for each hen to P. S. Dickey, secretary of the Washington Accredited Hatchery and Breeders' association, Puyallup, and ask to be put on the accredited list. The association will do the rest.

If you want your hatchery accredited, send an additional fee of $2 per 1000 hatching capacity. If you intend to buy and hatch eggs from outside flocks, send a complete list of all these flocks. When all of these are accredited, your hatchery will be accredited.

This is the whole thing in a nutshell. You don't have to wait for an application blank, although these will be ready for distribution later. Simply meet the requirements as above, and state that you are ready to comply with the rules of the association, and in due time a supervisor will visit your farm. If he finds conditions as represented, you will be accredited.

Some counties are asking if they might file through their local secretary. Yes. A hundred, or a thousand, men may so file, provided that the local secretary later files all applications with the state secretary.

In conclusion let me call your attention to the fact that there is a minimum fee of $5 per flock and $10 per 1000 hatching capacity. These fees cover all flocks up to 250 hens, and all hatcheries up to 5000 capacity.

CENTRALIA POULTRY SHOW.

Poultry show will be held in Centralia January 14 to 19, inclusive. A. E. Badger has been elected president of the association; E. H. Colson, vice president, and L. L. Lynn, secretary and manager. H. H. Corrier of Tacoma, well-known poultry expert, will act as publicity director and judge. Entries will be limited to 600 birds.

SPREADS DISEASE.

Unclean soil in the poultry yard leads to diseased flocks.

LIME IS A CLEANSER.

Lime is a great purifier of soil.

GENERAL ADVERTISING.

1000 Eggs in Every Hen

New System of Poultry Keeping—Get Dollar a Dozen Eggs Next Winter—Famous Poultryman

TELLS HOW

"The great trouble with the poultry business has always been that the laying life of a hen was too short," says Henry Trafford, international poultry expert and breeder, for nearly eighteen years editor of Poultry Success.

The average pullet lays 150 eggs. If kept the second year, she may lay 100 more. Then, she goes to market. Yet, it has been scientifically established that every pullet is born or hatched with over one thousand minute egg germs in her system—and will lay them on a highly profitable basis over a period of four to six years' time if given proper care.

How to work to get 1000 eggs from every hen; how to get pullets laying early; how to keep up heavy egg production all through cold winter months when eggs are highest; triple egg production; make slacker hens hustle; $5.00 profit from every hen in six winter months. These and many other money making poultry secrets are contained in Mr. Trafford's "1000 EGG HEN" system of poultry raising, one copy of which will be sent absolutely free to any reader of this paper who keeps six hens or more. Eggs should go to a dollar or more a dozen next winter. This means big profit to the poultry keeper who gets the eggs. Mr. Trafford tells how, if you keep chickens and want them to make money for you, cut out this ad and send it with your name and address to Henry Trafford, Suite 1103A Herald Bldg., Binghampton, N. Y., and a free copy of "THE 1000 EGG HEN" will be sent by return mail.—Adv.

"Some few years ago I bought a Peerless equipped with Goodyear Cords. These tires gave me over three years of daily service. I do not believe there is a better tire made than Goodyear."—W. H. BROWN, *Americus, Ga.*

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...have driven my Buick ...n 21,000 miles, over ...roads, through ice and ...in winter, and still ...two of the original ...ear Cord Tires with ...veled All-Weather ...and they look as if ...ould go at least ...r 3,000 miles yet. ...er two went 13,500 ...nd 14,382 miles. ...beat it?"—LOUIS ..., *Haverstraw, N.Y.*

THE satisfaction delivered users by Goodyear Cord Tires is proverbial. That satisfaction now is deeper and more intense than ever before. The brilliant performance of the *new* Goodyear Cord Tire with the beveled All-Weather Tread is the reason. Read what these typical Goodyear users say, then ask yourself if the tires that are good enough to win such enthusiastic approval are not the tires you want on *your* car.

GOODYEAR

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"I have driven my Stude... baker 15,448 miles on the same Goodyear Cord Tires with the beveled All-Weather Tread with which it came equipped, and they are still good for a few thousand more."—H. F. BECHLER, *Chicago, Ill.*

... of ... dyear Cords has never yet been off the rim."—HENRY H. DINNEEN, *Baltimore, Md.*

"Would you be interested in an old Goodyear casing, with the proper affidavit that it had run above 19,000 miles without a blow-out?"—J. F. ARMSTRONG, *Post, Tex.*

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FRUIT dipped in a boiling one-percent solution of RED SEAL Lye dries more rapidly than untreated fruit. In addition, RED SEAL destroys all possible germ life.

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Booklet containing complete list of uses, with description of each, sent on request. Full directions in every can. Be sure and buy only the genuine RED SEAL Lye.

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ORCHARD AND GARDEN

Apple Anthracnose

Anthracnose has caused some trouble with the apple trees this season and its rapid spread has made it necessary for every owner to take precautions against it, according to Theodore Albert, district horticultural inspector in the Chehalis district. This disease, which is often known as black spot canker, should be checked in the fall before the rainy weather starts.

The disease starts its deadly work as soon as the trees enter the dormant stage, which about coincides with the beginning of our wet period. The effect of last season's ravages can now easily be located by the sunken spots of bark on trunks and branches of the apple trees. The bark on all diseased spots should be carefully removed with a sharp knife, and every particle of it burnt. The resultant wound should then be painted over with a thick solution of Bordeaux. The entire tree should then be sprayed with a 4-4-50 solution of Bordeaux. The secret of success is to see that every particle of bark is covered with the spray. This spray put on in August will not injure the fruit. To be of the greatest benefit to the trees, this spray should not be put on later than August.

The 4-4-50 solution of Bordeaux is made as follows: Carefully slack four pounds of the best lime obtainable, then dissolve four pounds of bluestone in a wooden vessel. When ready to spray, add two gallons of water to the lime, and the same amount to the bluestone solution; next pour the two solutions (at the same time) into the tank containing the 45 gallons of water, stirring it all the time until the tank is emptied.

Where only small quantities of spray are used the formula would be one pound of lime, one pound of bluestone and 12 1-2 gallons of water.

For additional information if desired call on or write to the undersigned, who will be glad to assist in any way.

Cabbage Worms

By DON B. WHELAN.

Throughout the summer and late into the fall the cabbage is attacked and riddled by the green worms that are the larvae of the imported cabbage butterfly. This white butterfly is a native of Europe and was accidentally introduced into America at Quebec in 1860, at New York in 1868, at Charleston, S. C., in 1873 and in Apalachicola, Fla., at about the same date. From these centers it rapidly spread throughout the country. Its favorite food is cabbage, cauliflower, turnip, horse radish, radish, mustard, nasturtium, as well as a number of wild plants belonging to the mustard family.

Life History.

Winter is passed in the pupal stage, or chrysalis, from which they emerge early in the spring as white butterflies. The eggs are deposited singly on the under surface of the leaves of the food plant. These eggs are of a lemon-yellow color, nearly 1-25 of an inch in length and attached by the end. After about a week the egg hatches and the pale greenish yellow caterpillar begins feeding on the under surface of the leaf. Later holes are eaten through the leaves and into the developing head. About the only portion untouched are the larger veins of the leaves. In about two weeks the caterpillar is nearly full grown, being about an inch in length, velvety green, with a greenish-yellow stripe down the back. When ready to pupate it generally seeks a sheltered place on the under side of a cabbage leaf or in some sheltered place about a house, building or fence, in which to transform into the chrysalis. It takes from a week to 12 days in summer for the butterfly to emerge.

Control.

Since the worms eat the cabbage it is the common practice to treat the plant with some chemical which, when eaten by the worms, will kill them. This can be applied either as a dust or in the liquid form. Lead arsenate can be used dry by mixing a pound of it with four parts of hydrated lime. After it is thoroughly mixed it can be applied by placing some of it in a fruit can and then tie a piece of cheese cloth over the mouth to act as a sifter. Calcium arsenate and Paris green can be used in the same manner. If one desires to use the poison in the liquid form soap or some other spreader should be used, or else the spray will not adhere to the cabbage leaves.

There is little danger of getting poisoned by eating sprayed cabbages for it has been estimated that one would have to consume about 25 at one meal to get a killing dose. However, if one is prejudiced against the use of poison, hellebore can be used with good results. If it is used dry it can be applied undiluted, but if it is to be used as a spray four ounces are placed in two gallons of water. Add a little casein spreader or soap to the solution to make it spread better.

Manure for Orchards

George P. Stuart of Monroe finds that he can secure a better crop of berries from his trees by the application of from 15 to 20 tons of manure to the acre in his orchard. Such an application, he finds, gives a stronger set of fruit and therefore a greater yield of high quality fruit. His entire orchard is sprayed three different times for brown rot, and he feels that it paid him well, since he has had less trouble from this source than he would have had, had he not taken this precaution.

"I have always been able to sell good fruit," said Mr. Stuart, "and I find that quality is the first essential required by the buyer. I also find it a good plan to shop two or three kinds of fruits in the same car, such as raspberries, logans and cherries, in order that the dealer can have a larger variety, and thus insure better sales than if the shipment contained all of one kind of fruit. It has been much easier to sell all fruits under this plan, and I am going to keep it up in the future."

Eastern Fruit Show

Eastern fruit interests are waking up. Big preparations are being made for the Eastern Apple Exposition and Fruit Show to be held in New York city November 3 to 10. Already claims are being made that it will be "the largest fruit show ever given in the United States." It is under the direction of state committees of representatives of agricultural departments, horticultural and pomological societies, agricultural colleges, experiment stations, farm bureaus and individual growers who are interested in growing and marketing eastern-grown fruit and fruit products, nuts, honey and maple products, in Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, Pennsylvania, Delaware, Maryland, Virginia, West Virginia and North Carolina.

Orchard Tours

Definite dates for the orchard tours to be held in Yakima county this month have been set for August 27 and 28, and County Agent A. E. Lovett is arranging for a schedule covering those two days. M. D. Armstrong, extension horticulturalist, will be in the county for those tours. One day will be spent in a tour of the county below Union Gap and a day in like manner above the gap.

Orchard improvement, thinning, demonstrations, cover crops and spray plants will be visited.

Similar tours will be held in Walla Walla county August 16 and 17, and in Chelan county on August 21, 22 and 23.

THE CLIMBING CUTWORMS.

You will not see the climbing cutworm at work on the tender, unfolding buds of the fruit tree, or in the greenhouse, for he hides by day. Spraying with paris green or lead arsenate, in the orchard, so as to coat the buds, or using poison bran mash at the base of the tree or the greenhouse plant, will rid one of this infestation.

THE VALUE OF HONEY.

It is estimated that the value of honey produced in the United States approximates $50,000,000 per year.

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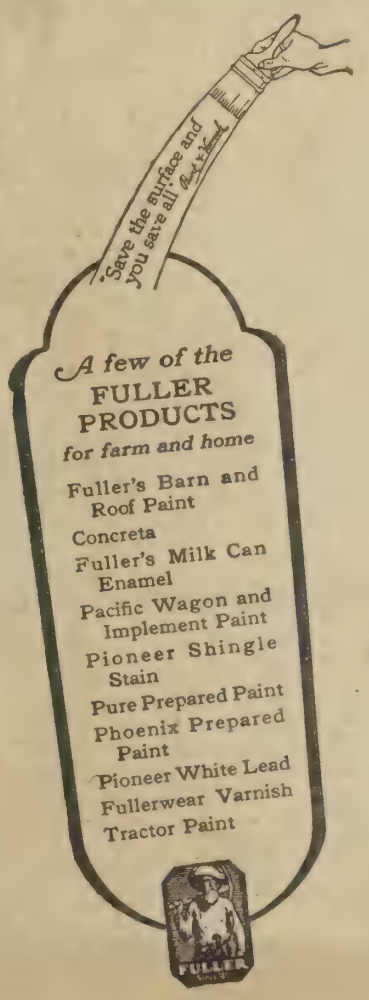

IT IS ECONOMY to apply Fuller Paint. It means money—your profits—on deposit in the bank, instead of paid out for new buildings or equipment or repairs on old.

Fuller Paint should be applied to all farm buildings and implements. "*Fuller Film*," the "coat" which forms as Fuller Paint dries, will protect any surface to which it is correctly applied from the destructive action of wind, rain and sun. *Fuller Film* will keep rot and decay from lumber and rust from implements.

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Drainage

What It Did for One Farmer

By A. B. CRANE, W. S. C. Extension Specialist.

County Agent Fred Martin of Wahkiakum county recently conducted a community farm tour to soils and crops demonstrations and drainage projects in the Skamokawa and Alacomon valleys. Among the places visited was the first drainage project which the extension service was instrumental in having installed in the county.

This was on the farm of William Dawson and some very interesting items were noted. Mr. Dawson says:

"That drainage was practically the making of the farm. Before draining, the field would lie covered with water every time it rained. Now no water stands there at all. On seven and a half acres now in hay I got 29 loads, which would average better than a ton to the load. Before I drained I got nothing but a poor pasture."

Mr. Dawson says that the increased yield from his fields enabled him to increase his herd of cows from 14 to 25, as he now has feed enough to keep that many. "Fourteen cows did not give an adequate income for my time and labor but 25 cows will." He says he now has a field of oats growing on a part of this field, which if cut and threshed is estimated will yield at least 100 bushels to the acre.

This system was laid out by the drainage specialist of the extension service in 1919 and put in during the next year. In the fall of 1920 the specialist met Mr. Dawson at the fair at Skamokawa. It had been raining for about two weeks.

"I tell you it seems good to look out over the fields and see it all dry after these rains. It never was that way before," was his comment.

Mr. Dawson run one eight-inch tile line from the creek back through the low place in the field to the county road in front of his house. Leading into this he ran two four-inch laterals from the field which has yielded so well. He expects to run two other laterals from the other side of the main that will reclaim another 10 acres which is not developed yet. There are about 30 acres now drained.

The cost of this improvement, Mr. Dawson says, was $385 for the tile and $450 for labor, or $835. The value of his entire 40 acres is increased at least $3000 at the initial cost of less than $900, or about $30 per acre for the part drained.

Many other farms in Wahkiakum county could show as good or better results if drainage was installed.

Running Water

Costly Power Plant Not Necessary

It is not essential to have an expensive power plant in order to have running water on the farm, provided there is some kind of a stream that can be made to operate a water wheel or other power apparatus. Robert S. Smith of the Yelm district in Thurston county, has an undershot wheel, which is rigged to a pump and forces the water to a tank in the barn yard.

The main head of water runs through a part of the cow pasture and is polluted. It was, therefore, necessary to pipe pure water from one of the springs to the pump. A three-inch cylinder is stationed on the frame work, which supports the water wheel, and the crankshaft on the wheel itself works the piston that pumps the water. The entire equipment is homemade, with the exception of the pump cylinder, and it was installed at a cost of $150, which includes all pipe and a few piece jobs which were done at the blacksmith shop. This figure, however, does not include labor.

This power plant has been mentioned as one of the most efficient of its kind that has ever been installed in Thurston county. A. B. Crane, drainage specialist of the state college helped to install it, and later said that it developed more power for the amount of fall in the running stream than any plant he had ever seen installed.

Fertilizer for Alfalfa

By F. J. SIEVERS, Department of Soils, State College of Washington.

Will you please advise me what is the best fertilizer for alfalfa where dry farming is practiced? Can you tell me how much sulphur per acre is used for dry land alfalfa? J. F. G.

Lyle, Wash.

Dry land soils in general are well supplied with the mineral elements of plant food, but are, as a rule, deficient in nitrogen. Since alfalfa, as well as other legume crops, when properly inoculated, has the power of taking its nitrogen supply from the air, there is hardly ever any need of applying a fertilizer to alfalfa under conditions where precipitation is very limited.

Here in the Palouse region of eastern Washington it has been quite common to get pronounced increases in yield from alfalfa when this crop was treated with either land plaster or sulphur, and consequently I would advise you to try either of these materials on a small portion of your alfalfa field in order to determine whether such results may be obtained in your locality and under your soil conditions.

The land plaster should be applied at the rate of 200 pounds per acre, broadcast, while the sulphur need not be applied heavier than 60 to 70 pounds per acre, also broadcast. The application of either material should be made just as early as possible, and best results may be obtained if the application is made even a year before the alfalfa is seeded. An ordinary grain drill will give fairly good results when used as a distributor, and an application such as is recommended should satisfy the demands of the crop for sulphur for as long a period as you may see fit to keep the alfalfa on the same piece of land. You no doubt know that best practice requires that alfalfa sod be broken up at least after five or six years.

Bedrock of Cooperation

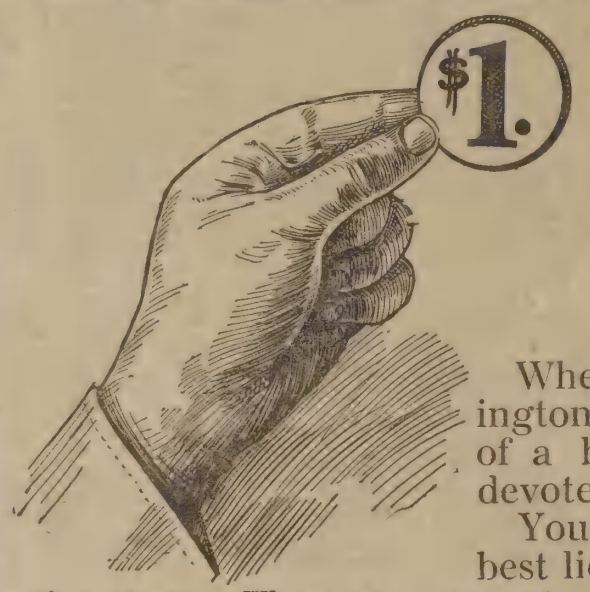
(Continued from page nine.)

operative bacon factory was organized in 1887. Today there are 46 such factories distributed throughout the country, doing a total annual business of nearly 400,000,000 crowns. Eighteen of these factories are federated into a cooperative wholesale agency, the remaining 28 plants selling independently.

Quality Eggs.

Similar marketing problems confronted the egg producers. A standard quality product was demanded in the foreign markets, but the disorganized efforts of producers resulted in many inferior eggs being shipped. The Englishmen in those days often said "there is something rotten in Denmark" in commenting on Danish eggs. The outcome was the organizing of local egg collecting associations federated into a large central association, where the eggs were handled under careful supervision, examined, sorted, graded and packed so that they would provide the buyer with a uniform, high-quality product. There are now 550 egg collecting associations federated into one central selling agency which annually markets nearly 300,000 cases of eggs on the basis of 360 eggs to the case.

For $1 You Employ the Services of Scores of Workers for 5 Years



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World's Live Stock Supply

Of the present 1,295,160,000 head of cattle, sheep and swine in the world, the United States contains 13.3 per cent. In 1914 of the total of 1,419,787,000 it contained 11 per cent. The United States leads in hog production with 27 per cent, China is second with 18 per cent. In sheep, Australia leads with 15 per cent, Argentina is second with 7 1-2 per cent, the United States third with 7.2 per cent. In cattle, India leads with 25 per cent, the United States is second with 13 per cent. Supply and demand coupled with the influence of transportation costs will always govern live stock prices.

THE WAY TO BEGIN.

Use high-producing cows to raise calves from if you can, but use a good bull without fail.

FARMERS' WANT ADS

This is the farmers' "want," "sale" and "exchange" department for small advertisements of farmers, including live stock and poultry.

Advertising rates for ads running 1 to 3 times, 10c per word per insertion, with a special rate to Farmer subscribers, as follows: Ads running 4 to 12 times, 9c per word per insertion; ads running 13 times or more, 8c per word per insertion.

All commercial and land advertising, 10 cents per word per insertion. Open also to nonsubscribers.

In using these columns advertisers must observe (1) No advertisement will be inserted for less than $1.00. (2) Every word, number and initial, including name and address, must be paid for. (3) New advertisements, changes of copy or cancellations must reach general office, Spokane, Wash., 10 days in advance of publication date. (4) Cash must accompany order.

Above rates include insertion in The Washington Farmer, The Idaho Farmer and The Oregon Farmer, which constitute the Pacific Northwest Farm Trio, 46 Review building, Spokane, Wash.

MONUMENTS F

COMPLETE STOCK. WRITE FOR DESIGNS and prices. Inland Monument Co., N1001 Monroe, Spokane.

HELP WANTED—Female 1

GIRLS DESIRING WORK FOR HALF BOARD and room, while attending school, write Gooding College, Gooding, Idaho, today.

HELP WANTED—Male 3

MEN WANTED—TURN YOUR SPARE TIME into cash or devote your whole time to a highly paid, congenial business; good money year around; cash weekly. Middle-aged men find this attractive. Many of our men receiving $4000 to $5000 yearly under our plan. Experience not required. Washington Nursery Company, Toppenish, Wash.

FARMER WANTED—PRACTICAL MAN, CAPable of operating general farm near city and school; good home, electrically equipped; permanent position for right man. Write, giving experience, number in family and references. A 2, Washington Farmer, Spokane.

LOCAL SALESMEN FOR OUR COMPLETE line "Trees That Please," all or part time contracts. Write Capital City Nursery company, Salem, Ore.

AGENTS WANTED 9

AGENTS—C. T. A. PRICES LOWER THAN ever. Suits, $18, made to order; any size or style. Orders easy to get. Big profits. Agent's outfit free. Sample suit at cost. Write Chicago Tailors' Ass'n, Dept. 417, Sta. C, Chicago.

SELL DRY GOODS REMNANTS—GREATEST bargains in fine goods. Agents. Pacific Remnant Co., 169 N. Shaffer, Orange, Calif.

SITUATIONS WANTED—Female 18

INTELLIGENT, HEALTHY, CHEERFUL widow (53), wants work in good family. C, care Oregon Farmer, Portland, Ore.

SCHOOLS AND COLLEGES 26

EARN $110 TO $250 MONTHLY; EXPENSES paid as railway traffic inspector; position guaranteed after completion of 3 months' home study course or money refunded. Excellent opportunities. Write for free booklet G-157, Stand. Business Training Inst., Buffalo, N. Y.

LEARN AT HOME—YOU CAN GET A PRACTICAL business college course by correspondence. Tuition, $25 a year. Montana Business Institute, Miles City, Montana.

FRESH FOOD PRODUCTS 51-3

FISH—4 LBS. SMOKED SALMON, $1; 4 LBS. Alaska salmon bellies, $1; 4 lbs. black cod, $1, 3 lbs. best codfish, $1; delivered by mail. Coffin Fish Co., Seattle, Wash.

BEES AND HONEY 53

ALFALFA-SWEET CLOVER HONEY—2 60-LB. cans, $9.75; one can, $5, f. o. b. Rigby; one 40-lb. can, prepaid to fourth zone, $5.75; quality guaranteed. Heckman & Larsen Honey Co., Rigby, Idaho.

FAMOUS KITTITAS VALLEY ALFALFA HONey, extracted; postpaid 2d and 3d zones; 10 lb. pail, $1.85; 3 10s, $5; 3 5s, $2.75; 60-lb., $8. Kittitas Valley Apiaries, Ellensburg, Wash.

QUEEN BEES—BUY THE BEST. UNSURpassed Italian queens, 1, $1; 6, $5.75; 12, $11; 50, $45; 100, $85. Circular free. J. D. Harrah, Freewater, Ore.

HAPPY HOME HONEY — ALFALFA AND clover; 60-lb. can, $7.50; two cans, $14.50; case six 10-lb. pails, $8.25. H. N. Paul, Mabton, Wash.

BEST QUALITY EXTRACTED ALFALFA AND clover honey; 60-lb. can, $5; 2 cans, $9.50. Meyer Bros. Honey Co., Rigby, Idaho.

VALLEY BLOSSOM HONEY; QUALITY GUARanteed; 1 60-lb. can, $7.50; 2, $14.40. Ernest Sires, Route 7, Yakima, Wash.

PURE, WATER-WHITE SWEET CLOVER honey; 60-lb. can, $5; two, $9.75. H. R. Bowen, Roberts, Idaho.

EXTRACTED HONEY FOR SALE—WELLS D. Rose, Sunnyside, Wash.

MISCELLANEOUS—FOR SALE 60

SASH AND DOORS—O. B. WILLIAMS CO., 1943 First ave. So., Seattle. Chicken house sash, 20" wide by 25" high, 80c; a dozen different sizes in stock for immediate shipment. Skylights for chicken houses, 36"x40"; price, glazed, $2. This is the size recommended by the Western Washington experiment station. We carry them in stock for immediate shipment. Sash and doors for all purposes at lowest prices. All orders receive prompt attention. Our large illustrated catalog No. 35, showing full line of building material and built-in fixtures for the home, free on request. O. B. Williams Co. Established 1899.

CORN HARVESTER, CUTS AND PILES ON harvester or windrows; man and horse cuts and shocks equal corn binder; sold in every state. Only $25 with fodder tying attachment. Testimonials and catalog free showing picture of harvester. Process Harvester Co., Salina, Kansas.

TOBACCO—"OLD KAINTUCKEE" NATURAL leaf. Dark brown for chewing, light brown, mild for smoking. Fine as silk. None better. Sample pound, 60c; 5 pounds or more, 50c pound, postpaid. R. E. Acree, Obion Valley Tobacco Farm, Pryorsburg, Ky.

SPECIAL—ONE-POUND TIN "SATISFACTION tobacco" and pipe for $1. Smoking, chewing tobacco, cigars, cigarettes and complete line of pipes. Wholesale and retail. Peter M. Jacoy, 3 Washington st., Spokane.

WALL BOARD—WRITE FOR SAMPLE OF Washington plaster wall board; won't warp, won't burn. Manufactured by Washington Building Products company, 6851 E. Marginal Way, Seattle, Wash.

POCKET SIZE, 5-IN-ONE TOOL KITS, 45C; safety razors, used Gillette blades, 45c. Agents wanted. Army Blanket Supply Store, 309 Riverside ave., Spokane.

MISCELLANEOUS—FOR SALE (Continued) 60

PIPE—GET PARTICULARS ON OUR SPEcial flue pipe, 1¼, 1½ and 2 inch. Big saving on it. We also have all sizes second-hand and new standard pipe at low prices. We also save you on roofing, belting, pumps, engines, cables, etc. Alaska Junk Co., S120 Adams, Spokane, Wash.

NATURAL LEAF TOBACCO—CHEWING, 5 lbs., $1.75; 10 lbs., $3; smoking, 5 lbs., $1.25; 10 lbs., $2. Pay when received. Pipe and recipe free. Farmers' Cooperative Tobacco Union, Paducah, Ky.

TOBACCO — FINE, YELLOW MAMMOTH chewing, 10 lbs., $3; smoking, 10 lbs., $2; 20 lbs., $3.50. Farmers' Club, Mayfield, Ky.

GRAIN BINS AND TANKS 90

METAL GRAIN BINS SAVE YOU MONEY. Write for circular T and prices. Spokane Culvert & Tank Co., Spokane, Wash.

MACHINERY—For Sale 93

GOOD AS NEW—USED 1½-TON TRAILER, also 25 horsepower motor, in excellent condition; bargain price. Mission Service Station, Spokane.

GANG PLOWS, NEW AND USED TRACTORS, small gas and steam engines, sawmills. Fallquist Bros., W20 Riverside ave., Spokane, Wn.

AUTOMOBILES—FOR SALE 112

SEE CHEVROLET FIRST—NEW AND USED cars at prices that will surprise you; stop in or write Inland Empire Chevrolet Sales Corp., 916 2d ave., Spokane. Open evenings. Open Sunday.

AUTO TRUCKS—For Sale 115

WHEAT HAULING AND TRUCK CONTRACTing season is now on. See our Ford ton trucks with the six-speed transmission and nower when needed; speed when you want it. National Motor Co., authorized Ford dealers, 1212 First. Phone Main 460, Spokane.

AUTO ACCESSORIES AND PARTS 119

INVESTIGATE — "THE RING WITH THE Spring" makes a poor engine good; makes a good engine better. Money back guarantee. Wire and disc wheel sales and service. Pacific Gear & Auto Parts Co., W1022 First ave., Spokane, Wash.

NEW AND USED AUTO PARTS—NEARLY all cars. A trial order is all we ask. C. & D. Auto Salvage & Supply Co., 1904 Grand ave., Kansas City, Mo.

STOVE REPAIRING 128

WRITE MYER RUBENS, SPOKANE, ABOUT stove repairs, welding broken parts, nickel plating.

FUR-BEARING ANIMALS 170

SILVER AND CROSS FOXES FOR SALE. William Rambo, 407 Sprague, Spokane.

PETS—Dogs, Birds, Etc. 171

CLOVERLAND AIREDALES—THE PERFECT farm dog; puppies for immediate delivery. Cloverland Kennels, Gooding, Idaho.

RABBITS and HARES 173

500 RABBITS FOR SALE—ALL AGES. SIX weeks to two years; utility or exhibition; raised in sanitary outdoor hutches; guaranteed free from disease; real red New Zealand Reds, American blue, American black and white checkered Giants, black and white English spotted. Write us your wants. Weiser Valley Rabbitry, Weiser, Idaho.

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PEDIGREED FLEMISH GIANT RABBITS. C. E. Cockerham, Newberg, Ore.

POULTRY 174

IF YOU NEED ANY PULLETS TO FILL OUT your flocks, we can supply February, March, April and May hatched White Leghorn pullets of Hollywood, Tancred or Tancred-Hollywood crossed strains at reasonable prices. We have about 250 very choice R. I. Red pullets. We ship all pullets with a guarantee of satisfaction or they may be returned to us within three days. We have a large assortment of used incubators which we will sell at very attractive prices. Write for quotation on pullets and incubators. Queen Hatchery, 1430 1st ave., Seattle, Wash.

CERTIFIED WHITE LEGHORN QUALITY chicks for summer and fall months, from selected free range, high egg producing breeding flocks, inspected and accredited by the Sonoma county farm bureau. Send for catalog and attractive prices. Safe delivery and full count guaranteed. Must Hatch Incubator Co., Inc., 445 Seventh st., Petaluma, Calif.

250,000 ACCREDITED BABY CHICKS FOR sale during May and June. Send in your order early. "A" grade, $6 for fifty; $11.50 per hundred; $110 per thousand. "AA" grade, $8.50 per fifty; $16 per hundred; $155 per thousand, f. o. b. Petaluma. Member of the Sonoma county farm bureau accredited hatchery list. White Hatchery, Petaluma, Calif.

WHITE LEGHORN BABY CHIX FROM flocks mated to males having sire's dam record of 240 to 297 eggs per year. Full particulars and interesting literature on request. We are accredited by Sonoma county farm bureau. The Pioneer Hatchery, 422 Sixth street, Petaluma, Cal.

SUMMER SALE "HENACRES" PULLETS: best for fall and winter eggs, $1.25 to $2 each. Hens for breeders, $1 to $1.50 each. High grade stock at reasonable prices. Booking orders now for 1924 baby chicks. Free catalog and price list. "Henacres," Box A, Prosser, Wash.

DOLLARS FOR YOUR EGGS—WE PAY THE top market prices for your eggs and poultry. Daily cash remittances. McClintock-Trunkey Co., produce department, Spokane.

SILVER WYANDOTTE AND BUFF ORPINGton stock. Prices reasonable. Mrs. Earl Davis, Elk, Wash.

LIVE STOCK 177

JERSEY BULL, GLEN TANA VENTURE; sired by Morocco's Pioneer; dam, Fern's Lucena, dropped May 9, 1919. Sale or trade. C. W. Patton, Mica, Wash.

LIVE STOCK (Continued) 177

WE GUARANTEE TO PAY THE HIGHEST market price for your poultry and live stock. Veal market growing stronger. Owing to the constant changes in the market we are unable to quote prices in this paper from week to week. We will furnish tags and prices when you are ready to ship. Write us what you have to sell. Prompt returns. John Lewis & Co., Spokane, Wn.

REGISTERED SHROPSHIRES—FIFTY EWES, two years and up; fifteen yearling ewes, twelve rams, 68 ewe and ram lambs. Some show rams. Eight registered Oxford ewes. J. W. Cook, Brownsville, Ore.

TOP PRICES PAID FOR CREAM, EGGS, poultry, pork, veal, also fruits, berries and vegetables in season. Inland Products company, Second at Cedar, Department E, Spokane, Wash.

YEARLING HAMPSHIRE RAMS, $30. ONE and two year old Rambouillet rams, $25, $50. Essex hogs, $10, $50. These prices include registration papers. Dolph Phipps, Route 3, Medford, Ore.

WE PAY TOP PRICES FOR YOUR LIVE OR dressed veal, hogs, and poultry. Your check by return mail. Shipping tags on request. M. & J. Packing Co., Spokane.

WE PAY THE HIGHEST CASH PRICE AND remit every day for strictly fat dressed veal and pork and live poultry. Address Dept. T, Welch's, Spokane, Wash.

REGISTERED SHROPSHIRE RAMS—FLOCK headers and range rams at reasonable prices. George Armstrong, Corvallis, Ore.

REGISTERED HOLSTEINS—BULLS, HEIFers and cows for sale; accredited herd. Oscar Dunlap, Junction City, Oregon.

REGISTERED BERKSHIRE BREEDING pigs, $16; big type, champion blood. Chas. O. Churchill, Shelton, Wash.

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FOR SALE—REGISTERED GUERNSEY BULL, dehorned; t. b. tested. Sam Rodius, Coeur d'Alene, Idaho.

REGISTERED HAMPSHIRE BREEDING bucks and ewe lambs. Far Niente Farm, R2, Bothell, Wash.

REGISTERED SHROPSHIRE RAMS, FROM prize-winning stock. G. H. & J. J. Thompson, Macleay, Ore.

THOROUGHBRED CHESTER WHITE PIGS: big type. Shoreacres Ranch, Route 1, Vancouver, Wash.

REGISTERED SHROPSHIRE RAMS AND ewes. Write McK. Edwards, Valley, Wash.

THREE RAMS TO TRADE FOR LAMBS. Fred Weyermann, St. Maries, Idaho.

FRESH MILCH GOATS AND KIDS. MAMIE Rand, E1024 Decatur, Spokane.

HARNESS and SADDLERY 189

SEND FOR FREE HARNESS AND SADDLE catalog today; cut out the middleman, buy direct from the manufacturer. Lowest prices in the west; satisfaction guaranteed. Established 1881. Write Pierce Harness Co., Dept. T, Spokane, Wash.

FAIRS 370

HARVEST FESTIVAL, NAMPA, IDAHO, SEPtember 18 to 21. Southwestern Idaho's great fair and livestock show. Premium list free. Write P. W. Duffes, secretary, Nampa, Idaho.

JACKSON COUNTY FAIR—SOUTHERN OREgon's great farm and livestock show, September 12 to 15. Premium list free. Write H. O. Frohbach, secretary, Medford, Ore.

TWIN FALLS COUNTY FAIR—SOUTHERN Idaho's great fair and livestock show, September 11 to 14. Premium list free. Write J. M. Markel, secretary, Filer, Idaho.

GRAYS HARBOR COUNTY FAIR—BIG FARM and livestock show, at Elma, Wash. August 29 to Sept. 2; premium list free. Write C. H. Palmer, secretary, Elma, Wash.

WESTERN WASHINGTON FAIR, PUYALLUP, October 1-7, both inclusive. 133,000 in attendance last year. You are invited to participate. W. H. Paulhamus, Manager.

NORTHWEST WASHINGTON FAIR—LYNDen, Sept. 24-29. Don't miss this great farm and livestock exhibition. Premium list free. A. E. Rusco, secretary, Lynden, Wash.

WASHINGTON STATE FAIR—THE GREAT fair and livestock show of Washington, Sept. 17 to 22. Premium list free. Write H. P. Vermilye, secretary, Yakima, Wash.

JOB PRINTING 372

WEDDING ANNOUNCEMENTS AND INVITAtations, catalogs, booklets, high school annuals, letter heads, envelopes, cards, butter wrappers, etc. Union Printing Co., 412 First ave., Spokane, Wash.

$1.50 POSTPAID—YOUR NAME AND ADdress on 200 sheets and 100 envelopes, Hammermill bond writing paper, neatly boxed. Parker Printing Co., 405 Pacific blk., Seattle, Wash.

CLEANING, DYEING, Etc. 420

FRENCH DRY CLEANING BY PARCEL post. Ladies' and gents' suits, furs, hats, etc., prompt service. Address City Dye Works (Dept. A), E422 Sprague ave., Spokane, Wash.

TANNING 425

ANY KIND OF HIDE TANNED WITH HAIR on, or for leather. Fur and taxidermy work done to order. M. R. Mohr Co., 321 Sprague, Spokane, Wash.

KODAK FILM DEVELOPING 472

FREE ENLARGEMENT WITH 75C ORDER high gloss print. Spokane Film Co.

FILMS DEVELOPED FREE—KODO. THE PICture King, S15 Stevens, Spokane.

MATERNITY HOMES 497

MATERNITY HOSPITAL; STRICTLY PRIvate; doctor in attendance; prices reasonable. Mrs. Elizabeth Peel, matron, W1324 Broadway, Spokane.

BUILDING MATERIAL 588

FIX BROKEN PLASTER WALLS WITH PERfection plaster wallboard; nailed on like lumber; takes calcimine or paint; sample and booklet from Western Wallboard Co., Seattle, Wash.

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LUMBER, LATH, SHINGLES, MILLWORK—Direct from mill to you. Free catalog and plan book. Home Builders Supply Company, Leary building, Seattle, Wash.

SEEDS 620

HUNGARIAN VETCH SEED, POSITIVELY aphis proof. Good forage crop. Write for circular describing same. We have common vetch, red and alsike clover. Corvallis Feed & Seed Co., Corvallis, Ore.

NURSERY STOCK 621

TREES—NOW BOOKING MAIL ORDERS AT reduced prices for limited time only. Apples, pears, peaches, nut trees, prunes, cherry, small fruits, etc. Live agents wanted. Lafayette Nursery Co., Lafayette, Ore.

FARM LANDS FOR SALE 651

CUTOVER LANDS, EASY TO CLEAR; $8 TO $20 per acre; 25 miles north of Spokane; on hard surfaced highway; Great Northern and Milwaukee railways; excellent opportunity for dairying and stock raising with Spokane markets and creamery near at hand. Will help the man who will live upon this land and agree to clear a part each year by giving lumber to help start his buildings, and a purebred Jersey bull to groups of farmers. Interest and payments low. Write Milan Farms Development company, Dept. T, Old National Bank bldg., Spokane, Wash.

POTATO, POULTRY, BERRIES, ALL cleared and in meadow. A few feet from paved highway; located a half mile from railroad station, good store and sawmill; excellent neighbors, fine schools, close to several good towns. Priced at only $100 an acre. Sold in 5, 10 or 20 acre parcels. Small payment down, balance in 10 years at 6 per cent. This is the best land at the price that we know of. Write or call for full information. Carter, MacDonald & Miller, 208 Columbia st., Seattle, Wash.

HIGHEST TYPE FARM LAND, WHERE SETtlers get steady and permanent employment and live at home. Level bench and river valley land; all good soil; an already well developed farm district; school, markets, roads, etc. Around Onalaska, Washington, and near Pacific highway (15 miles southeast Chehalis); 20 acres or more, $15 to $50; long, easy terms. A clean cut and fair proposition. Go to Onalaska or write Graham Land Company, American Bank bldg., Seattle.

ALFALFA LANDS — IN SUNNY SOUTHERN Alberta, in the famous Lethbridge northern irrigation district; at low prices and on easy terms. Will also grow big crops of wheat, oats, barley, corn, vegetables, small fruits, etc. Ample moisture means sure returns. Near town, markets, railways, good schools. Write for full information to the Irrigation Council, 12 Provincial bldg., Lethbridge, Alberta.

DO YOU WANT A HOME IN A RICH VALLEY near Spokane, on three transcontinental railroads? Where soil is perfect, rainfall ample. Summers cool, winters moderate? The kind of stump land that pays to clear? Timothy and clover green eight months in year; natural stock country. Land cheap, 10 yearly payments at 6 per cent. Humbird Lumber Company, Box 00, Sandpoint, Idaho.

HARRINGTON DISTRICT—540 ACRES GOOD wheat land; 100 acres pasture; creek; good buildings; macadamized road; 2 miles from Harrington; main line Great Northern; good schools, churches, stores; small payment will handle, balance easy terms; bargain; no trades. Owner, W. E. Shrader, Harrington, Wash.

BIG OPENING SALE OF YAKIMA VALLEY farm land, under an assessed state and government approved irrigation project; best, deep soil; close to town and good roads. Price $25 per acre and up. Very easy terms. Western Lands, Inc., owners, 918 Green bldg., Seattle.

BIG LUMBER COMPANY LAND SALE—IN Skagit county; 40-acre tracts, $1400; $200 cash, balance easy. Lots work for the settler. Splendid district, roads, schools, towns. Information free. H. C. Peters, 726 3d ave., Seattle.

BARGAIN—140 ACRES; 50 IN CROPS, BALance pasture; partly equipped and stocked; on Corvallis-Newport highway. $60 acre; $2000 cash, balance 10 to 28 years, 6 per cent. Emil T. Raddant, Corvallis, Ore.

10 ACRES; 5 IN ORCHARD, UNDER IRRIGAtion; 1 mile from Okanogan; dwelling, concrete cellar, cistern; nice view; $1000 cash. Write L., Box 373, Okanogan, Wash.

SELL YOUR PROPERTY QUICKLY FOR cash; no matter where located. Particulars free. Real Estate Salesman company, 501 Brownell, Lincoln, Neb.

CUTOVER LANDS, DAIRY RANCHES, $10 acre up; ten years' time. Your own terms. Grosgong Land Co., Deer Park, Wash.

FOR SALE—10 ACRES IMPROVED WATERfront; near Tacoma; $2000. Joe Lundblade, Arlington, Wash.

320 ACRES LAND; 25 CLEARED; SPRING house, barn. Particulars, write Box 381, Cashmere, Wash.

FARM LANDS—Wanted 654

NO COMMISSION — SELL YOUR FARM through Washington Farm Bureau Exchange, represented in 45 states. Lists of farms for sale by owner mailed free. 312½ Lindelle, Spokane.

I HAVE INQUIRIES FOR FARMS IN NORTHwest. Describe fully and state price. R. A. McNown, 310 Wilkinson bldg., Omaha, Neb.

IRRIGATED LANDS—For Sale 663

CORBIN ADDITION TO GREENACRES—IN the beautiful Spokane valley; 30 minutes from Spokane; paved road; 40 inches of water for irrigation; gravity flow. Ask for booklet with all information.

Return coupon—The Fred B. Grinnell company, Spokane, Wash. I am interested in the Spokane valley. Please send booklet and all information to

Name .....

Address .....

THE BEST LOCATED AND IMPROVED IRRIgated 31 acres in the early Kennewick district, very cheap. Speculators and others investigate. Jesse Reed, Route 1, Kennewick, Wash.

FOR SALE OR EXCHANGE 702

122-ACRE DAIRY RANCH, WITH STOCK; near Burley, Idaho; close in to good schools, r. r. Address F. L. Keep, Metolius, Ore.

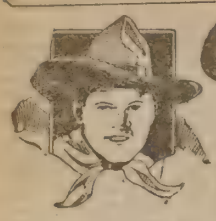
IMPROVED STOCK RANCH, 520 ACRES; NO encumbrance. Price $20 per acre. What have you? Jessie Hawthorne, Enterprise, Ore.

FOR INCOME PROPERTY—40 ACRES KENnewick irrigated land; value $12,000; improved. J. Jacot, Finley, Wash.

TO EXCHANGE—Real Estate 705

TRADE—UNENCUMBERED TIMBER CLAIM, left fork Grays river, Washington, for timber claim near Lewiston. Wallace & Co., Freier bldg., Lewiston, Idaho.

$15,000—CLEAR TACOMA INCOME PROPerty for clear farm, equipped, same value. Write owner, 3206 N. 27th st., Tacoma, Wash.



Cattle Ranch To College

By Russell Doubleday Copyright by Doubleday & McClure Co

The first time we met John Worth, the leading character in this story, he was taking an active part in preparing the little frontier village of Bismarck, N. D., to withstand an Indian attack. We next saw him playing the part of a man, although he was only 12 years old, in defending the village when the warriors appeared.

After the Indians were repulsed by the frontiersmen under the leadership of Jim McKenzie, the sheriff, and order was restored, Mr. Worth, John's father, set out for the north to search for outcroppings of coal, he being a miner as well as a freighter. He returned with news of Indian uprisings that made the establishment of a camp unwise, but when peace was somewhat restored he led a party northward. It was a great day for the boys when the wagon train started across the wild prairie, but the first few hours out brought an experience that they long remembered. They rode away from the party for a swim in the river, and when they came back to where they had tied their horses they found them gone. Afoot they started after the outfit, now miles ahead and it was late at night when they wearily dragged themselves into camp and went to bed after a supper of cold beans and coffee.

They finally reached their destination. The mine was opened and worked throughout the winter, during which the boys enjoyed many sports in the adjacent region. The following year, however, camp was broken and the start made for a new mine far to the westward.

The trip westward was filled with interesting experiences for the boys, who supplied the travelers with fresh antelope and buffalo meat. Upon arrival at the new mine, John became an employee below the surface of the earth. The pleasure of his work and play was greatly dampened by the accidental death of his closest partner under a slide of coal in the mine.

The boys became well acquainted with the Indians on their rides over the prairies after the camp's livestock.

CHAPTER VIII.

A Close Finish.

"Boys, you'll have to go and hunt those spare mules tomorrow; they haven't been seen for a week." Thus Mr. Worth greeted the boys as they came shuffling in after a long day of mingled work and play one evening not long after the buffalo hunt.

The following morning the youngsters mounted their horses, after completing their early chores, and started out. "Where shall we go?" asked Ben.

"Let's look among the Indians' ponies; those mules are always following their cayuses around." The plan was no sooner made than executed. They trotted along the edge of the river for several miles, the crisp morning air acting like a tonic on horse and rider. Baldy was too old and dignified to be foolish, but his springy stride, wide-awake look, and quick response to each word or urging betokened his good condition and enjoyment. Ben's horse, a little bunchy cow pony with an occasional wicked streak in him, danced about as if he were worked by electricity and the current was being turned on and off.

The ford reached, the ponies waded in till the boys had to cross their legs in front of the saddles to keep from getting wet.

On the other side they found a bunch of a couple of hundred horses, and as they drew near the herders came charging down on them. They feared horse thieves, but John explained matters, and after a long sign-language talk learned that there were six of the long-eared runaways tied at the camp. They had been put there for safe keeping, since they had been killing colts and were in danger of being roughly used by the horses in consequence. A grown "pony," though generally smaller, will drive out a mule in short order, and these plucky little animals are never afraid to tackle their vicious antagonists.

The boys went back on the opposite side of the river from which they had come until the camp was reached.

They found the Indian village all agog with excitement, and for a time could not get any of the braves to answer their inquiries about the missing mules. A horse race was to be held, and the usually stoical bucks could for the time being think of nothing else.

The whereabouts of the missing animals was learned before long, however, and an Indian went with them to see that they really belonged to the Worth outfit. On their way they had to pass straight through the village of several hundred tepees, and many were the greetings of "How!" that were shouted to them.

On the outskirts of the camp many braves were standing around, making bets, grooming their horses, and comparing notes. Little redskins darted everywhere in and out between their elders' legs and shouted shrilly to each other. The boys found it hard to go on to attend to their errand, and though neither said anything for a while, they looked appealingly at each other. "If we find the mules belong to us," said John, finally, in answer to Ben's questioning look, "we'll take 'em part way back, tie 'em, and then come here and see the races." So they went on reluctantly, leaving the gesticulating, grunting crowd behind them.

The captive animals were, as they hoped, the ones they had been seeking, and if the guide had any doubts of their ownership the big "W" branded on the shoulder of each beast soon dispelled them. "Lucky there's a fort near by," said John. "We'd never have seen those critters again if there hadn't been." The mules were driven back to a point convenient of access on the trip back to the mine and tied securely. Then both boys rushed over to the course as fast as their ponies could go.

Nothing had changed; the men still talked excitedly, and on either side of the level space where the horses were to run lay little heaps of personal belongings that had been bet on this or that horse—saddles, blankets, gay bead-embroidered moccasins, and belts, rifles and cartridges.

As the boys drew near, old Wolf Voice started toward them with greater speed than befitted a chief of his dignity and years.

"You got white-faced horse?" he shouted as he came near. "You run race? Me bet you now, me beat you." The grave old buck was almost childish at the prospect of racing a running horse.

Before answering, John looked over the horses that were to compete, and then consulted with his brother. "What do you think?" said he. "Wolf Voice is crazy for a race, and I think Baldy can beat anything here."

"But we haven't any money," said Ben.

"Me bet you poney, you bet um poney," said the Indian, coming up at this instant and speaking as if in answer to Ben's remark.

John would not put up Baldy as a stake for anything in the world, but he took off his saddle. "I'll bet saddle against your ponies," he said, pointing to two horses a boy was leading forward. The old brave demanded more, so John added bridle and silver-mounted bit to the pile; still he was not satisfied, but John refused to give anything more. Wolf Voice haggled and demanded larger stakes on the boy's part and finally pointed to his spurs; these were unbuckled and thrown on the ground, and at last the bargain was completed.

At this juncture Big Hawk joined the group. He was eager to bet against Baldy, but all John's possessions were already pledged. It was a trying situation for the boy, for he wanted to get even with him, and he felt sure that his horse would win. A happy thought struck him.

"Say, Ben," he called out. "Lend me your saddle to put up against Big Hawk's pony. I haven't got anything left." The younger boy was also eager to pay back the young brave for his work at the buffalo hunt, so he complied with this request unhesitatingly.

The wagers arranged, John looked to his horse. Baldy was now without saddle or bridle, but his owner speedily made a hackamore or halter out of a piece of rope and climbed on his back; he had decided to ride bare-back.

A number of braves were clearing the course for the racers, who had already lined up at the starting point, but old Wolf Voice rushed down and asked them to wait a minute for the new entry. In the meantime John was trotting up and down, warming up his mount. In a few minutes Baldy was in his place with the others. The horses all knew what was to be done, but Baldy did not become excited and tire himself as did some of the others.

They all lined up a hundred feet from the starting place. The course, which was merely a level, grassy place, stretched out invitingly before them; the Indian spectators formed the boundaries on either side, their usually impassive, dark-red faces working with excitement. At a word from the starter the horses went forward at a trot, then changed to a lope, and were breaking into a run when, a few yards from the scratch the boy riding Wolf Voice's bay shot out of the line and ahead. Of course they had to be called back, and the boy was sharply reprimanded for spoiling the start.

Then again the horses started and came down to the scratch steadily. At the starter's yell of approval, they sprang ahead with a dash.

After the jolting scramble of the start, John began to plan his race. He pulled his horse out of the bunch and ran on the outside. Baldy and he were about the middle of the string as the fast ones led away. The little bay, which was the old chief's pride, led, running beautifully; at his heels was a big gray, fully holding his own. The distance of half a mile was more than half covered and both bay and gray were ahead of Baldy, who was third and well in advance of the bunch. The crowd was yelling wildly, each man shouting encouragement to his favorite in a way that would make an eastern baseball "rooter" turn pale with envy.

John lay down closer upon his horse's neck and chirped gently in his ear. There was a perfect understanding between them, and the old steed stretched out his neck a little more, laid his ears hard against the side of his head, and set out to overhaul the leaders, now running nose and nose. Baldy's long stride told, and he gained steadily, but the race was not yet over. If he could get abreast of the two leaders John knew that he could win out on a 20-foot spurt if need be—he had done it before.

It was but 50 yards from the finish. The two Indian ponies were tiring, but they kept up the pace gamely. The crowd was yelling insanely, uttering threats, encouragements, entreaties in the Indian dialect, which neither John nor Baldy understood; but just at the critical moment a clear, shrill voice rose above the din: "Now, Baldy, hit it up! Get a move on, John!"

Horse and rider braced. John set his lips tighter: they were gaining, gaining perceptibly each second. The two leaders were whipping their ponies spasmodically, but John and Baldy kept their heads. Now Baldy's nose was on a line with the gray's hind quarter, now even with his shoulder, and now all three horses were running as if harnessed in one team. And still he gained. John was becoming excited and raised his quirt. "Come, Baldy, do it!" he cried, and at the same moment brought down the lash on him. The game old horse responded magnificently. A few great jumps and they gained three-quarters of a length. Another instant and they dashed past the finish line. Baldy had won!

John slipped from his back and patted his nose affectionately. "Good work, old chap. I knew you could leave that lot of cayuses behind."

"Hurrah for you, John!" cried Ben as the victors drew near. "Baldy, you're a trump, sure enough."

The boys were soon the center of a circle of red faces, excited, threatening, joyful, or merely interested, according to their bets. All were anxious to race again, but John refused. Realizing that he and Ben would be expected home, he broke through the ring, put his saddle and bridle on one of the horses he had won from Wolf Voice, mounted, and started off, leading the other two and Baldy. Ben managed as best he could with the mules, and so they returned to the mine, the richer by three ponies, several trinkets, moccasins, etc. It was not till a good deal later in life that the boys learned how much better worth while it is to race merely for the sake of the sport itself, and what a surprising amount of trouble a man can bring on himself and other people by forming a habit of betting. At present they unthinkingly followed the examples of the rough men around them.

In the year and a half that was spent at this mine on the Yellowstone many opportunities were offered for Baldy to show his speed, but the redskins had learned caution and were never again so reckless as on this memorable occasion.

The friendly feeling between the red and the white boys grew as time went on, and many excursions were taken in company. The Indians told John and Ben things about birds and beasts of which they never dreamed, and showed them games that were a constant delight. They made a kind of combination spear and skate from the curved rib of a buffalo to the end of which were fastened three feathers; the highly polished convex surface offered little resistance to the ice, so the whole could be thrown a long distance on the glassy surface. The Worth boys grew to be very expert throwers of this queer bone skate, and many were the exciting matches they participated in.

Our boys in turn taught their coppery friends some civilized games. Trials of strength and skill were frequent, and in most of them the honors were about even. While the red boys could give points on the art of wrestling and never lost an opportunity to show their superiority, the Worth youngsters got even by initiating them in the "noble art of self-defense." John put in practice the points given him by Tom Malloy, much to the discomfiture of the Indian boys and the corresponding satisfaction of his teacher and the men of the mining camp.

The new sport did not become popular, however, in the redskins' camp; John was too successful—his opponent was invariably worsted.

And so the days passed, with more work and less play perhaps, than most boys are accustomed to. Many pleasant evenings, after the day's work was done, were spent by the men telling yarns. John and Ben slipped out often, joined the group, and listened eagerly to the tales that were told. It was on one of these nights that Charley Green told a tale that entirely eclipsed Munchausen; a tale that would never have occurred to a westerner.

"You know Big Hawk?" he began, looking at the men around him and then out of the corner of his eye at John. "Well, Big Hawk has seen the boys, and especially John, box, and made up his mind that he could do something in that line himself—at least that is my idea of his method of reasoning." He interrupted himself to explain: "He challenged John

(Continued on page eighteen.)

Parker McAllister

It was a trying situation for the boy.

Bits of Fun For Everyone

Yeah-r.

Winter can not jump to summer without a spring, and
Summer can not jump to winter without a fall.—Boys' Life.

Soft Answer.

He—I suppose when all women vote the party managers will have to put handsome men on their tickets for candidates.

She—What makes you think women will demand handsome men to vote for when you look at the kind most of them marry?—Farmer and Breeder.

As Elucidating.

Efficiency Expert Barr—That's funny. I've been studying this business chart for an hour, but I'm unable to discover what it means.

Mrs. Barr—No wonder. The baby scribbled that.—American Legion Weekly.

Lucky.

Archie—That's a very nice engagement ring that Phyllis is wearing.

Reggie—Yes, I've been quite successful with it, you know. Five girls have worn it already and all I've paid on the thing so far is $6 down.—American Legion Weekly.

Some Mistake.

The telephone in a well-known surgeon's office rang and the doctor answered it. A voice inquired, "Who is this?"

The doctor readily recognized the voice of his 7-year-old son. Although an exceedingly busy man, he was always ready for a bit of fun, so he replied:

"The smartest man in the world."

"I beg your pardon," said the boy, "I have the wrong number."—The Austin (Texas) Cumberland.

An Exchange of Courtesies.

One of the young bloods of the town recently invited a beautiful young siren of the merry-merry to dinner. She belonged to that section of Broadway sisterhood classed as "beautiful, but dumb."

When the young man met her he became gurglingly enthusiastic.

"My gracious," he said, "you look like a bit of rare old tapestry.",

"You're not so snappy-looking yourself," she retorted.—O. O. McIntyre in St. Louis Globe-Democrat.

The Silver Lining.

"Mister," began the seedy-looking man, "I haven't got no home and——"

"No taxes to pay?" interrupted the man addressed, "no coal bills! no worry lest the landlord raise your rent. Permit the to congratulate you."

"I have no job and——"

"Lucky chap! No danger of getting fired."

"But I'm serious, mister. I have no money and——"

"No temptation to spend it foolishly on able-bodied beggars. Why, you're the very child of fortune. Good-day!"—Boston Transcript.

FAMILY CIRCLE

ALICE W. BARLAND
EDITORIAL CONTRIBUTOR

IF SHE BUT KNEW!

If mother only knew how I regret
The anxious hours, the worry and the fret
I gave her long ago. If she could see
The tears I shed all unavailingly
To my sad wish, I should not call in vain:
"Mother, come back! Forgive me once again!"

If she could only know how tenderly I prize
Only the memory of her dear eves—
How all her words seem holy as a prayer,
And how with tears and sad repental care
I've tried to be like her, both brave and true—
Ah, if she knew! If mother only knew!
—LILLIE E. BARR.

Experience Letters

Dear Mrs. Barland: I am the mother of three fine boys and a little girl, so enjoy reading what the young people write. I like the frank way E. A. B. introduces himself; he has a strong will, a love for fun, and an appreciation of worth. Try this, E. A. B.: Take that nice girl to a good show, watch the show closely, learn the big moments, the high morals and the real value of the story. If you don't find real fun reviewing together the story, the comedy, the tragedy, the costumes, in fact, the whole show, you are out of tune with life. Climb to the highest peak, play tennis or any game you both can play. It is the sweet memories of the real things that bring joy as we travel on. Whatever you have seen that you liked, that nice girl will like to hear you tell about it. Let her laugh with you, tell her your hopes and plans. Remember that the nice girl does not forget, and that it is hardly a safe game, or a fair one, to spend your play time with the wild girl and expect to marry the good girl.

Each day we paint a bit of memory's picture.
We paint it fast, nor can it be erased.
Let's paint it bright with joy, and fun and laughter.
Ne'er dip our brush in shades of doubtful hue.
Let not our brooks show murky, in our picture,
But clear, like mirrors we may look into.
And looking back, see joy and fun and laughter.

I like the suggestion by J. W. The good things we do may be very interesting and helpful also. The best way to overcome the unpleasant is to give more thought to the pleasant. M. S.

Family Circle Girls

Dear Mrs. Barland: I live on a 220-acre farm, one-half mile from town. Though this is the first letter to the Circle, I have not been asleep as to its happenings, as I have read every letter with a great deal of interest.

I am glad to know that there are yet many real girls and boys. By real girls and boys I mean girls who are not flappers and boys who are honorable, manly young men. These kinds have at times seemed quite scarce, but if one looks long enough they can be discovered.

I liked the letter by the young man, H. K., and hope it will help every girl who reads it. I think it is very nice of you, H. K., to be so frank, for we girls are not mind readers, you know. The next time I write I shall give a girl's view of boys.

I do not believe in any mushy love business between boys and girls, but I think it a fine thing for a girl to have a good boy friend, a regular "pal." I don't think a girl should think seriously about a boy until she has finished her education. (I don't intend to.) I was graduated from high school last June and intend to go to college this fall.

I should like very much to have the question of education, suggested by "Happy Daisy," discussed by the Circle. If some one will lead, I shall join in.
GERTRUDE K.

Dear Mrs. Barland: I wonder if Sis from Tulip Town always does that much work. I believe in a girl doing her part, but I don't believe in spoiling a boy by doing work which wouldn't hurt him to do and would probably do him good.

I have two brothers, both younger than I, and they do the milking and other chores while I do my work.

I think the subject mentioned by Happy Daisy a good one and no doubt the girl she alludes to will be helped by the discussion. It is hard to have an opinion when one knows nothing of the circumstances. I imagine from what Happy Daisy wrote that the girl will have to board away from home. If so, she might write good, long weekly letters to her father, and, if possible, she should go home for the week-ends and, of course, should spend all holiday seasons with her father. In answer to the question: "Under what circumstances should one sacrifice his education," will say there are two words which would answer, and they are health and wealth.

One sometimes has to sacrifice his education on account of his own health and sometimes on account of the health of some member of the family. I think every one who possibly can should go through high school, providing he is going for the actual good he can get out of it. Some go, it seems, just for the good times to be had. I believe in the good times, but not in neglecting studies to have the good times. I don't believe in running out nights and losing sleep and unfitting one's self for the school duties.

I don't consider it advisable for girls to to go with strange boys nights, nor for girls as young as 11 and 12 to be going out with boys. I know several who do. What do the rest of you think about it? From the letters in the Circle it would seem that there are not many of the flapper kind of girls and I hope there are not. I believe the larger percentage of the girls are of the better class.

With best wishes to all, "MICKEY."

This voices the sentiments of one of the younger girls, but one old for her years.
A. W. B.

Dear Mrs. Barland: Do you mind if children of 14 write to your column? I have lived in the country and the city and like both places.

I don't think there is enough enjoyment planned for children living in the country. The only time we meet is at school. I believe there should be a party planned at least once a month in the school buildings or some place. We could have a little dance and some games and a general good time.

The girls in my school seem to have more cliques or sets than the boys do. In my room the boys have one set and the girls two; there are really three, the "popular set," the "unpopular set," and the set that tags the "popular set." It seems to me that the majority of the girls in my room are snobs.

I have plenty of friends, but not many in this community and I am just like "Lonesome" in that way. I wish some of the "popular" girls would send in a recipe for friendship, if there is such a recipe.

I don't seem to understand the poor little flappers, but they have my heart-felt sympathy. The flappers' letters seem funny to me, but maybe I don't understand as I am too young.

My brother and I are great chums and always have good times together during our summer vacations. We have a beautiful farm and have many pets for company. I like to be kind to all animals and to have them trust me.

I have known many boys and girls to come home from Sunday school and then go out and steal fruit and other things. Sunday school doesn't seem to do them any good and I think they need to be taught the 10 commandments week days as well as Sundays, from the way they talk and act. "DICKEY."

Family Circle Boys

Good Morning, Mrs. Barland: May I come in? I have wanted to do so for some time, but didn't seem to have any right until lately.

I want to tell the bachelor from Oregon my way of making bread, which I think will do away with lots of work for him.

First, get a large pan, called a bread rising pan; it has a cover with holes in it. At noon put two yeast cakes (I use yeast foam) in a teacup of water. After supper sift about one and one-half gallons of flour into another large pan, take two quarts of warm water, one small teacup of melted lard, two heaping tablespoons of sugar, one heaping tablespoon of salt, and to this add the yeast foam that has been soaking and mix all together.

Warm the flour before you begin and make a large hollow place in the middle of it before you pour in the liquid mixture, stir it into a hard lump and knead hard for half an hour. Next grease your bread rising pan and put the bread in it. Put on the cover and fold a clean blanket or quilt four double, set the pan in the middle and fold in the corners. At 4:30 or 5 o'clock the next morning my bread is ready to make into loaves, which I do the first thing. This will make eight loaves and I place them around the stove and bake as soon as they rise to double their size. It is all baked by 7 o'clock, before I start to the field. This will last me a week. After the bread is cold I put it into a tin wash boiler with a tight lid and it keeps well to the end of the week.

My letter is pretty long and I will close, wishing all my bachelor friends success with my way of making bread. I read the Circle and get much good from it.
Washington. B. P. L.

Babyhood

Baby life is a brook serene
That joys to mirror a larger scene.
Tiny tragedies make great plash;
But, sudden, merry the ripples flash.
—Julia M. Martin.

Just Folks

Experience hinders as well as helps.

Academic wisdom can solve any problem.

He who can not enjoy details can not enjoy life.

It was my privilege to be present at the Harding memorial services in the armory in Spokane. To me one feature of the services outweighed all the other features. It was the brief period of silence when the crowded audience of 3000 souls bowed their heads in common with memorial audiences throughout the country at the concerted time. The newspaper report of the meeting says: "Not a sound could be heard in the armory and outside a strange calm was felt."

Here was one time and place when Catholic and Protestant, when Jew and Gentile, when Greek and Barbarian could unite in spirit, each according to his own conscience, and pay that homage which death exacts from all.

It seems almost as that summons to silence had come down all the way from the Prophet Zechariah, who exhorted: "Be silent, O all flesh, before the Lord."

That silence is deeper than speech has been acknowledged in all ages; "the silence that is in the starry sky," and that silence which "is deep as eternity."

Babel voices are playing havoc with national affairs, with our own daily lives, and the oncoming of periods of reverent silence are imperative.

We have not cultivated the silences as we should, nor appreciated what they could do for us. E. A. S.

Extension Service at the Fair

(Continued from page six.)

altering the commercial pattern, showing the type of dress for slender, ideal and stout person and proper and improper dress.

I started some berry bushes this year. How should I train them?

All the latest methods of training raspberry and loganberry bushes will be seen in the horticulture booth. These may be examined and studied.

What would it cost me to drain some of my land, and where can I find out about drainage?

Drainage costs and the results you could expect to receive if you have the soil may be studied in the exhibit. A number of home-made devices, to be used on the farm in running levels and working around drainage ditches, may be seen which will help you in your everyday work.

Will all the exhibits be in chart form, or will there be some action?

Considerable action has been added to the exhibit this year. For instance, in the farm management booth it will show a hen laying an egg, and for every egg she lays it will give the cost of feed, upkeep and profit. Watch the hen and find out how much you can make on chickens.

Why does the extension service of the college send out an exhibit each year?

It is the function of the extension service to take the facts secured by the experiment station, good farm practices and other facts determined by the United States department of agriculture and give them to the people. Exhibiting at fairs is one of the most effective methods of having people see and learn.

HOOK ONTO THE WIRE.

If there is a power line in your community, hook onto it and install some electrical devices in your home. Or maybe you can afford an electric plant of your own.

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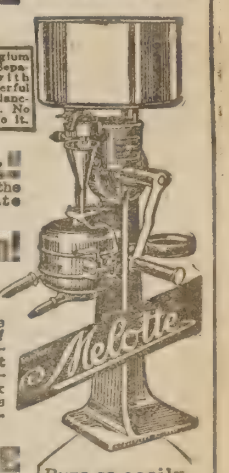

days' free trial—then, if satisfied, only $7.50 and a few easy payments — AND — the wonderful Belgium Melotte Separator is YOURS.

No Money Down!

Catalog tells all—write.

Caution! U. S. Bulletin 201 shows that vibration of the bowl causes *cream waste!* The Melotte bowl is *self-balancing.* Positively cannot get out of balance therefore cannot vibrate. Can't remix cream with milk. *The Melotte has won 26 Grand and International Prizes.*

Catalog FREE

Write for new Melotte catalog containing full description of this wonderful separator and the story of M. Jules Melotte, its inventor. Don't buy *any* separator until you have found out all you can about the Melotte and details of our 15-year guarantee which is infinitely stronger than any separator guarantee. Write TODAY. How many cows do you milk?

Runs so easily, bowl spins *minutes* after you stop cranking unless you apply brake. No other separator has needs a brake. Bowl chamber is *porcelain lined.*

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High Points in News of the Week

Had Warren G. Harding lived but a few weeks longer he would have witnessed the formal ratification of the treaty which he had in mind between the five leading maritime nations of the world when he called the international conference early in his administration to consider the limitation of navies.

Last week official representatives of the United States, Great Britain, France, Italy and Japan met in Washington, D. C., and formally deposited their respective governments' ratifications of the treaty. As a result, the destruction of war vessels in various numbers by these governments will begin immediately, as provided in the treaty. The ratio of capital war ships between these five countries as named above is provided in the treaty to be 5-5-3-2-2.

The ratification of the treaty recognizes a reservation made by the United States, namely, that this country shall not be bound to use military force in international controversies to which it is not a party, under the terms of the four-power Pacific treaty, which is also now in effect. This four-power treaty, which is between the United States, England, France and Japan, provides that war shall not be entered into between any of these four nations until the four shall first have consulted in a formal hearing in an effort to settle the controversy without resort to arms.

Under the navy limitations treaty this country and others have already ordered the cessation of construction works in their navy yards.

Friends of world peace believe that these two treaties will go far toward guaranteeing the future peace of the world, though none is so bold as to see in them an absolute preventive of war.

* * *

There exists in this country today an organization called the Association Against the Prohibition Amendment. Under its leadership the fight for the return of liquor through the modification of the Volstead enforcement act or the ultimate repeal of the prohibition amendment to the national constitution is being made. This organization last week sent broadcast a statement of their plans for the campaign to gain control of congress next election. This statement reads as follows:

"The Association Against the Prohibition Amendment won a real victory in the 1922 election.

"Conditions are favorable for a more impressive triumph in 1924 and we believe that you will be interested in our plans to this extent.

"As the political situation stands, our organization has an excellent opportunity to graps the balance of power in next year's political contest by working now to awaken public sentiment in such 'pivotal' or 'key' states as Massachusetts, Connecicut, New York, New Jersey, Pennsylvania, Maryland, Ohio, Illinois, Wisconsin and California.

"The states mentioned contain 45 per cent of the population of the country and all are more or less favorable to the repeal of the Volstead law. It is the task of the association so to organize these states that it will be for the party that wins them in 1924 to make concessions along the line of repealing or modifying the present prohibition laws."

* * *

The department of labor last week announced a continuation of the downward trend of the prices of general commodities in the United States. Since the first of April, according to the report, the decline in general prices has averaged 6 1-3 per cent. The principal declines were in fuel, lighting material, cloth and clothing and certain agricultural crops, notably wheat.

* * *

The movement is still under way to settle by arbitration the controversies between the anthracite coal mine operators and the miners, which threatens to cause an anthracite coal strike beginning September 1. Chairman Hammond of the United States coal commission summarized the situation as follows last week: "It would be suicidal for either party to assume responsibility for the suspension of industry, and I have too high a regard for the operators and miners to think they could commit such egregious folly. And yet, such things have been done."

* * *

Premier Poincare of France has made it clear that it is the intention of that country to pay its war debts to the United States regardless of collections it may be able to make from Germany.

* * *

An election is soon to be held to fill 153 seats in the parliament of the new Irish Free State.

* * *

An explosion in the Kemmerer coal mine at Kemmerer, Wyo., last week resulted in the death of 99 miners.

* * *

The war department is reported to have included in the budget which it will ask for the next fiscal year $1,500,000 for improving fortifications at the Panama canal.

Farm Business and Markets Outlook

(Continued from page five.)

Prices per ton, in carlots—Chicago—No. 1 timothy, $25@27; No. 2, $21@25; No. 1 light clover, mixed, $21@25; No. 1 clover, $19@22; No. 2 clover, $14@18; No. 1 and choice alfalfa, $16@25; midland prairie, $16@18; rye straw, $13@14; oat and wheat straw, $10.50@11.50.

Good Eggs Remain Firm.

Prices on top quality eggs are firmly maintained because of limited supplies. General quality of receipts is beginning to show improvement, although most of the arrivals are still irregular. Receipts are running slightly behind the volume moving into consumptive channels and withdrawals of short held stocks in storage have been made to supplement the supply of good eggs. Excess holdings over last year of 229,000 cases, as shown by the preliminary report of 10,390,000 cases on August 1 this year, were the largest on record and compare with 10,161,000 cases in 1922 and a five-year average of 7,811,000 cases.

Butter Market Steady.

A shortage of only 2,182,000 pounds of butter in cold storage holdings on August 1, compared with a year ago, as shown by the official report on warehouse holdings, was far out of line with the general expectancy of the trade. However, consumption remains excellent and the output of butter is falling off considerably each week and consistently running behind a year ago, so that prices are well maintained, even in the face of the "bearish" report.

Cheese Prices Sustained.

With a good demand for cheese for both immediate consumption and storing purposes, prices remained firm last week. Stocks of cheese in storage on August 1 aggregated 55,526,000 pounds, the largest on that date since 1919, and about 20 per cent larger than last year. Prices on No. 1 American cheese on August 15 were: Chicago, Twins, 23@23½c; S. Daisies, 23@23½c; D. Daisies, 23@23½c; Longhorns, 24@24½c; square prints, 23½@24c.

Fruits and Vegetables.

The white potato crop forecast amounts to about 3½ bushels per capita, or about the same as 1921 and 15 per cent less than in 1922. On this basis a favorable season for the grower appears probable. Yields in the important states show decreases of 10 to 33 per cent below 1922. Carlot shipments for the season to August 13 total 40,905 cars, compared with 54,851 cars to the same date in 1922. Shipments are running rather light at present and prices are holding fairly steady. Irish Cobblers, U. S. No. 1, are quoted at $2 to $2.10 per 100 pounds in Chicago and at $1.35 at Colorado and Idaho shipping points.

The apple crop promises to be a good one in spite of reports of an extremely heavy summer drop. The commercial crop is about 2,000,000 barrels larger than last year, the increase being located mostly in the Pacific coast states, Michigan and the Virginias, while New York shows a decrease.

LATEST QUOTATIONS.

The Live Stock Market.

PORTLAND, Aug. 18.—Cattle—Choice steers, $7.25@8; medium to good steers, $6.75@7.25; fair to medium steers, $5.75@6.75; common to fair steers, $4.75@5.75; choice heifers, $5@5.50; choice cows and heifers, $4.25@5; medium to good cows and heifers, $3.75@4.25; fair to medium cows and heifers, $3@3.75; common cows, $2@3; canners, $1.50@2; bulls, $3@4; choice dairy calves, $9@10; prime light calves, $9@10; medium light calves, $8@9; heavy calves, $5@8.

Hogs—Prime light, $9@9.50; smooth heavy, 230 to 300 lbs., $8@9; smooth heavy, 300 lbs. and up, $6.50@8; rough heavy, $5@6.50; fat pigs, $8.25@8.75; feeder pigs, $8.25@8.75; stags, subject to dockage, $2.50@5.

Sheep—East-of-mountain lambs, $9.50@10.25; choice valley lambs, $9.50@10; medium valley lambs, $9@9.50; common valley lambs, $7@8.50; cull lambs, $6@7; light yearlings, $7.50@8; heavy yearlings, $6@6.50; light wethers, $6@6.50; heavy wethers, $5.50@6; ewes, $1.50@5.50.

SPOKANE, Aug. 18.—Cattle—Prime steers, $6.75@7.25; good to choice steers, $6.25@6.75; medium to good steers, $5.50@6.25; fair to medium steers, $5@5.50; common to fair steers, $4.25@5; choice cows and heifers, $5@5.50; good to choice cows, heifers, $4.50@5; medium to good cows, heifers, $4@4.50; fair to medium cows, heifers, $3@4; canners, $2@2.50; bulls, $3.25@4; light veal calves, $8@9; heavy veal calves, $6.50@8; stockers and feeders, $4@5.25.

Hogs—Prime mixed, $9@9.50; medium, $8.75@9.25; heavies, $6@8.50; fat pigs, $8.75@9; stockers and feeders, $8.50@8.75.

Sheep—Prime lambs, $9@10; fair to medium, $7.50@8.50; yearlings, $7@8; wethers, $5.50@7; mutton ewes, $3@5.

The Grain Market.

PORTLAND, Ore., Aug. 18.—Wheat—Hard white, Bluestem, Bart, $1.06; soft white, western white, $1.05; hard winter, 98c; northern spring, 98c; western red, 97c.

SEATTLE, Aug. 18.—Wheat—Hard, soft and western white, $1.06; hard, hoft and red winter, northern spring and western red, $1.01; Big Bend Bluestem, $1.07.

ODESSA, Wash., Aug. 18.—Bart and Bluestem, 88c; White Hybrid, Club, 86c; Forty-Fold, 85c; Turkey red and Marquis, 84c; Jones Fife.

WALLA WALLA, Aug. 18.—Bluestem and Bart, 91c; Club, 90c; Turkey red, 82c.

PULLMAN, Wash., Aug. 18.—Red, 81c; white, 85c.

Hay and Feed Grain.

SPOKANE, Aug. 18.—Feed wheat, $38 per ton. Oats, $40 per ton; rolled, $44. Corn, $44 per ton; cracked corn, $46 per ton. Barley, $36 per ton; rolled, $38. Bran, $23 ton. Bran and shorts, $24 ton. Shorts, $26 ton.

Hay—Alfalfa, $20 ton in ton lots, $16@18 carload lots; new timothy, $21@22 in ton lots, delivered; $19 a ton in car lots f. o. b. Spokane.

PORTLAND, Aug. 18.—Millfeed—City delivery prices: Millrun, $26 per ton; middlings, $38; scratch feed, $48; rolled barley, $37@39; cracked corn, $48; rolled oats, $40.

Hay—Buying prices, f. o. b. Portland: Alfalfa, $15.50@16 ton; cheat, $13@14; valley timothy, $18@19; eastern Oregon timothy, $20@22; clover, $13@14; oat, $14@15; oat and vetch, $15@16; straw, $8 per ton.

General Product.

PORTLAND, Aug. 18.—Butter—Cubes, extras, 42@43c lb; prices, parchment wrapped, box lots, 47c; cartons, 48c; butterfat, 46c delivered Portland; average station buying price, 43c lb. Eggs—Buying price: White hennery standards, 30c per doz; mixed color standards, 27@28c doz. Selling price, Front street selects, 38c; candled ranch, 35c. Association selling prices, cash at store, selects, 35c; firsts, 37c; pullets, 30c. Cheese—Prices to jobbers, f. o. b. Tillamook: Triplets, 27c; longhorns and loaf, 28c per lb. Poultry—Hens, 14@23c; broilers, 24@27c; ducks, nominal; geese, nominal; turkeys, nominal. Pork—Fancy, 13c per lb. Veal—Fancy, 16c per lb.

Onions—Walla Walla Globes, $1.60@1.75 per hundred. Potatoes—New Oregon, $1.25@1.75 per hundred; sweet potatoes, 9@10c per lb. Vegetables—Cabbage, Oregon, bulk, 1½@3c lb; lettuce, $1.25@1.50 crate; garlic, 17¾@20c lb; tomatoes, $1.25@2 box; celery, 75c@$1.10 doz; peas, 6@7c; peppers, green, 10@12½c lb; cucumbers, 40@75c box; beans, 5@6c lb; corn, 75c@$1.35 sack; bunched beets, 35@40c doz; bunched carrots, 35@45c doz; radishes, 30@35c doz; green onions, 30@35c doz; beets, $2@2.50 sack; carrots, $2@2.50 sack; rutabagas, $2 sack; egg plant, 8@10c lb; summer squash, $1@1.25 crate.

SEATTLE, Aug. 18.—Eggs—Select local ranch, white shells, cases included, 34c per doz f. o. b. Seattle; mixed colors, 32c per doz; pullets, 24c per doz; checks, 20c per doz; cases returned to shippers, 1c less; eastern Washington, case count, 28c per doz f. o. b. Seattle.

Butter fat—F. o. b. Seattle: A grade, 48c per lb; raw milk, $2.25 per cwt.

Poultry—Hens, 4½ lbs and up, 22c per lb; do 3½ and under 4½ lbs, 15c per lb; broilers, 1½ lbs and heavier, 24c per lb; do heavy broods, 1 to 1½ lbs, 23c per lb; hens, 3 to 3½ lbs, 12c per lb; do dry picked, 2c above live; capons, live, fat, 6 to 10 lbs, 35c per lb; do dry picked, fancy, dressed, 37c per lb; do roosters, 11c per lb; Belgian hares, 3½ lbs and heavier, 12c per lb; geese, fat, live, 15c per lb; ducklings, live, 3½ lbs and up, 16c per lb; ducks, old, over 3 lbs, 15c per lb; turkeys, fat, dry picked, 8 to 10 lbs, 30c per lb; do live, 25c per lb; squabs, large, dressed, $4.50 per doz; pigeons, $2; guineas, $8 per doz.

Beef—Steers, fancy, 7c per lb; cows, fat, 5c per lb.

Farming State of Mind

(Continued from page five.)

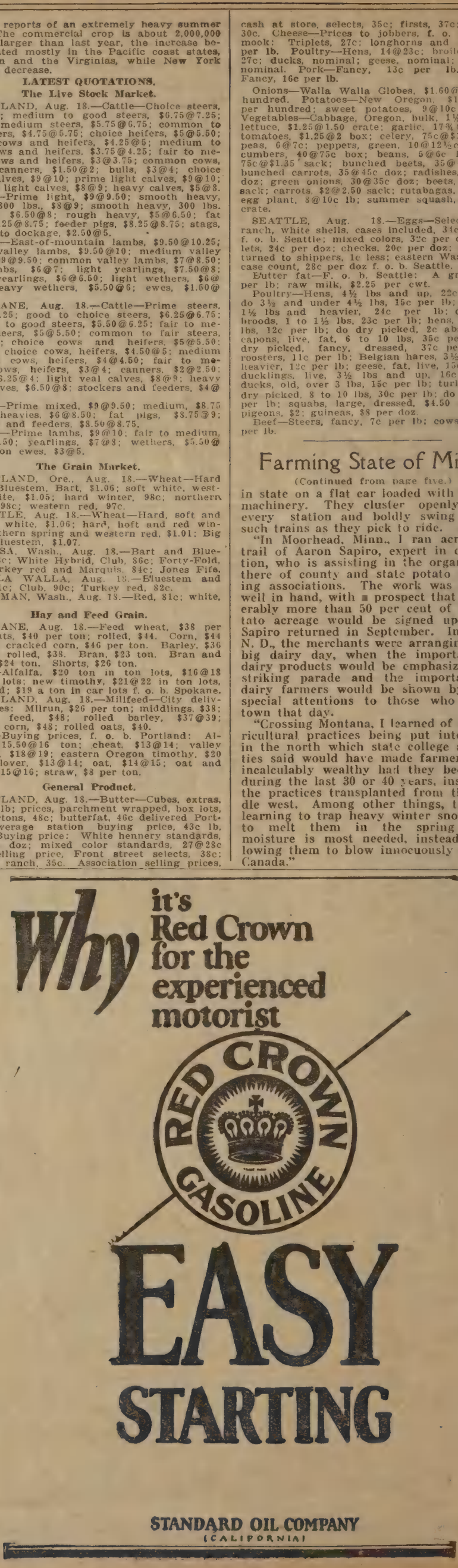
in state on a flat car loaded with harvest machinery. They cluster openly about every station and boldly swing aboard such trains as they pick to ride.

"In Moorhead, Minn., I ran across the trail of Aaron Sapiro, expert in cooperation, who is assisting in the organization there of county and state potato marketing associations. The work was already well in hand, with a prospect that considerably more than 50 per cent of the potato acreage would be signed up before Sapiro returned in September. In Fargo, N. D., the merchants were arranging for a big dairy day, when the importance of dairy products would be emphasized in a striking parade and the importance of dairy farmers would be shown by many special attentions to those who visited town that day.

"Crossing Montana, I learned of new agricultural practices being put into effect in the north which state college authorities said would have made farmers there incalculably wealthy had they been used during the last 30 or 40 years, instead of the practices transplanted from the middle west. Among other things, they are learning to trap heavy winter snows, and to melt them in the spring where moisture is most needed, instead of allowing them to blow innocuously on into Canada."

Range of Live Stock Prices for Week Ending August 15

CATTLE.	Chicago.	Spokane.	Portland	N. Salt Lake.
Choice prime and heavy steers (1100 lb. up)	11.50@12.60	.....	.....	.....
Good heavy steers	10.25@11.60	.....	.....	.....
Medium heavy steers	8.50@10.50	.....	.....	.....
Common heavy steers	6.50@ 8.75	.....	.....	.....
Choice and prime light steers (1100 lb. down)	11.40@12.35	.....	.....	.....
Good light steers	10.00@11.50	.....	.....	.....
Medium light steers	8.50@10.25	6.25@ 7.25	6.75@ 7.50	6.50@ 7.25
Common light steers	5.75@ 8.65	4.25@ 6.50	4.50@ 6.75	4.50@ 6.50
Common to choice butcher heifers	4.25@10.75	2.75@ 5.25	2.50@ 5.00	3.00@ 5.00
Common to choice butcher cows	3.25@ 9.35	2.00@ 4.75	2.00@ 4.50	2.25@ 5.00
Bologna and beef bulls	3.25@ 5.00	2.75@ 3.50	3.00@ 4.00	2.00@ 3.50
Canners and cutters, cows and heifers	2.35@ 3.50	1.50@ 2.50	1.50@ 2.00	1.50@ 2.25
Canner steers	3.25@ 5.75	2.50@ 3.50	2.50@ 3.50	2.25@ 3.25
Medium to choice light veals	8.25@12.75	7.00@ 8.00	8.00@10.00	7.00@ 8.00
Common to choice heavy veals	3.00@12.50	6.00@ 7.00	5.00@ 8.00	.....
Common to choice feeders (750 lb. up)	5.90@ 9.00	.....	.....	.....
Common to choice feeders (750 lb. down)	4.35@ 8.50	4.00@ 5.25	.....	4.50@ 5.50
Common to choice stocker cows and heifers	3.25@ 5.50	.....	.....	.....
HOGS.				
Top of market	8.70	9.25	9.50	7.35
Bulk of sales	6.40@ 8.60	7.75@ 9.10	8.00@ 9.25	6.50@ 7.25
Heavy (250 lb. up)	7.00@ 8.35	7.75@ 9.00	8.00@ 9.00	.....
Medium (200-250 lb.)	7.15@ 8.70	8.25@ 9.25	8.75@ 9.25	6.50@ 7.25
Light (150-200 lb.)	6.90@ 8.70	8.85@ 9.25	9.00@ 9.50	6.70@ 7.35
Light lights (130-150 lb.)	6.70@ 8.50	8.00@ 9.00	8.50@ 9.25	.....
Smooth packing sows (250 lb. up)	5.80@ 6.75	6.25@ 7.25	6.50@ 7.50	5.50@ 6.50
Rough packing sows (200 lb. up)	5.50@ 6.25	5.50@ 6.25	5.00@ 6.50	4.50@ 5.50
Medium to choice pigs (130 lb. down)	6.25@ 8.00	8.25@ 8.75	8.50@ 9.00	.....
Stock pigs	.....	8.00@ 8.50	8.25@ 8.65	.....
SHEEP AND LAMBS.				
Medium to prime lambs (84 lb. down)	10.25@12.85	8.00@ 9.00	8.50@10.00	9.00@10.75
Culls and common lambs	8.00@10.50	7.00@ 8.00	6.00@ 8.50	7.00@ 9.00
Medium to prime yearling wethers	7.50@11.00	6.00@ 7.00	6.00@ 8.00	5.50@ 7.00
Medium to prime wethers	5.00@ 9.35	4.00@ 6.00	5.50@ 6.50	4.75@ 5.75
Medium to choice ewes	3.75@ 8.00	3.00@ 5.00	3.00@ 5.00	3.00@ 4.00
Culls and common ewes	1.00@ 4.00	2.00@ 3.00	1.50@ 3.00	2.00@ 3.00
Feeder lambs	10.75@13.00	.....	.....	.....



Your Health

By Royal S. Copeland, M. D., F. A. C. S.

In the course of a year very many persons write to me for advice about skin troubles. One particular ailment is the topic of many letters. This is the disease called "psoriasis."

Dr. Copeland.

There are several diseases of the skin characterized by redness of the surfaces and more or less extensive scaling. The chief of these is the one under discussion. In this trouble there are round, well-defined patches of redness, covered with scales, silvery in appearance.

The affected spots are raised a little above the natural level of the skin. The scales can be scraped off easily. When cleared the surface may show a few bleeding points.

It is not uncommon to find the knees and elbows affected. Sometimes the scalp is the seat of trouble. The palms of the hands and the soles of the feet are rarely attacked. Occasionally the fingernails are included in the invasion. Indeed, any part of the body may be diseased, although psoriasis rarely appears on the face.

There is little itching, as a rule, and the affected parts are dry. The disease has been described as looking as if mortar had splashed the surface and dried there. Sometimes a patch of "psoriasis" will heal in the center, leaving a ring of diseased skin. No scars are left after the sore spots have healed.

In local treatment the skin should be soaked in a solution of hot water and soft soap, to which has been added borax or bicarbonate of soda. With this solution and a hard brush all the scales should be removed.

Then ammoniated mercurial ointment may be applied. Five grains of salicylic acid may be added to an ounce of the mercurial ointment, and this may be applied locally.

The patient should have a low protein diet, avoiding eggs, meat, fish, fowl, liver and the other high protein foods.

The X-ray has been found useful in many cases. It is to be thought of especially if the patches are very small.

Latest High Class Patterns for the Home

Please order the patterns you desire at least two or three weeks before you wish to use them. Desiring to obtain the latest high-class patterns for its readers, THE FARMER has made arrangements to have them sent dircet from the east, and under present mailing conditions it takes abcut that time for them to reach you.

3979-4265. Ladies' costume. Waist 3979, cut in seven sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. Skirt 4265, cut in seven sizes: 25, 27, 29, 31, 33, 35 and 37 inches waist measure. To make this dress for a medium size will require 5 3-4 yards of 36-inch material. The width of the skirt at the foot is three yards. Two separate patterns, 10 cents for each pattern.

4469. Child's apron. Cut in four sizes: 6 months, 1, 2 3 years. To make the apron in either size will require three-fourths yard of 24 or 27 inch material. Price 10 cents.

4470. Girls' dress. Cut in four sizes: 6, 8, 10 and 12 years. An 8-year size requires 2 3-4 yards of 32-inch materail. Price 10 cents.

3980. Child's dress. Cut in four sizes: 1, 2, 3 and 5 years. A 3-year size will require 1 1-2 yards of 36-inch material. Price 10 cents.

4098. Ladies' apron. Cut in three sizes: Small, medium and large. A medium size requires 2 1-2 yards of 36-inch material. Price 10 cents.

4179. Ladies' house dress. Cut in six sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. A 38-inch size requires 4 5-8 yards of 32-inch material. The width at the foot is 2 1-8 yards. Price 10 cents.

4455. Ladies' dress. Cut in seven sizes: 36, 36, 38, 40, 42, 44 and 46 inches bust measure. A 38-inch size requires 5 5-8 yards of 40-inch material. The width of the skirt at the foot is 2 1-4 yards. Price 10 cents.

4451. Ladies' coat. Cut in seven sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. A 38-inch size requires 4 1-8 yards of 54-inch material. Price 10 cents.

4467. Boys' suit. Cut in four sizes: 3, 4, 5 and 6 years. A 4-year size requires 3 1-4 yards of 27-inch material. Price 10 cents.

4461. Ladies' night dress. Cut in four sizes: Small, 34-36; medium, 38-40; large, 42-44; extra large, 46-48 inches bust measure. A medium size requires 3 5-8 yards of 36-inch material. Price 10 cents.

4465. A pretty blouse. Cut in seven sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. A 38-inch size requires two yards of 32-inch material. Price 10 cents.

4481. Ladies' skirt. Cut in seven sizes: 25, 27, 29, 31, 33, 35 and 37 inches waist measure. To make of one material requires 3 3-4 yards 40 inches wide for a medium size. The width at the foot is 2 1-2 yards. Price 10 cents.

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Pattern No..... Size..... Pattern No..... Size.....

Name .....

Postoffice..... State.....

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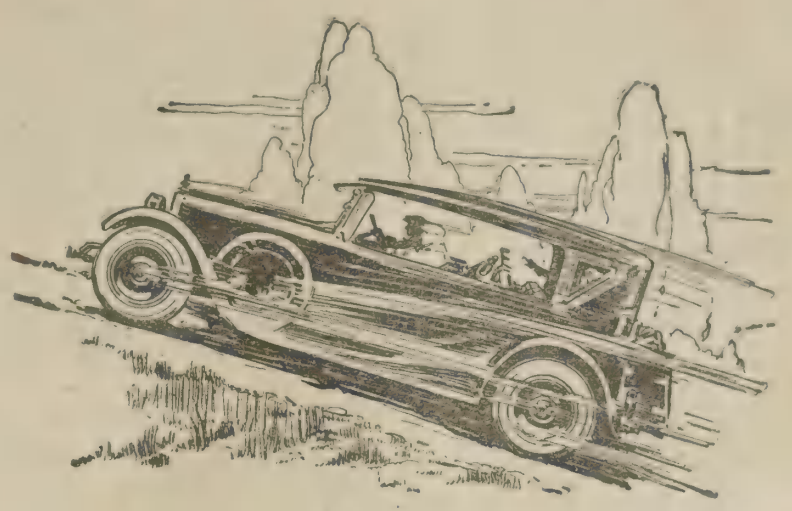
Be sure to give the pattern number and the correct size.



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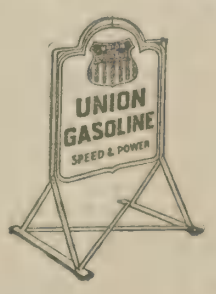

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Union Oil Company
of California

Union Gasoline

Alyda Tenbrink of Island county, Wash., is a new cousin. Her cousin told her about the Children's Corner. Alyda has a gray and white kitty with two baby kittens. They are blark and white.

A girl in Okanogan county, Wash., Opal Carpenter, sends in the following jokes, for which we thank her: "Is Mr. Black in?" inquired the caller. "No!" he has gone to lunch," replied the stenographer. "Will he be back after lunch?" "No! That is what he went after." Mr. White—Your dog just bit a piece of flesh out of my leg. Mr. Wells—Glad you mentioned it; I was just going to feed him. Bind, he had a little pen. He used it every day, and when he tried to fill the thing, the ink ran all astray.

Leatha Runner and her sister had fun riding on the wagon while their grandpa hauled hay. T pole stuck out from the rack in the back and while he drove from cock to cock they climbed on and rode. Leatha is an eastern Washington girl. She will be in the fourth grade next year at school.

Seven-year-old Elsie Cramer writes her first letter and we are happy to hear from her. Elsie will be in the fourth grade next year at school. She has a little brother named Robert. Elsie and Robert's pets are two kittens, a cat, three calves and a dog named Shep. September 9 Elsie will be 8. She lives in Spokane county, Wash.

A message reaches us from Rosale Staeheli, who has never written to us before. Rosale is nine and has three brothers, all younger than herself. The pet in the Staeheli home is a dog named Sport. Rosale's home is in Stevens county, Wash.

Birthday Greetings

THURSDAY, August 23.—Emma Baum, 10 years old; Pauline Robinson, 11.

FRIDAY, August 24.—Leslie Smyth, 10 years old; Grace Lenore Woodyard, 10.

SATURDAY, August 25.—Marguerite Duffy, 11 years old; Mildred Jones, 9; Artise Elaine Morris, 9; Helen Wayne, 11; Lavelle Wilson, 11.

SUNDAY, August 26.—Ruth Brown, 10 years old; Dora Malone, 9; Kenneth Sieveke, 8.

MONDAY, August 27.—Ethel Lindberg, 11 years old.

TUESDAY, August 28.—Dale Early, 7 years old; Thelma Melger, 11.

LETTERS WELCOMED BY AUNT NELLIE.

Among recent letters received by Aunt Nellie are those from cousins whose names follow. A few of these will be published each week in the regular edition of THE FARMER and others will appear fro mtime to time in The Junior Farmer:

Bernice Clemons, Martha Moorehouse, Paul Fox, Mildred Brown, Delores Evans, Lemerl Birdsell, Thelma Martinson, Norma Rogers, Bessie Pendell, Otto Strom, Olive Altha Martin, Martha Steinke, Olga Foster, Mildred Gallagher, Fae Casey, Hazel Baker, Venice Williams, Myrtle Lovain Williams, Esther Weston, Nanna Hazelton, Evelyn Ellis, Carol Simerman, Gertrude Schrag, Mabel Terry, Matilda Louise Guler, Beulah E. Warren, Lawrence Rice, Madeline Wilton, Irene Severson, Earnest Long, Reuben Helmbigner.

Virgene Fife, Bertha Osborne, Lewis Gibbs, Faye Palmer, Nellie Powell, Alice Johnson, Georgia Muriel Hanson, Hazel Baker, Belle Matson, Esther Doering, Lorna Vogelaar, Mildred Waranka, Edward Wildermuth, Hulda Giese, Gus Van Der Pole, Elna and Ethel Early, Itha Bowen, Lena Schauerman, Frances Schnuriger, Gertrude Reimann.

BEDTIME STORIES

By THORNTON W. BURGESS.

MATTERS ARE SETTLED.

Farmer Brown's boy came into the old orchard whistling. It was good to hear some one who seemed happy and wanted everybody else to feel happy. he truth is there had been very little happiness in the old orchard since Bully the English sparrow had moved there.

So it was good to hear the whistle of Farmer Brown's boy, for there had been no song or whistle for days and days.

"I wonder if Skimmer the swallow has babies by this time. He ought to have. I believe I'll pay him a call."

Straight across the old orchard he walked to the tree in which Skimmer had built his nest in the summer. Just imagine how surprised he was when, as he drew near, Mrs. Bully and not Mrs. Skimmer appeared in the doorway to see what was going on. The whistle of Farmer Brown's boy stopped abruptly. "Hello!" he exclaimed. "What are you doing there? I must have a look into this. I certainly must.

"The last time I was here Skimmer was living in that house. I wonder if you stole it from him the way you steal grain from my chickens. It would be just like your impudence, too. You may be all right in the country you came from, but you're a nuisance here in America."

He walked straight over to the tree where the nest was. Such a fuss as Bully and Mrs. Bully did make! Once all the other little peeople in the old orchard would have left, oh! so sorry for any one whose nest Farmer Brown's boy had found, but now there wasn't so much as a single peep of sympathy. Although Farmer Brown's boy didn't know it, many eyes were watching him, and for the first time there was hope and not fear in them. Fear, great fear, and sorrow and anger were all mixed up together in the voices of Bully and Mrs. Bully as they flew about frantically, but Farmer Brown's boy paid no attention to them. He slipped a hand into the hole in the tree where the nest was, and when it came out it brought the nest with it.

"One, two, three, four, five, six," counted he as he spread the nest open and looked

"Hello!" he exclaimed. "What are you doing in there?"

at the speckled eggs, while Bully and Mrs. Bully cried as if their hearts would break. "If these belonged to anybody but you I wouldn't touch them," he declared. "As it is, I'm obliged to take them. I'm sorry, but it is so. If I didn't I would prove myself a poor friend of all the other birds in the old orchard. The old orchard needs them and it doesn't need you. You don't do any good yourself, or if you do it is so little that it doesn't count, and you drive away the birds who do do good. I suppose I ought to get my gun and shoot you, but I can't do that. You are dirty, noisy, useless nuisances, but you are no cowards, and I just can't hurt you. I suppose you can't help being what you are. But I can't have you driving out my other friends, so you can't nest here."

With this he tore up the nest and walked off with the six eggs. Jenny Wren sighed with relief. "Now they certainly will go away," said she.

(Copyright by J. G. Lloyd.)

Cattle Ranch to College

(Continued from page fourteen.)

something in this fashion: 'You heap big fighter,' he said, 'me show you.'"

The men in the circle began to grin; they were beginning to take in the joke. John and his brother gazed in amazement; all this was new to them.

"Though he is a pretty big chap," Green continued, "the kid didn't seem to be scared; he knew how to put up his hands and the big red duffer was entirely ignorant of fistic tactics. Anyhow, the boy called the bluff by responding, 'Well, I don't know, I reckon I can do you up.' Ben was sent for the gloves, those primitive, deerskin-stuffed-with-grass affairs. A space was cleared on the dry grassy bottom, and the spectators marked the boundaries. The spectators were mostly red," added Green.

"Produce a spectator," shouted a listener.

"Proof, proof, we want proof of this."

"Never mind him," exclaimed another; "go on, Charley."

"I'm not making affidavits. I'm simply telling a story," Charley explained. "Big Hawk, knowing it to be a kind of battle, had arrayed himself in full war regalia, which consisted chiefly of a big feathered bonnet and a decorative effect in yellow, red and green paint."

The group of interested listeners chuckled, but offered no remarks or objections. John and Ben appeared to be dazed.

"Tom Malloy was the referee and I acted as John's second. Wolf Voice did the same service for Big Hawk.

"When the two stepped into the ring," Green continued, "the tall, paint-decorated, feather-tufted Indian and the short, pink-skinned boy, a smile appeared on the usually grave-faced red men. I said to myself, 'Is this a Punch and Judy show or a scene from the inferno come to the surface? 'Time!' sang out Tom Malloy, watch in hand."

Green stopped to take breath, then continued:

"The two stepped to the center, and the red man decided to settle matters at once. A strong right-arm jab followed. John dodged, and the force of the blow nearly jerked the Indian off his feet, and at the same time pulled the war bonnet over his eyes. The boy took advantage of this and thumped Big Hawk on the chest. The Indian cleared his eyes and came at him like a wounded buffalo, head down, hands going like flails; avoiding them, John hit out for the nose and landed square on his beak. The buck tripped and fell on his back and the blood began to flow freely from the bruised member, mingling with the yellow and green paint, forming a very weird design. It was enough, Big Hawk was satisfied and hastened to get off the gloves and bathe his nose at the river's edge."

From time to time during the recital of this tale Green glanced at the boys to see the effect of his absurd story. That they were greatly amused was evident. Cries of "Come off!" "What are you giving us?" and the like followed the conclusion, and Charley Green subsided, congratulating himself on his vivid imagination.

The feeling between the two camps, or rather the younger members of them, was not always friendly, and the boys were glad their father came back after opening a new mine, told them that he had bought a sheep ranch, and asked them if they wanted to go to work on it. The brothers accepted eagerly, for they were possessed with the restless spirit of the westerner and were anxious for new scenes and new experiences.

Much had transpired during the long stay at the Yellowstone mine. The railroad, with its busy construction gang and its noisy, short-breathed engine, had reached and passed the little camp and had left behind its steel trail. The tracks were not used for regular traffic as yet, but the little dinky engine went by frequently, dragging flat cars loaded with rails, ties, and other construction material. The boys became great friends of the engineer, and he allowed them to ride with him in the cab of the locomotive occasionally.

It was with real regret, therefore, that one morning, as the iron horse stood near the mine, hissing and grunting in impatience to be off, the boys climbed up the step and into the cab to bid their friend, Mr. Jackson, goodby.

"What! going to pull up stakes?" he inquired. "I've got three boys about your size back in the east at school, where you ought to be," he added.

"Well," John replied, "mother has talked about school, but father says he's going to teach us to work first."

"Father's great on work," interposed Ben.

In answer to Mr. Jackson's inquiry, John said that they were to start in a day or two and would go alone, driving a buckboard; and that though they did not know the road the horses had been over it, so with that aid and the description given they would be able to find the way.

"Well, so long, boys," said the kindly engineer, after they had shaken hands and thanked him for the many engine rides, "I shall miss you."

"Same here; so long!" called Ben and John in chorus.

The little engine began to cough, the steam puffed and hissed, and in a few minutes it was out of sight around the turn.

A day or two later the boys climbed into the buckboard, and, after bidding a matter-of-fact farewell to all, started off: on a journey to a place neither of them had been to before, over a road that was entirely unfamiliar to both.

With their father's last instructions ringing in their ears, they set out at a good pace.

The 150-mile drive lasted five, long, wearisome days. Day after day they traveled, sitting still on the bouncing, rattling buckboard. The white-topped wagons that came into view occasionally were hailed with relief, for they somewhat broke the monotony of the journey; a word or two with these drivers and a question as to the location of the best grass, wood and water—camp necessaries—was all that passed, but even that was a comfort after the desolation and loneliness through which they had been passing.

On the fourth day the Big Horn river came into view and was crossed in safety. The appearance of the country changed, and the boys for the first time saw real mountains. Living, as they had been, on the flat prairies, their surprise was as great as their interest and delight at these massive hills uprearing themselves against the sky. The day following they drove up to the door of the ranch house and were received cordially by Abe Miller, the foreman in charge. In obedience to their father's command they delivered a letter of instructions, and while Abe was painfully studying this out, his hardened forefinger pointing to each word as he went along, the boys had ample time to observe him as well as their new surroundings. They saw that he was short and rather fat and blessed with the face that is apt to go with that build: it was decidedly cheerful, for the corners of his mouth turned up; even now there was a half smile on his lips, though his brow bore a perplexed frown from his literary struggle. The ranch buildings, which consisted of half a dozen rough sheds and as many more corrals, beside the ranch house or log shack, lay in a valley. On one side rose a high range of mountains, wooded to the summit; on the other, a long, rolling, grass-covered plain.

"I don't see any sheep," said John, after scanning the country in every direction.

Abe looked up, but held his stubby forefinger pressed firmly on the last word he was deciphering, as if to make sure of its safety.

"Oh, they're 25 miles down the creek now," he answered. "We only keep them here in the winter. We'll go there tomorrow; it's too late now."

By the time the ranchman had finished the letter the sun was nearing the mountain crest and the boys' appetites assured them it was time to eat. In the shack a low fire was burning, which blazed cheerfully when John added an armful of twigs and brush. While the boy was mending the fire Abe went to one corner of the cabin and from a tall pole which stood there let down part of a sheep's quarter.

"Why do you keep it up there?" asked Ben, who now noticed it for the first time.

"No flies up there," explained Abe. "Meat keeps in this climate till it dries up if the flies don't get at it."

The boys went out and sat on the doorstep to wait till the meal was cooked, for though they were more tired than they realized, they had the greatest curiosity to see everything connected with this new home.

After sitting silent a while, their heads resting on the doorjamb, their eyes on the crest of the mountain where the sun shone with its last departing glory, John turned toward his brother.

"These mountains are great. We didn't have—— Say, Mr. Miller, what's this?" he asked excitedly, interrupting himself and pointing, first to some bullet holes in the logs and then at a blood stain on the block below.

(To be continued.)

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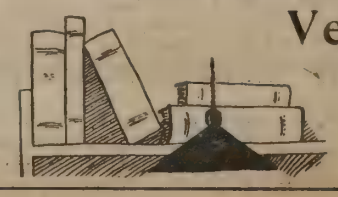

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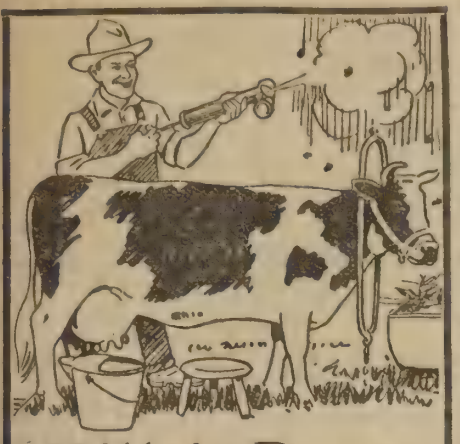

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Culling the Herd

"No dairyman can cull his herd intelligently until he knows what all of his cows are doing, and there is nothing like the records from a cow testing association to give him these figures," asserts John Ford of the Novelty community near Duvall, in the northern part of King county.

"I had two cows in the herd when I began testing that I intended to butcher. I thought I would give them a trial and found that one produced 42 pounds and the other 48 pounds of butterfat per month," said Mr. Ford. "They were both young animals but did not milk up as well as I thought they should. Since I had no way of telling that they had a good butterfat test, I did not realize that they were two of the best cows in the herd. I had one cow, a registered Guernsey, that produced 50 pounds of butterfat for the month of May. She was a purebred, but I had no papers on her and had planned on selling her.

"This goes to show that a man must have some check on his cows before he lets them go, if he is going to cull them intelligently. I have always believed in three essential points to be followed for getting the best returns from the cows. They are: Breeding, weeding and feeding. It is hard to say just which one of these ranks first, but I have found that they are all very important points to watch."

Mr. Ford has 45 cows and heifers in the entire herd, and had an average fat production of 35.6 pounds for the month of May. He has a new herd bull, Chicona Hero, formerly herd sire at the Orchard Hill farm, at Redmond, Wash., owned by Dr. Park Weed Willis of Seattle. He is sired by King of the Medfields and is out of Hazel's Girl of Chicona, who had a fat production of 456 pounds and 8864 pounds of milk. This herd bull replaces a Holstein bull, and Mr. Ford expects to get some very good grade Guernsey calves that can be raised for milk cows.

There are 114 acres on the bottom and 140 acres of hill land on the Ford farm, and it is an ideal location for a dairy farm. Mr. Ford has been on the place only four years, and has built up the entire herd during that time. He expects to remodel his dairy barn, put up another silo, and have the entire place fitted as a real dairy farm, in the course of a few years.

IN REGISTER OF MERIT CLASS.

The cows in the E. O. Erickson herd of Yakima have been making creditable records, but only recently there were eight cows which met all requirements for the register of merit class. Mr. Erickson is especially well pleased with the results, since they were made with two milkings a day and just ordinary care, the cows running with the rest of the herd. This speaks well for the quality of the stock, which was put on official test.

Sultan's Figgis of Jersey Home made 11,745 pounds of milk, containing 664.69 pounds of fat, in 365 days. She produced this record as a 4-year-old, when only 384.8 pounds of fat was required for advanced registry, thus making nearly double the amount necessary to qualify.

As a 3-year-old, Sultan's Flower Girl produced 13,132 pounds of milk, containing 596.63 pounds of fat. This was a 365-day test. A good record was also made by a 2-year-old heifer. Her record was 6056 pounds of milk, containing 301.76 pounds of fat, the test being for 305 days.

Sultan's Victor Rose, made a good record for the time that the test was continued. She was sold to a Canadian buyer before the record was completed, but in 288 days she produced 8403 pounds of milk, containing 445.31 pounds of fat. The record was made as a 4-year-old.

A cow 13 years old, Vesta's Figgis, produced in 305 days 8007 pounds of milk, containing 423.37 pounds of fat. Brown Lad's Lady, 9-year-old, produced in 365 days 11,130 pounds of milk, containing 544.33 pounds of fat.

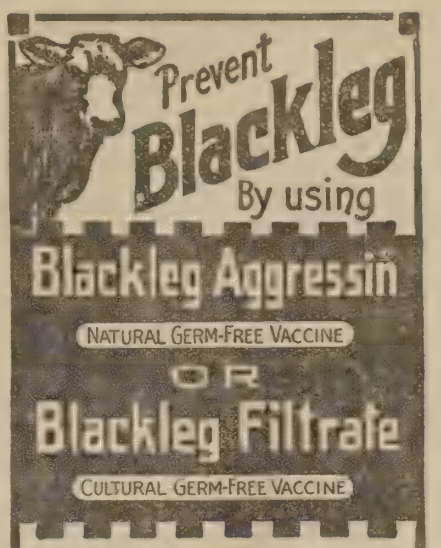
Gold Bug's Wild Rose, 5 years old, produced in 365 days 10,315 pounds of milk, testing 5.25 per cent and containing 541.93 pounds of fat. Raleigh's Beauty of Jersey Home, 6 years old, produced 10,690 pounds of milk in 365 days, containing 538.09 pounds of fat.

SOLD THROUGH ASSOCIATION.

A carload of grade Holstein cattle from Whatcom county shipped to Roy, Utah, recently makes a total of $9000 worth of animals that have been sold through the efforts of the Washington State Holstein-Freisian association during the last two months. This last car was selected by R. T. Davis of Weiser, Idaho, and was purchased by R. P. Townsend. The animals were picked from the following breeders: Ed Hoem, Snohomish; Lee Brothers, Youngquist Brothers, Mount Vernon; Hollywood farms, Hollywood, Wash., and Carnation Stock farms, Seattle.

GUERNSEY BREEDERS ORGANIZE.

On the 4th of July Guernsey breeders in the vicinity of Spokane, Wash., met at Little River farm, owned by M. H. Jerdee, near Buckeye, and organized the Spokane County Guernsey Cattle club. The following were elected to office: President, Dr. W. J. Keyes of Spokane; vice president; J. C. Trotter of Rockyford; secretary-treasurer, Mrs. Anna J. Odell of Valleyford.



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Best blood lines, well grown, good individuals. Booking orders for fall weanlings. Would sell few good sows.
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Shropshires, Oxfords and Dorsets
Fitted show rams for good registered flock headers; range rams in lots to suit.
20 Shropshire ewes, sired by imp. Brewin 92; 20 Oxford breeding ewes, 40 Dorset breeding ewes and ewe lambs. All priced according to value.
FLOYD T. FOX, Silverton, Ore.

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Range or stud rams and ewes, from one to a carload. Angora bucks and does. Priced for quick sale.
WM. RIDDELL & SONS, Monmouth, Ore.

Shropshire Sheep
Yearling and lamb rams, ewes of all ages. Sired by best rams obtainable.
FELZER BROS., Tangent, Ore.

Oxford Downs I have 21 registered yearling rams for sale, well kept and large for their age. Can also spare a few choice ewes.
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Red Wing Jennie Van Yeksa Starlight, four years old last May. Sire, May Rose Yeksa Starlight; dam, Jennie Van, 664 lbs. fat. His three nearest dams average 748 lbs. fat. A show bull; was second at Pacific International in very strong competition. Would consider calf of good breeding in part pay.
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CRANDALL & LYNN, Salem, Ore.

Milking Shorthorns Cows and young bulls by Peerless Knight, by Beau of Glenside, carrying 93¾ per cent of champion milch cow, Rose of Glenside.
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Our show herd will be exhibited at
Chehalis, Spokane, Lewiston (Idaho), Yakima and Salem (Oregon.)
Remember that none of these animals were purchased for show purposes, have all been in the herd three years or over, and with only two exceptions, the whole herd was bred at Hollywood Farm.
Hollywood Farm Hollywood, Wash.

The department editors of this paper are anxious to be of service to you. Do not fail to write to us if they can be of help to you.

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EXPERIMENT STATION
URBANA ILL

Come out of the fog on this feed question

Let the light of science show you why the home-mixing poultryman can't possibly "see" what he's doing

Let's assume that Mr. Poultryman can buy his feed ingredients as cheaply as we can (which he can't). Let's assume, further, that he knows how to balance and blend them as well as we do (which he doesn't). The big point is—

What has he got when he's through? He has an egg mash, of course. But what sort of mash? Is it *exactly* the same as the last batch he mixed? Is it the same in protein? In carbohydrates? In fat? In fiber? In food essentials, such as vitamins? ..... It's hard to tell! *He* can't tell. He doesn't know. He can only guess and grope along, as a man in a fog.

Contrast this with the clear-as-day analysis of mill-made, mill-mixed Sperry Feeds and—what's the answer? The man who keeps on mixing his own feeds is only leading himself—and his profits—up a "blind alley." You must remember that all the ingredients that enter into an egg mash may test differently. All bran, all middlings, all barley, all soya bean meals, are not the same. They may look alike—but they are not. It takes laboratory analysis—nothing else and nothing less—to "show up" their real value.

Take carbohydrates for example. *Bran* may range from 53 to 61%; *middlings* from 56 to 62%; *barley* from 56 to 71%; *soya bean meal* from 26 to 30%; *cocoanut meal* from 28 to 55%; *meat scraps* from nothing to 10%. And so on—you find the same kind of variation in protein, fat, fiber, etc.

That's why the Sperry system of laboratory control—the finest on the Pacific Coast—gives you something money can't buy: It gives you the assurance, the certainty, that every time you feed Surelay, for example, your hens are getting the *same* uniform, balanced ration. No guess work; no chance of slip-up or mix-up!

It is this kind of sure-feeling and sure-feeding that makes Surelay the "cheapest" feed you can buy. Why waste time and trouble mixing feed—only to have your hoppers filled with doubts and disappointments? Order Surelay-in-the-yellow-striped-bag from your dealer, and send for the new Sperry Service Bulletin, "Why Mixed Feeds," written by Dr. Kaupp—one of the greatest authorities on feed investigation. Mail the coupon now—it's free!

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Let's Go!

SEASON *of* 1923

Can Low Priced Wheat Be Fed Profitably?—Page 7

Would Continue Farm Protection

Thomas J. Drumheller, head of the Washington Wool Growers' association, has been appointed chairman for the state of Washington to organize nonpartisan tariff clubs to oppose proposed reductions in the protection on agricultural products.

A telegram to Mr. Drumheller from F. J. Hagenbarth of Salt Lake City, president of the National Wool Growers' association, said:

"Powerful organized commercial interests are making concerted efforts antagonistic to western producers, demanding that the tariff commission reduce the tariff on agricultural, mineral, live stock, dairy and other western products.

"To continue prosperity and enable the farmers to remove their debt burden, conditions must remain stable and unaffected by tariff changes. With this in view, we have accepted the chairmanship of the organization committee of the western tariff association, now organizing nonpartisan tariff clubs in every western state, and have issued a call signed by western governors and producing organizations for a western nonpartisan tariff congress."

Mr. Drumheller, who returned recently from Chicago, where he marketed 3500 lambs, said: "The proposed reductions, fostered by the big users of western raw materials, would injure the entire west. The tendency in the east is not to give a whoop for the farmer. The change would throw agricultural industries back where they were two or three years ago."

The present law puts a protective tariff o.. cattle of from 1 1-2 to 2 cents a pound; on sheep, of $2 a head; on fresh lamb, of 4 cents a pound; on hogs of 1-2 cent a pound; on bacon, hams and shoulders, of 2 cents a pound; on lard, 1 cent a pound; on milk, 2 1-2 cents a gallon; on cream, 20 cents a gallon; on eggs, 8 cents a dozen; on rye, 15 cents a bushel; on wheat, 30 cents a bushel; on wheat flour, 78 cents per 100 pounds; on potatoes, 50 cents per 100 pounds.

All of the foregoing farm products were without protection under the old law. It is feared by those who are opposing a return to the old law that free trade or reduced protection would put American farmers in direct competition in their own home markets with the products of Canadian farms and ranches. Dairy producers and live stock men also fear heavy imports of butter, cheese and meats from other foreign countries.

Your Health

By Royal S. Copeland, M. D., F. A. C. S.

Lord Carnarvon's death was a shock to everybody. He was in the very center of the limelight. The most indifferent could not resist the glamour of his startling discoveries in Egypt. Everybody talked about King "Tut" and the splendors of his tomb.

Dr. Copeland.

Then came the news of Carnarvon's illness due to the insect bite, his attack of pneumonia, his brave fight and the final surrender to death. Added to this were the rumors of secret poisons in the tomb, the anger of the gods and the whisperings of the mystics.

To me there is not the slightest mystery about the death of this archaeologist. He was the victim of loss of sleep, of excitement, of the heat and stress of the climate, of bad air and, finally, of infection carried to him by some one afflicted with a cold in the nose or chest.

Carnarvon's resistance was lowered by all the things I have mentioned. Then came the bite and the natural illness incident to poisoning by a venomous insect, but materially aggravated by the physical depression of the man.

You see how the way was prepared for the successful attack of the pneumonia germs. Some careless friend or visitor sneezed or coughed them into the air within breathing distance of Lord Carnarvon. He became infected when his fighting powers were already exhausted.

Dissipation is a common factor in preparing the way for pneumonia. I do not mean drunkenness or carousing. I mean neglect of the body, needless waste of energy, deliberate abuse of the natural laws. You can not burn the candle at both ends and get away with your foolishness without a sharp rebuke from Mother Nature.

Abundant sleep at regular hours.
Good food at regular hours.
Exercise at regular hours.
Reasonable regulation of your regular work.
Regular inspection and repair of your body.
These are the rules of right living.

Use Washington Honey

To the Editor: As a meeting of the Yakima County Beekeepers' association, held at Sunnyside on July 25, it was decided to make a slight advance in the price of honey this season. Beekeepers in this association have been keeping some records of production costs and have found that it costs the average producer around 10 cents to produce a pound of extracted honey and put it in the 60-pound cans. Before these get to the freight office, drayage, costs of cases and advertising must be added.

The year 1922 was a hard one for Yakima beekeepers, as they sold their honey at around 8 cents, about 2 cents below actual cost. The 1923 crop is cut short at least 25 per cent, owing to damage from spray poison.

The honey crop in Walla Walla valley is said to be very short and California has no honey for export this year. Yakima valley beekeepers are very much discouraged. Many men with $15,000 to $20,000 invested in bees and equipment have to work at odd jobs through the winter in order to make a living.

Washington honey consumers should demand honey produced in Washington. It won't cost the consumer much, if any more than imported honey. H. N. PAUL.
Mabton, Wash.

NEW CHAMPION GUERNSEY.

The July report of official testing in Washington shows a new class DD senior 3-year-old) champion Guernsey. She is Bob's R. S. Royalette, owned by Valley Gem farm of Arlington, that produced 13,349.10 pounds of milk containing 641.40 pounds of fat in one year. This record displaces that of La France of Bralee, owned by Dr. A. Macrae Smith of Bellingham, and it also gives the Valley Gem farm heifer eighth position on the national roll of honor.

Hay at $10

"I may be putting the estimate too low, but I feel confident that I can raise alfalfa hay for $10 a ton," said L. T. Wilson, a farmer and stockman of Ellensburg, Kittitas county, Wash. "In fact, I figure that if a man can't raise hay for less than $10 a ton he has very poor prospects for his income.

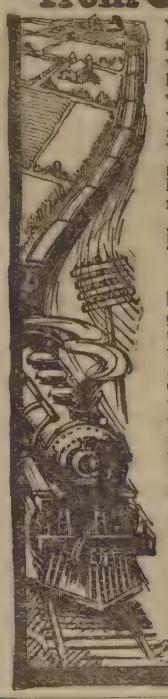
"It may be that I am working a different system than the average hay grower, but the only thing that I lay it to is that I thoroughly plan my work each day. A man must get out early every morning, get his chores done, and keep up a certain pace during the day. I figure on nine hours in the field on an average, and two hours for chores, and another two hours for irrigating. I, of course, take an hour off every day for all three meals. This schedule is for the haying season, and I try to always carry it out the same way."

Mr. Wilson has met with some strong opposition in his neighborhood, since many of the growers insist that alfalfa hay can not be produced at $10 a ton, but that the figure is closer to $12 and some even set the figure at $15. Mr. Wilson has agreed to keep a farm account book next year, and keep track of every expense incurred.

MAKE IT A REAL HOME.

Make the home worth while by eliminating a lot of its drudgery.

Opportunity Calls from CANADA



Visit Canada this summer—see for yourself the opportunities which Canada offers to both labor and capital—rich, fertile, virgin prairie land, near railways and towns, at $15 to $20 an acre—long terms if desired. Wheat crops last year the biggest in history; dairying and hogs pay well; mixed farming rapidly increasing.

Homeseekers' Rates on Canadian Railroads

If you wish to look over the country with a view to taking up land get an order from the nearest Canadian Government Agent for special rates on Canadian railroads. Make this your summer outing—Canada welcomes tourists—no passports required—have a great trip and see with your own eyes the opportunities that await you.

For full information, with free booklets and maps, write

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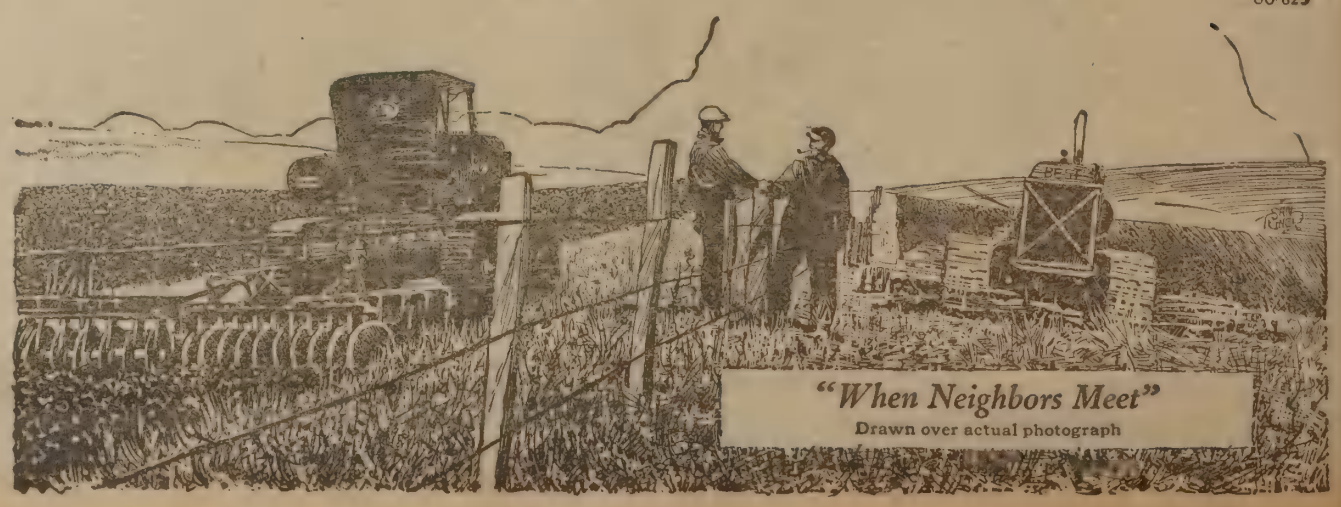

"When Neighbors Meet"
Drawn over actual photograph

Southwest Washington's Big Fair Again History

Those to Follow Must Step Lively If They Would Keep the Pace That Is Set for Them

By HORACE ADDIS

With a larger attendance every day than last year, which was the record year up to that time, and with a large and well-balanced show in every department, the Southwest Washington fair, midway between Chehalis and Centralia, August 20-25, kept up its record for steady growth, improvement and success. While this fair still allows a carnival company to operate games of chance, outside of this one regrettable feature it is educational in every department. This was shown in the numerous exhibits made by the state college, the state department of agriculture and the United States department of agriculture and biological survey, as well as in the improved varieties of agricultural and horticultural products and finely fitted purebred live stock. Recreation could be had, but information and education were there for all to take.

College Has Eight Booths.

The state college occupied eight booths, where last year it had only four. And two of these were for the home. The home management department, under the supervision of Miss Minerve Lawrence, was made up to represent a home and window curtains was the subject demonstrated. Types of windows, kinds of material, combinations of materials and combinations of color and designs for three sets of curtains for three windows were shown and demonstrated. Deep interest was manifested by large crowds of women all week.

Clothing was the other department of interest to women, in charge of Miss Belle Elger. It demonstrated the making of patterns for home use from commercial patterns and made plain how to dress well with homemade plans.

A very interesting booth was devoted to drainage, with A. B. Crane, specialist in that department, in charge. It had two homemade levels and a cheap commercial level. Two kinds of tile and special drainage tools, to make drainage work easier and better, were shown. A large picture, from a dual photograph, illustrated a field drained and yielding 100 bushels of oats per acre, and a successfully drained orchard. A box drain for use where tile drain is not practical in peat soil was exhibited.

The horticultural exhibit, with M. D. Armstrong in charge, showed only berries and illustrated the value of fertilizers and the correct method for training. "A berry patch must be fed" was the legend at the top of the exhibit. Soils deficient in humus, nitrogen and phosphorus are supplied by manures, vetch cover crops and superphosphates.

Don Magruder was in charge of the dairy booth, as well as in general charge of the college exhibit. "A good cow is worth three times as much as an average cow," the reader was informed, and the proof was in charts on feeding and production and showing the results of cow testing associations.

Feeds for live stock occupied another booth, with C. M. Hubler in charge. Feeds for growing and fattening were given. That "better rams mean better lambs" was proven by illustrations.

Poultry was an important booth, with W. D. Buchanan, poultry specialist, in charge. The value of raising high producing hens was shown; trap nesting systems were explained and suggestions were made for encouraging greater consumption of eggs. Three types of hens were shown, the 120-egg hen, which yields no profit, an intermediate one with little profit, and the 240-egg hen, with a good profit.

And last but not least in interest or importance was the bee and honey booth, set up by Professor Slocum. It showed good equipment and poor equipment. Four types of honey were shown, alfalfa, sweet clover, white clover and fire weed, with extracted and comb honey for each kind. "Color is no indication of adulteration," it was declared, as flowers largely determine the color.

The United States department of agriculture had a wonderful forestry display and the United States biological survey had a most interesting showing of predatory animals and methods of catching them.

The girls of the state school were serving meals and cooking pies and doughnuts. This was a part of the domestic science work, but knitting, sewing and other work was shown. This was in charge of Mrs. Ida McQuesten, superintendent, and the assistant, Mrs. Cornell.

The exhibit of the state training school for boys, in charge of Superintendent Briffith, showed both farm and mechanical exhibits. Samples of the good shoes made by the boys in the school factory and of the three suits which every boy has, one for work, one a school uniform and one a dress suit, were shown. Blacksmith tools made at the institution, tables and cabinets, as well as the farm exhibit of vegetables, grains, grasses and photos of the high production Holstein herd, were shown.

Club Work Prominent.

Industrial club work was pronounced by Miss Elmina White, state club leader, to be of higher quality than on any previous year. Three communities in Lewis county made exhibits. These were Boistfort, Dryad and Toledo. Toledo was strongest on sewing, with a fine, large and varied exhibit. Frank Kniezek, a member of the Dryad district, made a very fine garden exhibit. Thurston and Grays Harbor counties sent good exhibits in bee club work. Lewis, Thurston, Clark, Grays Harbor and Pacific counties all had one or more exhibits in the district contests.

Seven school districts made exhibits, under supervision of Miss Z. May Meighan, county school superintendent. They were Adna, Doty, Napavine, Pe Ell, Knox, Twin Oaks and Alder Brook. It was the largest and best school exhibit the fair has ever had. There was a good exhibit of sewing and cooking, as well as hand work, paper cutting and basketry. On manual training work Doty consolidated school district won first prize with a splendid exhibit. This school has had good exhibits of this kind before.

All this was in the main exhibit pavilion, besides the commercial booths, at many of which samples of cookery were given away.

The state department of agriculture had an equally educational exhibit outside. The division of food, drugs and fertilizers showed a number of patent feeds and fertilizers that had been barred from the state. It also showed feeds that complied with the law and demonstrations were given showing how the public is thus protected from inferior products. Equally educational exhibits were made by both the dairy and horticultural divisions, with demonstrations of milk testing, grafting and other work of the two divisions.

The Agricultural Crops.

In the opinion of Superintendent Theodore Albert, the exhibits in the agricultural pavilion ranked higher in quality than ever before, although there have been others as large. Grains and grasses were exceptionally good in this fair, which always has a good show of these products. The show was well balanced in all lines, with a strong show of horticultural products for this early in the year. Okaville made a fine community exhibit and St. Urbans Grange had a grange exhibit equally as good. Many with sporting proclivities would have liked to have these two score against each other. Both were greatly improved over former years. Menlo community had an exceptionally good display of grains and grasses. There was a simply wonderful floral exhibit, with dahlias and gladioli among the flowers most prominently shown. The asylum at Steilacoom had a remarkable exhibit of the work of its inmates. The honey display was one to "tickle the sweet tooth" of any one. Mr. Mahoney of Elma was the largest exhibitor, with an artistically arranged display. The cooperative berry growers had an attractive display of canned goods and other exhibits crowded the big pavilion to capacity.

Three Hundred Babies.

The better babies contest brought out over 300 entries and the doctors and nurses were kept busy every day. The textile and art departments were crowded with very fine exhibits. And there was something of interest, with opportunity for instruction, all over the grounds.

The largest and finest automobile show the fair has ever had was on the ground, most of the machines being housed in tents, one or two companies occupying an entire tent.

Besides all this, the races held every day but Monday were of a high order. The crowded grandstands which greeted them had the added attraction of the Van-Cleave jumping and saddle horses from Vancouver, B. C. Miss VanCleave, with her splendid and daring riding, proved one of the most popular attractions of the week.

The poultry show was notable as a display of Barred Rocks. This breed was easily the dominant one of the show, with 114 exhibited, and, like all the others, the birds were in good condition for this early in the season. It was quite a large show, with most of the utility breeds and a number of the fancy ones entered. A big display of rabbits was also made. Thomas P. Horn was again in charge and Harry Collier of Tacoma acted as judge.

The Live Stock Show.

The best all around, well-balanced stock show that this fair has had in a number of years, if not in its existence, was the general concensus of opinion. The rather inexplicible thing was the fact that it was stronger as a beef cattle than as a dairy show, although in a great dairy county and surrounding dairy region. But it was strong in both divisions and there was a strong sheep show and a hog show of decided interest. R. G. Fowler, county agriculturist, who was again live stock superintendent, had made provision for taking care of all that arrived, but it taxed his ingenuity and required the erection of several temporary structures.

With Shorthorns, Herefords and Aberdeen Angus all well represented and with strong competition in each breed, the beef cattle show was one for the fair to be proud of. The herds represented widely separated regions and showed the growing importance of this fair in the minds of northwest breeders. Frank Brown of Carlton, Ore., judged all beef breeds. He paid a high compliment to the quality of the show, calling attention especially to the Canadian herd of Herefords.

Shorthorns had the largest representation, with four herds. J. D. McGuire of Tenino, Wash., showed 12 head, George Bertrand of Castle Rock, Wash., 18; L. A. Bowes of Calgary, Alberta, 15, and Charles Yule of Carstairs, Alberta, 18. The Canadian herds were a little bter fitted, taken as a whole, than the two from close by, but all were of good type and blue ribbons and championships were well divided. Bertrand won senior and grand championship bull on the unusually thick meated and blocky Max Mill Criterion. Junior championship went to McGuire on Oak Grove Gainford, a junior calf of remarkably correct conformation and beautiful color, a son of his dead grand champion of last year, Hercules Model. Yule won both female championships, senior honors going to the great cow, Lovely Bud 3d, and junior to Bessie Queen 5th.

Herefords were represented by two well-fitted and typy herds, Diamond B ranch of Lowell, Ore., having 10 head, in charge of Manager M. J. Beall, and O. A. Boggs of Daisland, Alberta, 14. The two aged bulls were exceptionally good, the Canadian bull having the scale and the Oregon bull being the smoother. Boggs finally won the senior and grand championship on Alberta Panama, while junior bull honors went to Beall on Prince Rupert 7th. Boggs had both the female honors, senior and grand championship going to the mature cow, Miss Panama.

Two herds of Aberdeen Angus, both of exceptional quality, added their part to the big beef cattle show. Congdon & Battles of Yakima, Wash., and J. A. Scallard of Chehalis exhibited full herds. Scollard won 12 first prizes and Congdon & Battles seven. Senior and grand championship on bull went to Scollard on Erickman C. B. 5th, the Yakima herd winning the other three champion honors. Junior champion bull was Erickman C. B. 8th; senior champion female, Ericka 7th of Rosemere and junior and grand champion, the grand heifer, Barbara C. B. 2d. Scollard won on aged herd, get of sire and produce of cow, while Congdon & Battles had first on pair of calves and yearling herd.

Dual Purpose Cattle.

Two herds of milking Shorthorns were shown, both in considerably better condition than the stock with this strain is sometimes represented. Northwood farms of Redmond, Wash., showed 22 head, and E. C. Truesdell of Centralia 15. While blue ribbons were fairly well divided, Northwood won all championships. Gretna Challenger, the splendid type roan bull that won the same honor last year, was made senior and grand champion; junior champion was the calf, Northwood Sam, and the senior and grand champion cow was Lily L. 3d, a large cow, with the table back so much desired, and showing great constitution, while Northwood Maggie, a senior calf, won junior honors.

Red Polls were represented by the local herd of L. K. Cogswell, in rather poor show condition, but of good type. F. H. Porter of Halsey, Ore., was present with his famous herd. Porter won all blues but one and all championships. Peach Knot, that has never yet been defeated, was made senior and grand champion; Peon 4th, junior champion; Violet, a mature cow, was senior and grand champion, and Neva, a senior yearling heifer, won junior honors.

The Dairy Cattle.

E. W. VanTassell of Wenatchee, Wash., was the only exhibitor of Ayrshires, with a herd of 18, worthy in every way, both as to type and fitting, with Herdsman H. Howland in charge. Queen's Scottish Cavalier was made senior and grand champion bull, the junior calf, and Wenatchee Peter Bruce, junior champion. The senior and grand champion cow was found in the 2-year-old, Windlus Blissom, a very promising heifer, though some would prefer the beautiful 3-year-old cow shown. Junior champion was Wenatchee Blue Belle. All but the senior bull were bred by Mr. VanTassell, and he was purchased in dam.

The first real Guernsey show Lewis county breeders have ever made was noteworthy. Counting four club boys, nine exhibitors competed, and, while not a large show, for each one had only a few head, it was a thoroughly representative show, with honors pretty well divided. R. N. Chambers, Centralia, showed three; R. H. and Carl Taylor, Chehalis, three; Victor Fir, Chehalis, three; Joe Haight, Napavine, one; William C. Hornibrook, Goldendale, one; two Thiessen boys, one each, and two Tramm boys, one each. Senior and grand champion bull went to Taylor on Chicona Berwin and junior championship to Chamberlain on Prim's Emigrant; senior and grand champion cow was also won by Chamberlain on Sequel's Dorothy Vashon, with junior honors to Taylor on Anabel of Archer Farm.

Guernseys, Ayrshires and Red Polled were judged by George Bulkley of Carnation farm.

While it can not be said this is the first real show of Holsteins Lewis county breeders have made, it was decidedly the largest and best yet put up by county breeders, for not only were there a large number, but the cattle were shown in excellent condition. Added to this was the splendid herd of Hollywood farm, to the number of 10, and it was one of the best and most interesting shows yet made at this fair. All told, 86 head were shown. Eleven mature cows were in the ring, and not a poor one. Fifteen senior heifer calves made the largest class, and there was strong competition in almost every lot shown. Aside from Hollywood, all were Lewis county exhibitors. Hugh Nesbit of Chamberlain had 17; E. A. Donaldson, Centralia, four; Chris Hendrickson, Farest, seven, and his boys, Peter and Leonard, one each; James C. Chamberlain, Ceres, seven; William Hamilton and four of his sons showed from one to three each.

(Continued on page six.)

Fair Season Is On With a Bang

Early in August the Skagit county folks opened the 1923 fair season auspiciously, as reported in a recent issue of The Washington Farmer. Last week, as reported herewith, the Southwest Washington fair followed suit with one of its most successful events. Thus the fair season is on. At least one county fair, that of Grays Harbor, is being held this week, and next week the Spokane Interstate draws the crowds of eastern Washington and northern Idaho. Then comes a series—thick and fast—community, county, district and state, not ending until the middle of October.

It is doubtful if a Washington state fair has ever faced more rosy prospects than that scheduled for September 17-22 at Yakima. The spirit is right and the various departments are being prepared in a way that promises much to those who avail themselves of the privilege of attending. H. P. Vermilye, secretary and manager, is enthusiastic, as is also E. L. French, director of the state department of agriculture, under whose department the state fair is a feature.

It has been impossible to tabulate all the district, county and community fairs that will be held in Washington this season. Here, however, are a considerable number that will attract liberal attendance:

In September (the figures indicate the dates): Spokane Interstate, Spokane, 3-8; Whitman county, Colfax, 6-8; Kittitas county, Ellensburg, 13-15; Bainbridge Island, 15-16; Clallam county, Port Angeles, 13-15; Mabton Hay palace, Mabton, 13-15; Ferry county, Republic, 13-15; Washington State, Yakima, 17-22; Stevens County Live Stock show, Colville, 19-21; Burley valley, Burley, 21-23; Pend Oreille county, Dalkena, 27-29; Cowlitz county, Woodland, 26-29; Snohomish county, Granite Falls, 27-30; Mason county, Shelton, 28-30; Whatcom county, 24-29.

In October: Western Washington, Puyallup, 1-7; Oakesdale Live Stock and Produce, Oakesdale, 5-6; Adams county, Ritzville, 4-6; Clarke County Prune festival, Vancouver, 11-13; Skamania county, Stevenson, 12-13.

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A Sure Winner

Whitman county commissioners will award each boy or girl who is a member of the pig club, as managed by the farm bureau for the last six months through the assistance of the state college, and who brings his or her club pig to the fair at Colfax, September 6, 7 and 8, a five-dollar cash prize. As Secretary Burford of the Whitman county farm bureau puts it: "Whether you win any of the prizes listed or not you get a five-dollar cash check. It simmers down that the commissioners are interested in seeing our own boys become good live stock men, familiar and acquainted with the various breeds of stock. This money is awarded from the fact that these youngsters have already taken the lead and the commissioners wish to show these club boys and girls that the people of Whitman county are interested in them and their work."

Southwest Counties "Going Dry"

Given a county with 30,000 acres of wet bottom lands unfit for cultivation, not to mention 10,000 to 20,000 acres of so-called "tide lands" subject to diking; and one state drainage specialist who visits the county once a year and lays out drainage for approximately 200 acres, how long will it be before that county "goes dry"?

The answer, of course, is 150 years if you leave out of consideration the cumulative moral effect of the work already done, but that is precisely what Specialist A. B. Crane of Washington State college is counting on to carry forward the reclamation of Pacific county. For the southwest corner of the state, which includes Pacific and Wahkiakum counties, is beginning to be "sold" on the idea of drainage, and it is no longer a question of how many men the state specialist and County Agents E. C. Durdle and F. S. Martin can persuade to try it, but how many farms Crane can accommodate in the short time he can spend in the district.

The men he laid out work for the first year did it all and added more; and the results in the areas which have been drained are so apparent that others in the community who noted them are now demanding similar work on their farms. And no wonder! Land which was under water from three to eight inches two years ago was dry and much of it was being plowed in 1922.

And Neither Is Right

It used to be popular subject of debate whether governments, properly, exist for the individual, or whether the individual exists for the sake of government. The latter was the ideal in ancient Sparta, where the boy became at an early age the property and ward of the state; the theory that government not only shall exist for, but shall be at the mercy of, the individual is responsible today for anarchism.

Contenders for either theory appear to have but a shallow conception of what government is. If governments do not exist for the sake of the individuals they have no justification in existence. But mark—we say "for the individuals," not "the individual." For neither has that government any justification in existence which does not exist for every individual, without distinction, as nearly as the governed choose to realize that ideal. On the other hand, no individual is excusable in interpreting his personal liberty in such manner as to imperil or to subvert government, which is the precious property and the sacred trust of all.

Vetch Seed Crop

Scientists are at work on the development of the vetch seed industry in western Washington. The Western Washington experiment station of Puyallup has been selecting strains of vetch with this in view. M. E. McCollam, agronomist at the station, has established the strain commonly known as No. 15, which is being distributed at market prices for those who wish to grow their own seed. Other strains are being grown under the plan started by E. B. Stookey.

No. 15 is described as more hardy, has better seed producing quality and makes satisfactory growth both for fall and spring planting. It is also selected for its constricted seed pod, which will not shatter as easily as will some of the vetches and thus cause heavy loss when harvesting a seed crop.

Mr. McCollam reports that this work of selecting of the strains of vetch is now one of the most important projects being carried on at the station. "There is a good chance for the development of the vetch seed industry in western Washington," says Mr. McCollam, "and some of the northern counties already have taken up this crop and find it well adapted to their climatic and soil conditions. It is hoped that within a few years vetch seed will be produced as a commercial crop, in order to utilize the winter season which in this section is very available to the growth of vetch, and it is then better able to get a good start for maturing a seed crop as soon as the spring weather opens up."

Apple Shipments From Wenatchee

Apple shipments have begun in earnest from the Wenatchee district. Regular shipments of Winter Bananas are proceeding daily and they will be followed by Ben Davis and Jonathans. While most of the Winter Banana crop will be handled by marketing agencies, cash buyers are reported paying around $1.75 for extra fancy and fancy grades combined and $1.00 for C grade. Cash prices for Jonathans are around $1.40 for early extra fancy.

More Community Fairs

A greater number of community fairs will be held in this state than ever before. This is a most encouraging sign. These community fairs mean most to the small farmer, who, as a rule, does not see his way clear to travel a long distance to visit any of the larger fairs. It is these community fairs that help to build up community spirit and create friendly competition, which is the road to better and greater production of all farm crops.

Northwest Apple Industry Remains

According to J. H. Jacobsen, statistician of the United States department of agriculture of Boise, Idaho, Oregon, Washington and Idaho are producing 35,000,000 bushels of commercial apples this year, which is more than a third of the entire United States commercial crop.

Evidently, there are many apple trees that have not been pulled out.

Rotate Pastures

Pastures should be rotated as well as field crops, according to C. M. Hubbard, state college specialist in live stock. "Rotate your pasture," says Mr. Hubbard, "keeping your lambs and pigs on fresh feed and ahead of stomach and intestinal parasites."

Washington State Gleanings

The Nye Sheep company, Prosser, sold 1000 ewe lambs in Chicago July 31 for 12½ cents a pound and 800 wethers at 10¼ cents a pound, according to report received from Howard Nye. Mr. Nye and Otto F. Allgaier, assistant cashier of the bank, loaded the lambs at the summer range near Trout Creek, Mont., and went east with them.

WHEAT AVERAGES 50 BUSHELS.

W. W. Richardson of Pomeroy reports the largest yield of wheat so far harvested in that section, considering the acreage. His 300 acres of Fortyfold yielded 50 bushels an acre, he says. Mr. Richardson contracted his crop several months ago at 90 cents a bushel.

FAIRS COME IN BUNCHES.

It is interesting to note that there are more fairs listed this year in the week of September 9 to 15. This week is just previous to the State Fair, and it is natural that many of the fair managements want their own county or community fair to take place just previous to the State Fair, so that exhibits used in one, may be sent direct to the other.

TO HAVE DEMONSTRATION FARM.

The Long-Bell Lumber company is establishing a demonstration farm west of Longview on a five-acre tract in the rich agricultural lands that the company is preparing to market. The farm will be equipped with a cottage, barn and outbuildings and will be improved and used for demonstration purposes.

BUY PUREBRED GUERNSEYS.

N. P. Hodgson of Richardson purchased a purebred Guernsey cow, a heifer and a bull from Mr. Helmstra of Everson, Whatcom county, to add to his herd.

Oscar Weeks of Lopez purchased two purebred Guernsey heifers from H. B. Douglas of Ferndale. This adds some more fine stock to the island herds.

WHEAT ESTIMATE TOO HIGH.

With the wheat harvest rapidly nearing a close in Walla Walla valley, early estimates have been revised and the crop is now expected to be between 4,000,000 and 5,000,000 bushels, as against the preliminary estimate of 6,000,000 bushels. About 10 per cent of the grain has been shipped out, although 25 per cent has been sold, according to the report.

SHINGLE MILLS RESUME WORK.

Shingle mills throughout northwest Washington are generally resuming operations after a shutdown of about two months, it is reported at employment agencies in Bellingham. All but the Siemons mill in Bellingham are working, while in Anacortes all are in operation. The old Colony mill at Banchard, the Edison, the Vanhorn and the Sauk mills resumed work August 6, as did the Marietta mill.

INDIANS TO HAVE FAIR.

A community fair will be held at Inchelium under the management of the federal Indian service. The premium list is larger than in former years and a greater effort is being made to induce Indians to compete in the agricultural and live stock exhibits.

Horse racing will be a feature of the gathering and there will be sports contests of all kinds. There will be an Indian barbecue the first day and a program of speaking and music has been provided for the three days.

PRICE FOR PRUNE DRYING.

The prune drying price of $13.50 per green ton as fair for prune growers with drying equipment to charge others for drying their crop during the coming harvest has been fixed by the Washington Growers' Packing corporation, sales organization of the Clarke County Prune Growers' association. Growers are hard at work making preparations to take care of the harvest which will commence unusually early. The ideal summer weather is rapidly maturing the prunes.

SLAPPY PEACH POOL FORMED.

There will not be many loose peaches in the lower Yakima valley, for fully 95 per cent of the peaches below the gap are now organized, according to Bruce Wees of Donald, one of the large growers of peaches. The most recent development to steady the present market on peaches is the formation of a Slappy pool. All the Slappy peaches of the Parker Heights district are being brought to one place, and Percy Sheppard has the placing of them to the trade. From 25 to 30 cars will be handled according to this arrangement.

STUDY WOMEN IN ORCHARDS.

Conditions under which women and children work in Yakima valley orchards, as well as their number, is to be made a matter of record by the welfare bureau of the United States department of labor this year. Two representatives of the bureau, Miss Mary E. Skinner of of Washington, D. C., and Miss Mildred M. Hawkins of Milwaukee, Wis., have been sent to Yakima to make a comprehensive survey for the department. If these women find numbers sufficient and their needs warrant it, it is likely, they say, that the bureau will maintain a representative at Yakima.

LOGANBERRIES AND CHICKENS.

James Bennett of Vashon, who has one acre of loganberries, reports that he has harvested close to two tons of fruit from the patch this season. The patch is in its second year of bearing and there was only a slight touch of winterkill at one end of the field. Mr. Bennett says that if he could have given more attention to the pickers and saw to it that they picked every row clean he could have gotten from a half to a ton more from the vines. He intends to raise chickens and thus have a combination that will require all the attention that one man can give.

BLACKBERRIES TO SET RECORD.

Farmers of the Puyallup valley expect their second most important crop—blackberries—to be of the finest quality and to set a new record in production. Rain, which partially damaged the raspberry crop, together with increased acreage, accounts for the heavy crop which is being harvested.

The blackberry output this year will be 25 per cent greater, officials of the various canneries believe.

W. H. Paulhamus, president of the Puyallup and Sumner Fruit Growers' association, says the association has been shipping two carloads of blackberries daily and that the berries are of the finest quality.

Unfair Balance of Prices

Is the Chief Trouble With Farming Industry of the Nation

A statement by Secretary of Agriculture Wallace, given out at Washington last week, emphasized conclusions reached long ago by THE FARMER. Commenting upon the ruinously low prices of wheat, Secretary Wallace truly said, "It is just one more acute symptom of the general trouble from which agriculture is suffering. The disease itself is the distorted relationship between prices of farm products and the prices of other commodities."

As we have been pointing out for many months, "The farmer could get along fairly well with present prices of the wheat he has to sell, IF prices of other things were down accordingly. But prices of other things remain high, and that is what hurts."

Some politicians and labor union leaders are trying to make the farmers believe that this condition can be cured by a political alliance between organized labor and the farmers. They are mistaken.

Organized labor has one central, controlling purpose—to maintain a high level of wages, to make wages higher from time to time, to shorten the hours of the working day and stand for easier working conditions. It has been very successful in these purposes since the war. As Secretary Wallace says, "Wages in industry and on the railroads are almost twice as high as before the war. Taxes are about twice as high. Freight rates are from 50 to 75 per cent higher; metals and building materials of all kinds are from 50 to 100 per cent above pre-war prices. All these are items in the farmer's costs of production, and until a fair relationship is restored between agriculture, industry and commerce, agriculture will be upset and will have reason to complain."

The wage item is the big item in the cost of producing the things the farmer must buy; the wage item is the big factor in the making of high freight rates; the wage item enters largely into the burden of high taxes.

We are not unsympathetic with labor. We are only stating facts. We want labor to receive the highest wages that are consistent with a square deal for other classes of the nation, especially for the great farming class.

Let us analyze this general situation. The American farmers must sell their surplus in the open markets of the world, and at prices that foreign consumers can afford to pay. Our surplus wheat, dairy products, fruits, meats, etc., are wanted by millions of wage-earners in Europe, but those wage earners are receiving low wages. They can not afford to pay high prices for our surplus agricultural products. That is the condition that our farmers are facing.

Now the price at which we must sell our surplus wheat, for instance, is the price at which the American growers must sell their wheat to the American consumers. Organized labor, on the railroads, in the coal mines, in the factories—is well employed at good wages and could afford to pay the farmer better prices for his surplus products. But the constant clamor of organized labor is for reduced cost of living.

Organized labor has about everything that it could reasonably expect from the government at present; it has the benefit of the protective tariff, which guards it against the ruinous competition of the poorly paid workers of Europe and Asia; it has the protection of our immigration exclusion law, which in effect gives it a corner on the labor market in this country. We are not advocating free trade. Our own opinion is that it would be detrimental to all concerned. We are not advocating unrestricted immigration. We think that would be ruinous. We are only stating the facts.

If our analysis of conditions in the United States and in the world is wrong, we shall be pleased to be corrected; if that analysis is correct, as we think it is, how can the unfair balance of prices that Secretary Wallace has pointed out be adjusted by a political alliance between farmers and organized labor?

The Breaking of Day

The present distress of the wheat growers, paralleling in many respects the previous grief of the cotton growers of the south, has recalled these famous words from Henry W. Grady, perhaps the most eloquent and able journalist that the south has produced since the Civil war. Mr. Grady's voice is stilled in death, but these words of wisdom remain as one of his many monuments:

When every farmer in the south shall eat bread from his own fields and meat from his own pastures, and, disturbed by no creditor and enslaved by no debt, shall stand amid his teeming gardens and orchards and vineyards and dairy and barnyards, and pitching his crops in his own wisdom and growing them in independence, making cotton his clean surplus and selling it in his own time and in his chosen market and not at a master's bidding—getting his pay in cash and not in a receipted mortgage that discharges his debt, but does not restore his freedom—then shall be the breaking of the fullness of our day.

Substitute for the word "south" the term "Inland Empire," and for "cotton" the word "wheat," and the foregoing eloquent truths fit closely to the present hour and the present conditions in the Pacific northwest.

The Place of Counsel

The Adviser One Seeks Indicates the Kind of Advice Sought

Blessed is the man that walketh not in the counsel of the ungodly, nor standeth in the way of sinners, nor sitteth in the seat of the scornful. Psalms 1:1.

It is probably no accident that this basic declaration opens the Book of Psalms. Accidents usually put things where they do not belong. Surely, this great statement of fact and warning belongs at the beginning of this wonderful compilation of wisdom and inspiration.

If a man chooses to walk in the counsel of the ungodly, it is because there is a streak of ungodliness in him. It is because he does not take delight in the law of the Lord; because he does not meditate in this law, but rather in the lawlessness of the ungodly.

The Psalmist paints a beautiful picture in this first Psalm. He compares the man who abstains from counseling with the ungodly to a well-watered tree. He shall be like a tree that grows and thrives by the "rivers of water." He, too, shall thrive. "Whatsoever he doeth shall prosper."

Whatsoever he doeth shall prosper! It is a stupendous thought; a wonderful promise. In the true sense of prosperity, what more can any one desire as compensation for efforts put forth toward godliness and away from the so-called pleasures of ungodliness? Prosperity and poverty cover a far wider field than mere material possessions.

But in spite of the promise, we often hear it declared that poverty and failure are as likely to settle upon the man or woman of godly life as upon the sinner. Sometimes this seems true, but is it? May it not be that our definition of godliness is at fault? May it not be that our idea of it is shallow and superficial, and that we live up but poorly to our poor idea of this supreme quality?

"His delight is in the law of the Lord, and in his law doth he meditate day and night." Is our one delight in the law of the Lord? Is our constant thought dedicated to the supreme task of making our lives conform to that perfect law? If not, we are not living up to the standard of godliness that the Psalmist had in mind. Should we not, therefore, strive to know and practice genuine godliness rather than rest upon the assumption that the writer of the above text was wrong? Said the Master as he taught men the way of life, "Seek ye first the kingdom of God and his righteousness, and all these things shall be added unto you." If the Psalmist was wrong, so was Jesus, the Christ.

FARM BUSINESS AND MARKETS OUTLOOK

THE forecasters who specialize in calling the turns in the business cycle do not always agree as to the exact time when changes from expansion to contraction, or prosperity to depression, will take place.

The volume of building operations scheduled will keep the construction industry and allied lines busy for many months. The great increase in mail order sales tells the story so far as rural buying is concerned. Employment is well nigh universal in spite of the moderate letup in industrial activity and wages have advanced more than prices or the cost of living, so that the real income of most classes of the consuming public is believed to be the highest it has ever been.

That basic conditions are sound is indicated also by the manner in which the stock market has withstood the shock of the collapse of the mark, the fall of the French franc to the lowest point on record, the political changes in Germany, the clash between France and England, the threat of a coal strike and even the change of presidents in the United States.

Furthermore, there are indications of improvement in the wheat and hog markets, which have been the sorest spots in the agricultural situation. A high rate of consumption of farm products is assured as long as employment conditions remain healthy.

Choice Steer Market Climbing.

Choice steers are prize packages on the market just now and prices on the Chicago market advanced to a new high last week of $13 for weighty beeves and $12.65 for yearlings. Last summer a similar advance took place, although top prices did not cross the $11 mark until near the end of August, rising thereafter to $13.60 in October. A further advance this year is probable.

Demand for feeder cattle has expanded sharply in the last two weeks and prices are up about 75 cents. Heavy, fleshy feeders are most wanted for short feeding with new corn to catch the high market for heavy fat steers. Receipts of stockers and light feeders are likely to increase about as fast as demand expands.

Hogs Highest of Year.

Sorted loads of hogs sold up to $9.05 at Chicago last week, passing the previous high point established last January. Receipts were the lighest of any week since last October, and the small proportion of good hogs was in a strong position because of the broad outlet for fresh pork. Smallest runs in the hog alleys invariably occur from the middle of August to the end of September, so that if prices are to show a further burst of speed it is likely to come in the next few weeks. Spring pigs approaching 175 pounds weight or higher may be sold to advantage in this period.

Sharp Upturn in Lamb Market.

Lamb prices rallied swiftly last week when 10 days of light receipts cleared dressed lamb trade channels and lamb feeders displayed increased interest in raw material for feedlots. Each week brings fresh evidence that the supply is not going to mount to the usual heights during the range season. Feeder lambs during the last few weeks have been cheaper than at the corresponding period last year, but the advance of 50 to 75 cents last week brought them up close to last year's level. Orders on file for breeding ewes remain far in excess of arrivals.

Demand for Wool Restricted.

Seaboard markets report a restricted demand for wool. Orders placed with mills for spring goods in the men's division have been light, but women's wear lines have sold well and liberal sales of fall goods are still being made. Prices have eased slightly except for fine staple wools, which are scarce.

Better Outook in Wheat Market.

While wheat prices have not advanced much in the last 10 days, they have held the gains made before that time and the long distance outlook is distinctly better.

Besides the reduction of about 50,000,000 bushels in the crop and carry-over, compared with last year, the supply of rye is smaller than a year ago and there are smaller crops of white and sweet potatoes, buckwheat and even rice, which substitute for bread grains to some extent.

The Canadian crop estimate stands about 17,000,000 bushels less than last year, but first arrivals of new wheat at Winnipeg run mostly to low grades because of rust damage and blight.

New High in Corn Market.

Cash corn prices advanced into new high ground last week. Eastern and southeastern distributors and corn industries are buying freely, while producers have not sold freely enough to permit building up stocks at terminals.

Cash Grain Markets.

The range of cash grain prices for the week ended August 22 was: Chicago—Wheat: No. 2 red, $1.02@1.02 3-4; No. 3, 97c@$1.01 1-2; No. 4, 96@97 1-4c; No. 1 hard, $1.02@1.03 3-4; No. 3, $1@1.02; No. 4, 96@97 1-2c. Corn: No. 2 mixed, 89@90 1-2c; No. 3, 89 1-2c; No. 2 yellow, 90@91 3-4c; No. 3, 89 1-2@91 1-4c; No. 2 white, 89 1-4@89 3-4c; No. 3, 89 1-2c. Oats: No. 2 white, 39@42 1-2c; No. 3, 37 1-2@39 1-2c; No. 4, 37@39c. Rye: 64 1-2@67 1-2c. Barley: 58@66c. Minneapolis—Wheat: No. 1 dark northern, $1.18@1.23; No. 2, $1.14 3-8@1.18; No. 4, $1.09@1.13; No. 2 northern, $1.13@1.18; No. 2, $1.10@1.16; No. 3, $1.02@1.10; Durum, 89 1-2@94 1-8. Corn; No. 2 yellow, 85 1-2@86c. Oats: No. 2 white, 35 5-8@38 1-4c; No. 3, 35 1-8@37 1-4c; No. 3, 33 1-8@36 3-4c. Rye: 62 1-8@63 1-4c. Barley: 42@56c. Flaxseed: $2.30@2.35.

Seed and Feed.

Clover seed prices advanced again last week, both red clover and alsike sharing in the upturn.

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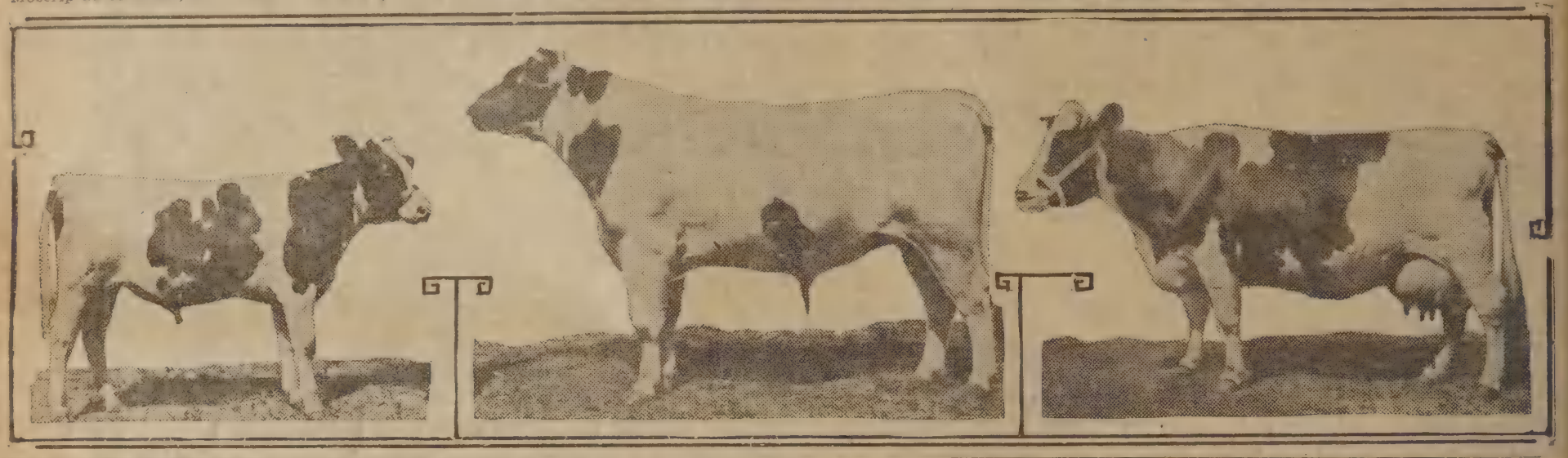
These Three Pictures Make an Interesting Study in Breeding

An interesting study in breeding is presented in these three pictures from Hollywood farm. Hollywood, Wash., where Harold C. Stimson is carrying forward the work started by his father. About a year before the latter's death in the fall of 1921 there arrived at Hollywood a consignment of sturdy females from the farm of W. S. Moscrip at St. Elmo, Minn.—the first that the famous judge and breeder had ever allowed to leave his herd for the northwest. Among them was North Star Daisy Johanna, a daughter of Moscrip's senior herd sire, carrying a calf by his junior sire, Bessie Fobes Oak Homestead. This cow, a picture of which is shown at the right, was just about Fred Stimson's ideal of what a dairy cow ought to be, and he hoped mightily that she would bring him a bull calf for future use in an outcross on the daughters of Judge Segis and his half-brother, King Lyons 3d.

Such proved to be the case, and the picture in the center shows Goliah of Hollywood, junior sire at Hollywood and destined upon the death of King Lyons 3d to succeed him, as he succeeded Judge Segis, at the head of the herd. This young bull, in whose veins flows the best blood of several famous Holstein families, is still far from proving himself, but his first calves indicate that he is able to transmit many fine qualities of individuality, at least. The picture at the left shows one of his get, out of one of the poorer daughters of Judge Segis.



Poultry Folks

Enjoy Picnic at Point Defiance

There were fully 1000 members of the Pierce county branch of the Washington Cooperative Egg and Poultry association who attended the first annual picnic at Point Defiance park near Tacoma, August 18. Although the association was just three years old the week of the picnic it was the first time a gathering of the entire membership had ever been attempted as a social function. The splendid turnout, which included friends of some of the members as well as others who were interested in the poultry industry, together with the friendly attitude with which everyone took part in the day's outing, showed that the association had developed a cooperative spirit, which extends beyond the business interest of the members.

The picnic was an all-day affair, and the members were invited to bring their basket lunches and bring any friends who might care to come with them. The 10th Artillery band from Camp Lewis furnished music throughout the day. An excellent sport program was carried on before lunch, which included events for men and women as well as for the boys and girls who were present.

The speaking program included prominent speakers from other organizations as well as some of the prominent men in the association. R. E. Darling, manager of the Tacoma branch gave the address of welcome, and introduced W. M. Buckmaster as chairman of the day. Among the speakers called on were: W. A. Linklater, superintendent of the Western Washington Experiment station; S. D. Sanders, president of the Washington Cooperative Egg and Poultry association, and Mrs. George R. Shoup, poultry specialist of the Experiment station.

One of the most interesting talks was made by D. S. McDole, of the accounting department of the association. He outlined the work of the association, and showed how the market for Washington eggs has been built up by consistent effort on the part of its marketing department. "When the association first began operation," he said, "the eggs were sold for what ungraded eggs brought on the New York markets. Later the present grades, used by the association, were established and a better price was received. We are consistently striving to increase the quality of our grades that are shipped to the New York market and have from time to time added new features to our packing that have helped us to get a slight premium over the eggs from other districts. It is only because of the members being able to work together with one thought in mind, that is the interests of the association, and our standing among other egg producers that has made such improvements possible. If we were a small organization our men would probably be too busy to work up new ideas and carry them out, but we have found that by working out little suggestions that are brought in now and then we have been able to improve our grades."

The Tacoma chamber of commerce was represented by George M. Elliott of the Rural Development bureau, who spoke of the value of cooperation and suggested that the association feel at liberty to call upon the Tacoma chamber of commerce at any time when cooperation between the two organizations might be carried out to advantage.

Another speaker who encouraged the work of cooperative organization was E. L. French, state director of agriculture, who outlined a number of practical marketing methods, and showed how much better the present cooperative organizations are functioning in this state than where the old methods of dumping products on the market and taking any price they could get. He pointed out that there were now 36 different cooperative organizations in the state, and from all indications there will be many other such organizations formed in the near future.

It is interesting to note that the Pierce county branch of the association shipped 77 cars of eggs in 1922, and during the last seven and one half months of 1923 there were 62 cars shipped out of the state. Manager Darling states that the membership is growing constantly and that a large per cent of the new members are coming in on their own accord. Further development plans are being made and the association hopes to be able to run pick-up trucks into the field and gather a large part of the eggs sold to the association. This will add greatly to the membership since there are many producers who are not at present able to deliver their eggs to the Tacoma warehouse.

Southwest Washington's Fair Again History

(Continued from page three.)

Other exhibitors were Henry Shoultes, Adna; A. T. Barnes, Chehalis; Henry Bouchard, Tono; L. L. Goff, Littell; J. H. West, Centralia, and the St. Urban Holstein Bull association. Hollywood had the senior and grand champion cow in Snowball Powers Mutual, a cow of great size, remarkably straight, broad hips and a show cow in every line. Junior champion heifer went to Donaldson on Dondary Perfection Bracelet. Hugh Nesbit had the senior and grand champion bull in Segis Pontiac Beets, that was first at the Pacific International, and junior bull honors went to the classy calf of Hollywood farm, Hollywood Goliath.

The one live stock division which showed a decline was the Jersey show, and this was in numbers only. Instead of the six or eight county breeders there were only three. N. C. Sears was there, as usual, with 18; A. T. Flagg, six; Dan Bush, four, and Mansford Brabec, one. Sears was the heaviest winner, with 12 firsts. He won senior and grand championship on Fussy's Fern Noble 35th, the bull that won the same honor last year, as a junior yearling; senior and grand championship on cow, with Brighter Dawn, and junior heifer champion with Cicily Winkle, a junior yearling that won similar honors, here and at the Pacific International as a junior calf last year. He again won the coveted honor of first on get of sire, the fifth successive year for his herd sire, St. Mawes of Oak Springs. A. T. Flagg was able to win four blues with his six head and his junior bull calf, Shady Grove St. Mawes Chris, was made junior champion. Mr. Bush won first on his yearling bull, Firwood Diploma St. Mawes, and his cow, St. Mawes Diploma, while not a show cow, was one of the greatly admired animals of the show, for her dairy quality.

John T. Kane of Salt Lake, Utah, judged Holsteins and Jerseys.

The Swine Show.

The number and quality of hogs exhibited indicated that the hog business must be coming back, to some extent, at least. More hogs were shown and more breeds were represented than for a number of years. Most of them were in good show condition, too. But when this is said, it may be added that the exhibit made by members of the Security Bank Pig club, with the president, J. T. Alexander, as leader, created more interest than all the other swine exhibits. This is purely a feeder contest, and Mr. Alexander puts up the money for the prizes. There are 28 members, of which 15 exhibited pigs. Those exhibiting were Lloyd Forth, Laurel Bartley and Joe Kerevar, Dryad; Raymond Reynolds, Joe Moteves, Keith Lawlor, Helen Medlicot, Ethel Lloyd and Iver Hulterburg, Napavine; Clarence Svinth, Arthur Donaldson, Thora Melius, Clinton Sturdevant, Lily Melius and Lafe Schmit, Chehalis.

Winners in this contest were Clarence Svinth, first, and also first in district work; second, Thora Melius; third, Joe Korevar; fourth, Raymond Reynolds; fifth, Helen Medlicot; sixth, Iver Hulterburg; seventh, Joe Moroves; eighth, Ethel Loyd; ninth, Arthur Donaldson. On sow and litter Loyd Forth won first and Lily Melius, second.

Counting baby pigs, O. I. C.'s were most largely represented. J. H. West, Centralia, showed 32, of which 19 were young suckling pigs. O. O. Phelps had 12 baby pigs and eight others; F. Van Derheyden, Wapato, Wash., two; Arthur W. Wade, Marysville, three, and Mrs. Ella Twiss, Forest, three. West won championship on sow on the smooth big type, May Belle, and Von Derheyden on his boar, Wapato Boy.

Foulger & Bryant of Centralia exhibited 10 Poland Chinas, and Miss Helen Medlicot two. The club girl won one first, all other blues and the championships going to Foulger & Bryant. Victor Price 2d was champion boar and Beatrice M., champion sow.

Ten Berkshires were shown by John C. Lammer of Centralia and 18 by the Earlken Berkshire company of Goldendale. Earlken's boar, River Banks Laurel Epoch, was made champion, with Lammer securing female honors on a senior pig.

Duroc Jerseys were shown by Howard L. Norris of Goldendale, with only four head, two nice gilts and two equally good boars.

Osborne & Cincaid of Centralia showed a few Hampshire gilts.

Most of the large and excellent sheep show was made by three firms making the big fair circuit, J. G. S. Hubbard & Sons, Monroe, Ore.; Floyd T. Fox, Silverton, Ore., and Eugene Hubbard of Corvallis, Ore. There was strong competition in Oxfords, Fox being the heaviest winner. Felzer Brothers' Shropshires, shown by Fox, were strong winners also. On Cotswolds William Riddle & Sons had nearly everything on sheep, shown by Eugene Hubbard over D. J. Kirby's, shown by Fox. Lincoln honors were well divided between William Riddell & Sons and William Riddell Jr., shown by Fox and Hubbard. On Southdowns J. G. S. Hubbard had nearly everything and most of the blues on Hamps. Rambouillets, owned by Bullard Brothers, Woodland, Cal., and shown by Fox, won without competition.

Frank Brown judged long wools and R. G. Fowler middle wool sheep.

Two Percheron stallions and two Morgan mares and colts made up the horse show. L. K. Cogswell of Chehalis had the Morgans and they made a beautiful pair, both mares and colts. The Tenino Percheron Horse company won first and J. D. Norton, Elma, second on the Percherons.

Orchardists Meet

Summer Session Is Well Attended

The summer meeting of the Washington State Horticultural association at Walla Walla August 17 and 18 was, in the opinion of leading fruitmen, one of the best summer meetings of the association ever held. Not only were many leading fruit experts present, but many presented papers and participated in the discussions.

One paper was by J. B. Wiley of Spokane, district horticulturist, who discussed the "Apple Leaf Roller, Its History and Control." Demonstrations on the disease were made during afternoon sessions. C. L. Vincent, instructor in horticulture at W. S. C., discussed pruning of small fruits, going into detail as to the reasons for and the best methods of pruning these fruits. H. J. Dana, also of the college, told of the results of experiments in cooling boxed apples and urged that fruit be hauled to the warehouse, so far as possible, in the cool of the day, when the temperature of the fruit was low, so that it needed less artificial cooling.

A paper on cherry pollination by C. E. Shuster of O. A. C. was read by the secretary and a discussion of the subject was led by Clayton Long of O. A. C. Mr. Long also talked on "The Long Arm Method of Pruning."

The Friday afternoon session was spent in visiting the Milton-Freewater orchards district, where demonstrations on leafer were held.

At the Saturday forenoon session E. J. Newcomer, entomologist of the United States department of agriculture, stationed at Yakima, spoke on oil sprays, declaring that many orchardists found them more satisfactory than lime sulphur sprays.

Leroy Childs, superintendent of the state experiment station at Hood River, Ore., spoke on the de'Anjou pear and its treatment as to pruning. M. J. Forsell, horticultural inspector at Everett discussed the strawberry root weevil, and A. L. Lovett, entomologist at O. A. C. talked on nicotine sprays.

Saturday afternoon was spent in an inspection of the orchards of the Dayton-Waitsburg district, ending with a supper tendered the delegates at the E. S. Ryerson orchard.

In speaking of the association and its meeting President Paul H. Weyrauch of Walla Walla said:

"These meetings are important because they give fruit growers an opportunity to talk over their troubles with other growers as well as hear them discussed by experts. The meeting this year was exceeding well attended for a summer meeting, 135 attending the Friday evening session and 25 auto loads taking in the demonstrations each day. The interest was very keen. It is true, however, that not enough of our fruit growers realize the necessity of discussing their problems. They are quick enough to call on our colleges and experiment stations for help when actually overtaken by orchard pests, but they pay too little attention to lectures on prevention. A case in point is the apple leaf roller, which has already done considerable damage in one of our districts and is taking hold in others. This pest, like any other, can best be controlled in its incipient stages. No one grower can do this. An association of growers can."

TURKEYS NEED ROOM.

Wide range is important for turkeys.

Value of Wheat as Livestock Feed

By HOWARD HACKEDORN
State College of Washington

The drop in the price of wheat has renewed interest in its feeding value to live stock, and this in turn to the long-term advantages of diversified farming.

The feeding value of wheat compares very favorably with that of corn. The higher price commanded by wheat as a product for direct human consumption, rather than processing it through animals for the use of man, has generally prohibited its use as a profitable stock feed.

Wheat is higher than corn in its protein or muscle-building content. It is a little higher in ash or bone-building material and in net energy material or starchy material. Wheat, like corn, is not a complete feed and should be combined with feeds higher in protein, provided these latter feeds are not too expensive. Also, to give the best results for most classes of live stock excepting sheep, it should be cracked or rolled. It has a disadvantage of gumming when fed to cattle and horses, which difficulty with the harder wheats can be overcome by mixing it with cut hay, silage or bran.

Fed to Hogs.

Wheat has been fed to hogs more extensively than to most any other class of live stock, as the hog is the most efficient machine for converting grain into meat. The value of wheat as a hog feed was tested out at the Missouri experiment station and reported in bulletin No. 136. These tests with 100-pound pigs fed in dry lot consisted of one lot fed wheat alone, one lot fed corn alone and the third lot fed equal proportions of 10 pounds of wheat to one pound tankage. The average daily gains on the lots fed wheat, corn, and wheat and corn were 1.25 pounds, 1.0 pounds and 1.18 pounds, respectively, during the 78 days of the feeding tests. The feed required per pound gain was 4.55 pounds wheat, 5.12 pounds of corn and 4.93 pounds of the mixture wheat and corn. The average daily feed per pig consisted of 5.98 pounds of wheat, 5.57 pounds of corn and 5.85 pounds of wheat and corn mixed. The wheat lot of hogs averaged 194 pounds at the end of the test, while the corn lot averaged 182 pounds, which is just about normal market weight.

In Balanced Ration.

The above results do not show the real value of wheat, as it is more efficient when fed in a ration balanced with such protein feeds as tankage, 60 per cent protein, skimmed milk or fish meal, suitable for animal feed. A ration of 10 pounds of wheat to one pound of tankage fed to a lot of 100-pound pigs for 78 days made an average daily gain per head of 1.51 pounds, as compared with 1.25 pounds where wheat alone was fed. The wheat and tankage lot of pigs averaged 215 pounds, as compared with 194 pounds for the wheat lot. The average amount of wheat per pound gain was 4.24, as compared with 4.55 for the wheat alone.

However, a balanced ration may not prove to be the most profitable one, as the supplement may be too expensive to use. Assuming the price of tankage to be approximately $60 per ton, which is the price tankage has been purchased at recently at the Washington experiment station, and wheat at 80 cents per bushel, 100 pounds of pork would cost approximately $6.05 if wheat alone were used and $6.27 if the protein supplement were added.

At the Washington experiment station fish meal suitable for animal feed was equal to tankage as a supplement to corn, and it would be safe to say equal results would be obtained with wheat. Linseed oil meal testing 31.15 per cent crude protein was some 17 per cent less efficient than the tankage. Skimmed milk is a very satisfactory hog feed, and 10 or 12 pounds of skimmed milk will replace approximately one pound of tankage. Unless the skimmed milk is very cheap, best results will be obtained by feeding two or three pounds of it, which is about two or three pints, per pound of grain fed.

Wheat in the above trials was fed in the ground form. Cracked or rolled wheat would be very satisfactory. Soaked wheat has been fed by some farmers who claim that this is a very good way to feed it; however, this method of feeding is more troublesome. Some of the hard kernels of the wheat, particularly with the harder varieties of spring wheats, are not masticated thoroughly by the hogs, and hence some method of preparation must be used to gain the best results.

For Fattening Lambs.

As a feed for fattening lambs wheat has been used only to a very limited extent. A number of years ago the Montana experiment station reports some lamb feeding trials with wheat and red clover hay. In the trials 22 black-faced lambs, weighing on an average of 70 pounds at the beginning of a 95-day feeding test, gained 25.34 pounds, or a little over one-fourth pound per day, which is a good average gain. The lambs consumed an average ration of .81 pounds of wheat and 2.04 pounds of hay per day. They were fed about one-third pound more hay than they consumed. It required 7.64 pounds of hay and 3.02 pounds of wheat per pound of grain, on the basis of feed eaten, or about one-third more hay on the basis of hay fed. These results compare very favorably with the two years' results of lamb feeding at the Washington experiment station, where lambs were fed three-fourths pound of shelled corn and all the first cutting alfalfa hay they would eat, which averaged 2.69 pounds per day. These lambs, 100 in all, made for 60 days an average daily gain of .275 pounds.

The cost of feeding a lamb for 95 days, based on the Montana wheat feeding results, and assuming the cost of hay to be $8 in the stack and wheat at 80 cents per bushel at the farm, would be $1.02 for hay and $1.02 for wheat. If the feeder lambs cost 10 cents per pound and weighed 60 pounds the cost per head would be $6 and the cost of the feed would be $2.04, so that the fat lamb at the feed lot gate would cost some $8.04, exclusive of loss, interest, risk and labor. An average lamb should gain 25 pounds when fed as stated above. Thus the assumed 85-pound fat lamb would have to sell for $9.50 per 100 pounds to just break even, exclusive of loss, interest, risk and labor. The normal loss, judging from the Washington experiment station results the last two years, for some 2500 lambs fed at the irrigation station should not be more than 4 per cent. The manure should be worth the labor on most farms, and the interest could be figured at whatever one had to pay.

As a feed for breeding ewes on the farm or range, I would expect it to be equivalent to corn.

Two lots of 1000-pound steers were fed at the Nebraska experiment station on ground wheat and alfalfa hay against ground corn and alfalfa hay. During the 77-day test the wheat lot gained 185 pounds and the corn lot 153 pounds. These steers consumed a total of 820 pounds of wheat and 830 pounds of corn per steer and in addition each lot received 909 pounds of hay. One can figure the cost of fattening a steer from these figures by assuming the same price for wheat and hay that was used in the illustration on the cost of fattening lambs, that is, 80 cents a bushel for wheat and $8 per ton for hay.

If feeder cattle cost 6 cents per pound, a margin, the difference between the price of the feeder and fat steer, of about 30 cents per 100 pounds would pay for the feed, but not the insurance, risk, interest or labor. For example, a 1000-pound

(Continued on page nineteen.)

"—and the extra egg money more than paid for our plant"— writes a pleased farmer who lighted his henhouses last winter with Union Carbide Gas from his Colt "Gas Well"

Poultry experts unite in insisting on plenty of sunlight in the henhouses. They attribute to sunlight the tonic effect of maintaining the birds in maximum production condition, and the power to dispel the majority of poultry diseases. Exhaustive tests prove Union Carbide Gaslight to be the nearest approach to sunlight. This light in the henhouses will provide your laying birds with the nearest natural illuminant for increasing production and the other valuable effects of sunlight.

Poultry research discovers the hen of tropical origin, of long sunlit days and short nights. Experiments have demonstrated the hen's digestive organism to be fashioned on the 14-hour plan—and 9 hours of winter daylight positively won't do, if you expect an egg a day and a contented healthy bird. Nature simply pulls a strike on you.

The farm hen has demonstrated beyond all question the fact that she is a dependable profit payer through the winter months (the period of high egg prices), when Union Carbide Gas from the Colt "Gas Well" lights the henhouses to make the necessary 12-to-14-hour working day. The extra hours of light will enable your hens to exercise and take in the food reserve needed for more eggs.

A Colt "Gas Well" on *your* farm

The Colt "Gas Well" is installed in the ground—in the yard. From it comes Union Carbide Gas, made automatically as needed. *It will light your house and barn. It will cook your meals. It relieves the drudgery of washday, and keeps the iron hot.* Besides converting the henhouse into a source of profit, the Colt "Gas Well" has become a necessity for the farm home.

Colt "Gas Well" users are increasing in vast numbers. Get *your* Colt Lighting-and-Cooking Plant now—be ready when the time comes for increasing egg production with artificial sunlight—Union Carbide Gaslight.

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LIVESTOCK AND DAIRY

High Feed Bills

May Give Big Dairy Profits

If it is lumber you are after, logs are fed to the sawmill. If it is flour that is required, it takes wheat to make it, while if milk is the product, good cows require plenty of feed of the right kind to manufacture the great dairy product.

High feed bills do not necessarily indicate small profits from milk cows. Donald Saunders, tester for the Snohomish County Cow Testing association, gives an example of where high feed bills made high profit returns.

The high herd in the Stillaguamish Valley Cow Testing association for the past year showed an average feed cost per cow in the herd of $140.20, but the average return over cost of feed per cow was $120.36. The lowest record in the same association was made by a herd whose feed cost averaged $61.02 and the average profit over cost of feed was $44.38.

A recent statement issued by the United States dairy division that "as the production of a cow is doubled—profits increase three times," proved true. The high herd produced twice as much butterfat in the year and almost three times the profit over the low herd.

"It is possible," said Mr. Saunders, "the low herd did not have the ability to return a good profit even though the animals had received a generous ration. However, a herd of cows may be likened to a manufacturing concern—the raw material must be utilized in order to produce the finished product."

LIFE PRESERVERS FOR LIVESTOCK

By DR. E. E. WEGNER, W. S. C.

The Sheep Nostril Fly.

This parasite is very common in certain parts of the United States, and in others it is seldom seen as yet. The possibilities are, however, that wherever sheep are raised this disaster will appear sooner or later and cause more or less damage. In this particular part of the country this trouble has been very slight and it has been only of late years that we have seen any of it, though the probabilities are that we shall see a great deal more in the future.

This fly belongs to the bot fly group and the trouble is due to the larva that finds it way into the tissues of the body. The female fly after mating lays her eggs about the sheep's nostrils; these soon hatch, and the larvae, seen as small white worms, begin to ascend the nostril. As they go up they irritate the membrane of the nostril and cause the sheep to sneeze; they find a permanent place to dwell in the cavities of the sheep's head and remain there, living on secretions which accumulate as a result of their irritation. During their stay in the head they increase in size and become much like the cattle maggot. After this they come out of the sheep's head and are sneezed out onto the ground, where they form a shell and bury themselves under a clod or in the grass and remain for a time until the shell bursts and the mature fly emerges. This whole life cycle requires about 10 months, but at the end of that time the insect is ready to begin the life cycle again.

The symptoms that the sheep will show are rather abundant discharge from the nostril, which may become very sticky and collect about the nostril. The sheep sneeze a great deal in an endeavor to get rid of the irritant. They may also toss their heads and stamp their feet. Sometimes they have difficulty in breathing because of the swelling of the nostrils.

At times the sheep seem to fear the fly and will run and attempt to get away when it approaches. They will try to protect their noses by putting them down in a rut or near the dust or they will get together and stand with their heads down in the center of a circle, to keep their noses away from the fly.

Salting the sheep from narrow troughs that have had tar placed on the sides will cause the sheep to get the tar on their noses and this is quite a protection against the flies, as they can not conveniently deposit their eggs about the nostrils.—(Copyright, 1923, by E. E. Wegner.)

THREE YEARLY RECORDS.

The only cow in the world to make three yearly records, each over 30,000 pounds milk and 1000 pounds butterfat, in one year is Adirondac Wietske Dairy Maid, according to an official announcement just received from the advanced registry office of the Holstein-Friesian association of America. At the age of 10 years this cow, a purebred Holstein, recently completed a yearly semi-official record of 31,580.9 pounds milk, containing 1,014.47 pounds butterfat. Her total three-year production is 97,882.6 pounds milk and 3186.61 pounds butterfat, or an average for each of the three years of 32,624.2 pounds milk and 1062.23 pounds butterfat, equivalent to 1327.8 pounds butter. She is owned by the Bridgford Holstein company, Patterson, Cal.

VETERINARY

By DR. S. B. NELSON.

Cow Holds Up Milk—What can I do for a cow that will not let down her milk? She has been fresh about three weeks. I have tried bathing her udder with warm water and rubbing it. She has given three gallons at a milking three or four times, but the last week she has given less than half that much. Her udder is so large and solid and she seems to raise it up when I milk. E. McK.

I am of the opinion that your cow has a little more than "holding up her milk." She probably has a touch of garget, and I would apply an ointment consisting of 1 part of fluid extract of phytolacca with 7 ounces of lard. Rub it pretty well into the udder. I would continue bathing and rubbing the udder gently before milking, applying the ointment after milking.

Sick Pigs—I have some pigs 3 months old that seem to be all right at one feeding and then the next they are sick. Their feet do not seem to have strength enough to carry them. We feed slop from a road camp and milk. They eat anything offered to them, but can't get up. J. S.
Castle Rock, Wash.

Give your pigs two ounces of castor oil per animal in the slop. Divide them into groups of three or four when you do this. The next day or two begin giving them each 10 grains of potassium iodide put into the slop.

Your pigs need pasture and exercise. Get them on green pasture and then force them to take exercise as soon as possible.

Lameness—I have a horse that has been lame for some time and now lately his pastern joint has swollen to the size of a fist and it makes him walk on the tip of his hoof. J. P.
Grandview, Wash.

A treatment for that lameness would be a long-drawn-out affair, I think. In the first place, put on a high-heeled shoe, so as to rest the tendon that goes over the pastern joint. Playing a stream of cold water on the joint for 10 or 15 minutes morning and evening and then rubbing practically dry and applying a little liniment as follows: Soap liniment, four ounces; tincture of iodine, one ounce, and then putting on a bandage and leaving it, may be of help.

String Halt—Is there a cure for string halt? E. R.
McCormick, Wash.

One of the best remedies known for string halt is the operation of severing a little tendon on the outside of the hock. This is an operation that almost any veterinarian would be glad to perform for you.

Churning Is Slow

By E. V. ELLINGTON,

What is the matter with our cow's cream? It takes three or four hours to do a churning. The cow is 6 years old and has been fresh since November 1. The butter is always soft and puffy when it comes. T. H. M.
Cheney, Wash.

The condition of difficult churning of cream that you describe is a most common complaint and usually occurs when the cow has been fresh eight or nine months. The character of the milk changes as the lactation period advances. The per cent of fat and the solids not fat increases. This makes the cream more viscous or sticky and more inclined to whip or froth up and fill the churn. At this stage of the lactation period the fat globules in the cream are small and hard and are difficult to gather together.

About the only practical remedy is to churn the cream at a somewhat higher temperature than the ordinary churning temperature of from 52 to 60 degrees. It may help to churn at a temperature as high as 70 degrees. When the churn fills up with the frothy cream, about the only remedy is to add hot water so as to destroy the viscosity of the cream. Such treatment will not make the best butter, but is more conducive to peace of mind than churning all day and finally becoming so discouraged that the whole churning is thrown out. This condition of the cow's milk will persist until the cow becomes dry. When she freshens again this trouble will not be present.

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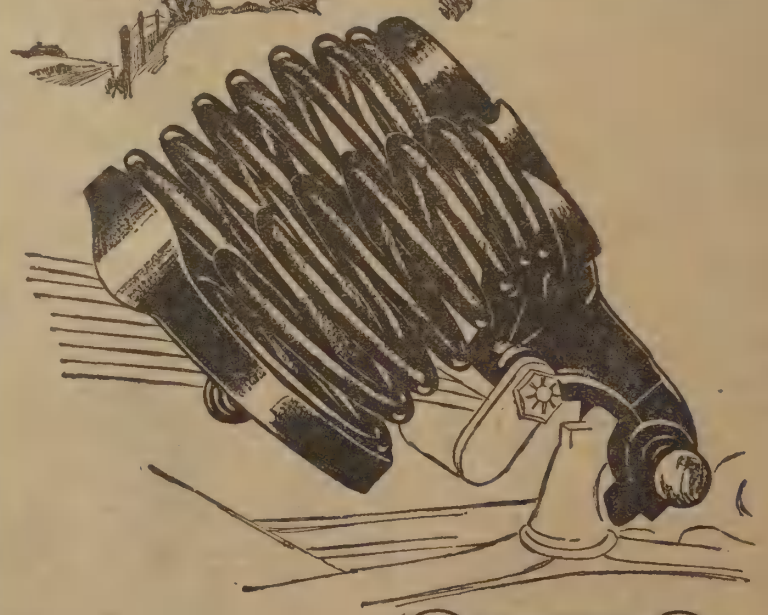
Write for "An Auto Biography." This new Hassler booklet, sent free on request, will grip you with its human interest, no matter what car you drive.



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Bedrock of Cooperation in Denmark

By CHRIS L. CHRISTENSEN
United States Department of Agriculture

ONLY 20 per cent, or one-fifth of the Danish farmers belong to cooperative egg collecting associations, yet these associations have brought about trade reforms and adopted egg stardards as to quality eggs which must be adhered to not only by the cooperative associations, but by all private merchants engaged in the egg trade.

II. HOW IT WORKS.

In the cooperative creamery in Denmark the whole milk is delivered direct to the creamery, where the milk is separated, the cream is retained and manufactured into butter and the skim milk is returned to the farm. Each creamery has a membership of approximately 150 farmers, who deliver direct to the plant the milk from 800 to 1000 cows. Transportation of the milk is a small item of expense. Nearly 90 per cent of the total milk production in the country goes to the cooperative creameries; a large part of the remaining 10 per cent going to private creameries is used to supply the city milk trade.

Ninety-five per cent of the total quantity of sweet milk delivered to the cooperative creameries is manufactured into a standardized grade of butter, of which more than 80 per cent is equivalent to 92 score or better. More than 90 per cent of the skim milk is returned to the farms via the milk wagons that collect the whole milk on the different routes, the skim milk providing the principal feed for the Danish bacon industry.

Furnish Own Capital.

The necessary capital for building and operating a creamery is raised by a loan from the savings institution or local bank, jointly guaranteed by the members of the association. The constitution and by-laws of the association provide for a contract delivery agreement whereby each farmer agrees to deliver his total milk production except what is needed for home and household consumption to the local association for a definite period, varying from 5, 7, 10 or 20 years, the usual period of the delivery contract being 10 years. The purpose of this is to make the business pay for the plant within 10 years.

Creamery Federation.

In the early days of the cooperative creamery, each plant sold its product to private butter merchants in Denmark, who in turn disposed of the butter to wholesalers and jobbers in Denmark and to British buyers in England. To bring about greater efficiency in marketing channels and to eliminate waste in marketing, a number of creameries formed a federation in 1889 to sell the butter direct to wholesalers. This federation failed in 1908 through inefficient management and an organization plan that was not cooperative.

Export Associations.

Meantime, two cooperative export butter associations had been formed in 1895, each drawing its membership from a number of cooperative creameries in a definite territory surrounding its headquarters, rather than extending its activities over the whole country. There are now in Denmark 11 cooperative export associations in which 546 cooperative creameries have membership.

These export associations handle approximately one-third the total butter export; about one-third of the butter exported being bought in Denmark direct from individual cooperative creameries by English wholesale houses which maintain purchasing representatives and operate purchasing depots in Denmark, the remaining third being bought by Danish butter merchants who supply the home trade and export butter to foreign countries. Each creamery in an export association agrees to deliver its total butter production to the association for one or two years, thus assuring the association a regular supply.

The capital required to equip and operate the export association is supplied by a loan guaranteed jointly by the local creameries, the liability of each creamery usually being limited to a definite figure. The export association is managed by an experienced butter merchant appointed by a board of directors composed of five members elected by the membership creameries.

National Federation.

All the cooperative creameries, together with many private creameries, are also federated into a national federation of Danish creameries, known as the National Federation of Danish Creameries, to promote matters of common interest, such as proper legislation affecting the creameries and the dairy industry, and to study production and marketing problems at home and abroad.

The federation also operates what is known as the "Copenhagen Butter Quotation," which establishes the basis on which the creameries shall be paid for their butter each week. One-half the membership of the committee that fixes the butter quotation is made up of producers, and the other half of private merchants.

Cooperative Bacon Plants.

More than 85 per cent of the total number of pigs annually slaughtered in Denmark are slaughtered in the cooperative bacon plants and the bacon is given a light cure. The cured bacon is sent direct to England, where the bulk goes direct to the wholesalers and is smoked, and then distributed to the retailers. These cooperative bacon factories as well as the private plants are about evenly distributed throughout the country, each factory drawing its supplies from about 3600 farmers. Most of the pigs delivered to the cooperative plants are hauled direct in wagons or trucks, thus eliminating shrinkage in transit and losses in yards. The hogs are slaughtered the same day they are received.

The bacon plant associations are organized on a similar plan as that of the creameries, necessary capital to build and operate the plant being provided by loans executed by the association and guaranteed by the members.

The membership territory in each plant is divided into five, six or seven districts, the members in each district assuming obligation for their portion of the loans made by the association. Each member agrees to deliver his total pig production to the factory for a definite period of 5, 7 or 10 years.

Partial Payment.

At the time the pigs are delivered the farmer receives a partial payment on the basis of a "hog quotation" fixed by the bacon factories in a designated province. This payment is made on the basis of slaughtered weight and quality classification, the slaughtered weight being approximately 75 per cent of the live weight. The associations operate an annual pool and at the end of the year the balance between the price paid the farmers upon delivery and the sales price less costs is credited to the farmers' account.

The Danes have learned that the highest quality of bacon comes from a pig which in live weight tops the scales around 200 pounds. The hog must weigh, slaughtered, between 132 and 165 pounds. A deduction of 1 cent per pound on the total weight is made on hogs weighing over 165 pounds slaughtered or under 132 pounds, 2 cents per pound being deducted on hogs that are 20 pounds or more over or under weight. Thus the farmers are compelled to deliver a uniform hog from which a high grade of bacon can be manufactured. Pigs in Denmark are delivered when weigh-

(Continued on page twelve.)

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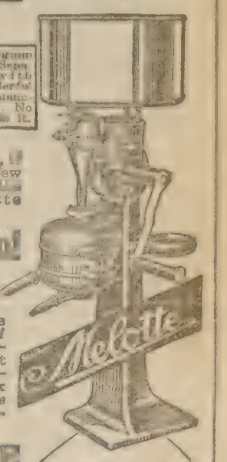

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Catalog tells all—write.

Caution! U. S. Bulletin 201 shows that vibration of the bowl causes cream waste! The Melotte bowl is self-balancing. Positively cannot get out of balance therefore cannot vibrate. Can't remix cream with milk. The Melotte has won 264 Grand and International Prizes.

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Write for new Melotte catalog containing full description of this wonderful cream separator and the story of M. Jules Melotte, its inventor. Don't buy any separator until you have found out all you can about the Melotte and details of our 15-year guarantee which is infinitely stronger than any separator guarantee. Write TODAY. How many cows do you milk?

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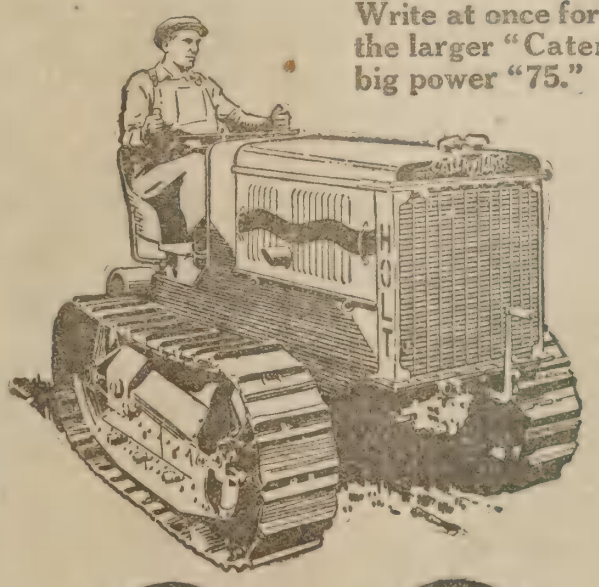

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POULTRY AND RABBITS

To Kill Lice

Sodium Fluoride Will Get Results

Although there are many methods used in attempting to rid poultry of lice, the sodium fluoride method is one of the simplest to apply, and perhaps the most effective, according to Dr. W. T. Johnson, veterinarian of the western Washington experiment station.

It has been determined that real poultry lice are masticating and not blood-sucking parasites. In other words, they live by eating the scales of the skin and parts of the feathers. It has also been determined that sodium fluoride acts as a poison when consumed by the lice. Taking advantage of this fact and placing the drug on the fowl, so that when the lice eat they consume the chemical, results in their destruction.

At least two methods of treatment have been very successfully used, the dust method and the dip method.

The dip method is the easiest, most rapid and the cheapest method, but should not be applied during the colder seasons. It consists in dipping the fowls in a lukewarm solution of sodium fluoride in water at the rate of three-quarters to one ounce (approximately a well-rounded tablespoonful) of the powder to each gallon of water. A tub is a convenient receptacle to use and it should be over half full of the solution.

A warm, sunny day should be selected when dipping, so that the fowls are dry before going to roost.

The fowls are grasped similar to that when dusting and held in the solution with the head out. The feathers of the body are then ruffled with the right hand. Finally the head is ducked once or twice for just a moment each time.

The dust method consists in applying a pinch of the drug on the skin and feathers of various parts of the body, since it has been found that several species of lice may inhabit a fowl, and that they tend to migrate to certain parts of the body and remain in more or less restricted areas. A pinch of the sodium fluorid is picked up between the index finger and thumb and placed on the skin of 12 places on the body when treating to destroy all lice that may infest the chicken. The order of applying the chemical is: (1) Base of tail; (2) below the vent; (3) to one side of keel bone; (4) other side of keel bone; (5) outside of thigh region, left; (6) along wing, left; (7) on back, just back of wings; (8) base of tail; (9) outside thigh region, right; (10) along wing, right; (11) throat; (12) back of head. Particular pains must be taken to deposit some of the drug on the skin in each part of the body mentioned. It is not necessary to make special effort to apply the powder to the feathers.

In order to treat as rapidly and efficiently as possible it is necessary to do the work in a systematic manner. It is well to hold the fowl in such a manner that one does not have to change hands; changing hands results in delay and increases the chances of the fowls getting away before treatment is completed. The wings are held together back to back by the left hand and the right hand remains free to apply the powder. The fowls should be held by the one hand throughout the entire procedure. If the wings are not held as given a cloud of the powder is liable to be created with detrimental results to both fowl and operator.

If the fowls are properly handled and a table be used upon which to lay the fowl and to hold the container of the sodium fluorid it is possible to treat more rapidly than one realizes at first thought. Three people with proper conditions at hand should catch and treat 100 or more birds per hour by this method after becoming experienced. Most rapid and effective work is done when a definite routine is followed in the case of each individual fowl, according to some such procedure as above given.

One pound of the powder should be enough to treat approximately 100 fowls by the above described method.

As stated before, in order to eradicate all lice that may affect the chicken it is necessary to apply the powder to 12 parts of the body, but if the louse which is found principally in the vent region is the only one noted it is only necessary to place the drug on the skin below the vent. The louse which infests the vent region is the most frequently encountered in our flocks and very often the only kind present.

It is no more necessary to apply sodium fluoride to various parts of the body than is the case when using various ointments. In using ointments they must be applied twice to completely eradicate. In the case of sodium fluoride one thorough treatment is usually effective, as it destroys all the lice present at that time and remains long enough to destroy the lice coming from the eggs present at the time of application. Treatment is not immediately effective, but requires several days.

Although it is possible to completely eradicate lice with one sodium fluoride treatment properly applied one must not harbor the impression that the flock will remain permanently free from then on, as there are various means by which a reinfestation may be established. But, when the work has been thoroughly done, reinfestation does not soon take place. To lessen the danger of reinfesting the flock treat all fowls on the premises and those brought in and isolate introduced fowls for a week's time before putting them with the flock.

It is highly important to have a convenient means of catching fowls, so that they may be handled very rapidly and yet disturbed as little as possible in order not to seriously lower egg production because of handling. A convenient means which is applicable for day work consists in running fencing wire along the edge of the droppings boards and then driving the fowls in back of the wire below the droppings boards. The fowls are then driven into a catching crate placed at one end of the enclosure.

In the United States department of agriculture farmers' bulletin No. 801 is found the following regarding this problem:

"For lice on your chickens, young turkeys and, in fact, all newly hatched fowls the application of sodium fluoride in the dust form is recommended, rather than by dipping. Sodium fluoride if used too freely on very young chicks may kill them. The importance of treating the hen before the hatch comes off is urged. It has been found that there is no injury to eggs provided the setting hen is properly treated. If this is not done the chicks should not be treated until about a week old and then only two very small pinches should be used. One of these should be distributed on the neck, top of head and throat, and the other on the back and below the vent. The mother should be given only three pinches—one on the head and neck, one on the back and one below the vent. The treatment should be given while the fowls are active and for a time they should be prevented from hovering, so that the free powder will be shaken off."

Ask for commercial sodium fluoride when purchasing, and not for sodium chlorid.

Treat all fowls on the premises—chickens, geese, ducks, turkeys, etc.

Do not let a single fowl escape complete treatment.

Apply the powder on the skin in each required part of the body when using the dust method.

Hold the fowl with the wings back to back and by the same hand throughout the entire procedure, as it prevents fluttering and production of a cloud of sodium fluoride, which results in an irritating effect on the breathing passages.

Do not dip in cold weather.

Do not leave solution of sodium fluoride so fowls may drink it—it is poisonous.

Do not let this solution stand in metal containers over night—it attacks metal.

Sodium fluoride does not destroy mites—they are blood suckers.

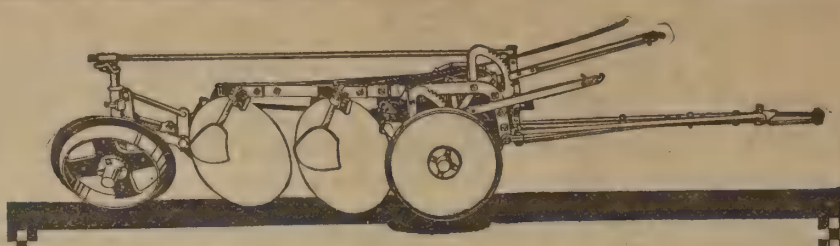
Do not use sodium fluoride to eradicate lice on cattle and hogs—these animals have blood sucking lice and irritation is sometimes produced.

LITTER FOR FERTILIZER.

Litter from the scratching floor should be used as fertilizer and soil conditioner in the garden or field.

DESTROY BODY LICE.

Sodium fluoride, dusted into the feathers, will destroy body lice on chickens.



An Orchard Disc Plow Needs a Stiff Hitch

You want to offset your plow to right or left of tractor for close work under the low limbs. And you want the plow to run steady when thus offset.

John Deere No. 26

is the plow that meets those requirements, because of its stiff, adjustable hitch.

Note, in the illustration at the right, how this hitch can be adjusted to the right or left to provide the desired offset.

Being stiff, this hitch tends to hold the plow in the furrow, when offset; and it also aids in controlling the rear wheel for short turns at the ends.

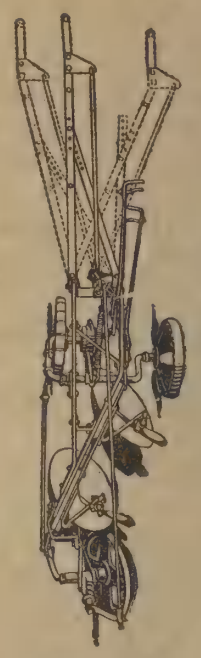
An exclusive feature—the No. 26 is the only disc plow with stiff hitch.

And don't forget these other important reasons for the great popularity of the No. 26:

Only 26 inches high when plowing 6 inches deep, and only 37 inches wide—it's the low, narrow plow that gets under the low limbs, up close to the row. Rear end can be made to float, thus preventing damage to large roots. Unusual clearance—frame is above the discs, not at the side. Simple, strong and positive power lift.

Subsoiling and ridging attachments can be furnished, making the No. 26 a three-in-one-plow.

Real service—adequate stocks of plows and repairs maintained at San Francisco, Los Angeles, Portland, Seattle, Spokane and Boise. And there is a John Deere dealer with plows and repairs near you.



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Tell us about your water conditions and we'll send you a quotation or an expert to talk things over. Write today.

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Stop that monthly feed bill. The Letz Dixie will cut, grind and mix anything grown—makes a perfectly balanced ration from home-grown crops. Guaranteed to increase production from 15 to 30% and cut feeding costs from 25 to 50%. A warehouse in every state.

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MORE FOR YOUR MONEY.

The dollar saved in buying some farm necessity and the dollar earned by the article bought add more than a little to the yearly profits. A good cream separator, a well constructed feed mill, fence or harrow, a durable garment or shoe are elements in the making of more prosperous farms and happier homes. The advertising columns of **THE WASHINGTON FARMER** contain an index to many useful things and refer you to the dealers. The wise shopper finds these columns one of the most interesting divisions of the paper.

Have you glanced over the farm bargains on the "Want Ad" page?

ORCHARD AND GARDEN

Apple Marketing

Clearing House of Information

That the time is ripe for the formation of an apple market clearing house is the opinion of large growers in north central Washington who have been marketing their products direct for several years.

"My idea is not to attempt to control the method of marketing apples or the prices at which they are sold," said one of these growers, who has studied the problem for many years. "To begin with, I would propose simply a clearing house of information which would be in the sole charge of a man in whom every dealer, grower and marketing agency would have complete confidence. Every carload price quoted would be reported to this clearing house daily and in turn all quotations would be bulletined out to each member of the organization. However, the bulletin would not contain the names of the firms making or receiving the quotations. I would suggest that the bulletin would simply announce five cars were quoted at $2, f. o. b. Wenatchee in a certain zone. The entire country, of course, would have to be zoned for this purpose so that bulletins would be intelligible.

"Of course, the names of the firms making and receiving quotations would be kept in the office, but would be strictly confidential. This shows why the man in charge of the clearing house must be of the very highest character and standard.

"Two great objects would be accomplished by the clearing house: One the stabilizing of the market, and the second, to prevent the flooding of certain markets while others may perhaps be bare of fruit.

"If all dealers and marketing agencies were informed as to the general range of quotations they would be able to act much more intelligently and efficiently. They would also avoid shipping large quantities of apples into a market which was overcrowded.

"During the last three or four seasons I have encountered quotations made by local firms or agencies varying as high as 75 cents per box for one grade and variety. Naturally the eastern dealer receiving such quotations would come to the conclusion that the situation here was pretty badly demoralized and would hold off in making a purchase, hoping for even better prices.

"It woud not be the hope or expectation that an absolutely uniform quotation could be worked out, but there is no reason why the prices of extra fancy Winesaps should vary more than 10, 15 or 20 cents in the market at any one time, in my opinion.

"It is useless to dwell further upon this phase of the situation, as every one knows it and knows that it is not the fault of any one firm, individual or agency, but rather the fault of the system.

"The one great object toward which all business is working is stability, and unless this can be achieved in the apple marketing game we can not expect to attain to maximum results either as growers or shippers.

"As a matter of fact the local dealers or shippers are the ones who suffer more seriously from the unsettled condition and the fluctuations of the market than any one else.

"With uniform grade and pack and quality of apples, picking at the proper time and transportation to the eastern markets in prime condition, there is no reason why the products of the Wenatchee district should not command a stable price during the entire season, which should return a fair profit to all of the factors concerned in their production, transportation and sale.

"I believe that the market clearing house is the one missing link which shall help to stabilize the market more than any other element."

Wintering the Bees

By GEORGE W. YORK.

No doubt by the time this appears in print most beekeepers will have taken the surplus honey off the hives. If not already done it is a fine time to requeen the colonies with young queens. The later rains will help continue the fall blossoms, and thus go far toward supplying the bees with honey stores for winter. But be sure to examine every colony carefully long enough before continued cold weather arrives, so you can feed them sugar sirup, if necessary to complete the required amount of food for winter. This should total around 40 pounds at least; or, if an eight-frame hive, the gross weight of hive and stores for winter should be about 60 pounds, and if a 10-frame hive, about 70 pounds.

Some beekeepers who run their bees for extracted honey make the mistake of extracting from the brood combs, which may contain quite a little sealed honey. This is seldom necessary if ample room was given in the supers during the honey-storing season. Besides, there is danger of getting young brood in the honey, which does not tend to improve it as a table food. It is a good rule never to extract any honey from the brood chamber. Rather than extract there it would be much better to exchange, say, one or two of the brood combs full of honey, with empty drawn combs, putting these latter in the center of the brood nest. This would give the queen a good chance to lay more eggs for the rearing of young bees for the winter time. Then keep the full combs of sealed honey for feeding early next spring, in case they are needed. They can be inserted in the brood chamber again in place of empty combs. If this is done, say, in March, it may be all the attention the bees will need until near swarming time.

But, whatver you do, try to have the colonies strong with young worker bees this fall for the coming winter, for they are the ones that will do the work next spring before the time when the young bees reared then are ready to do their part.

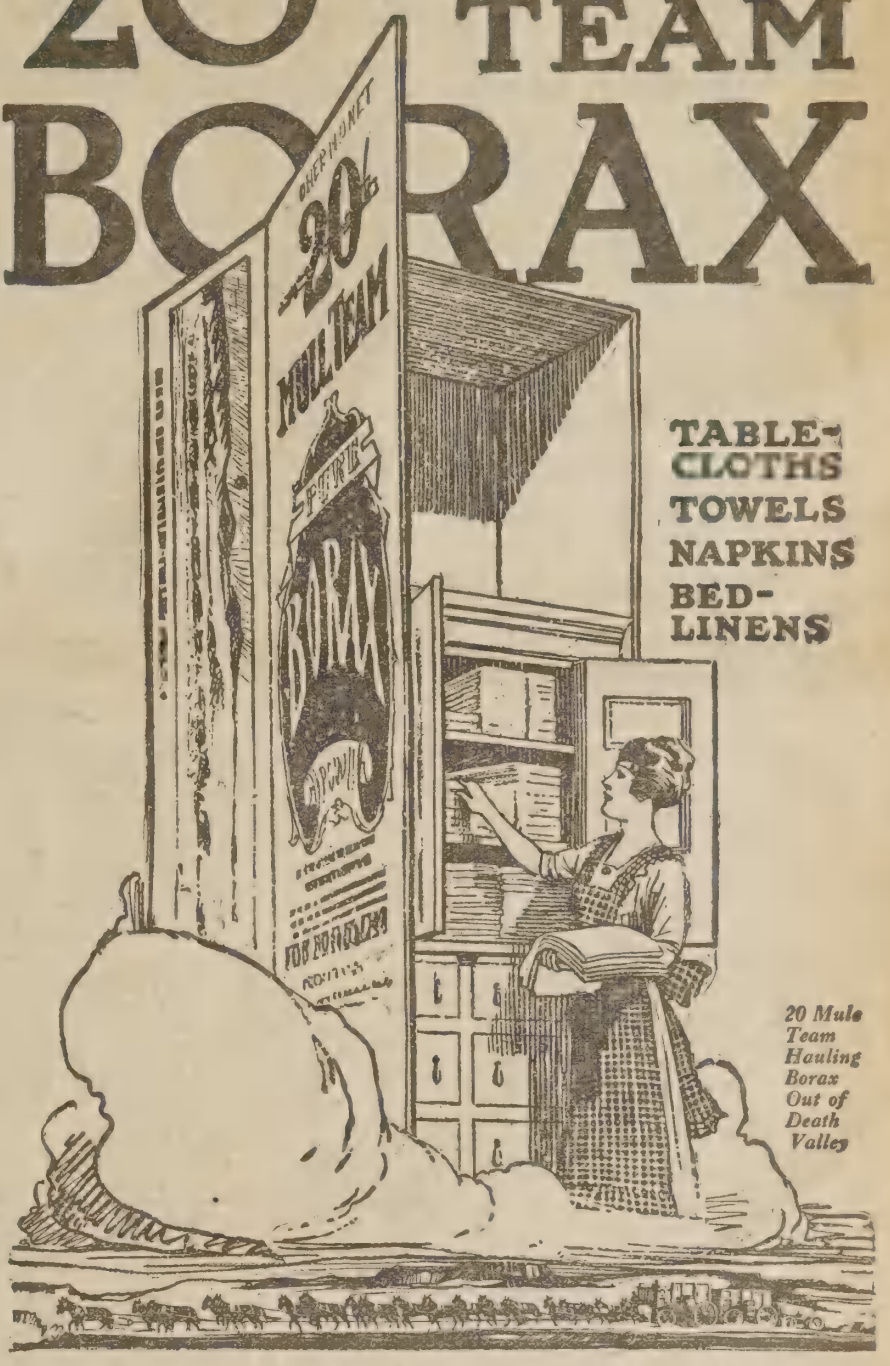
If the reader is somewhat inexperienced I would advise referring to some good book on beekeeping and learn just how to do everything as well as possible. Even the best of beekeepers sometimes miss it, but you will stand a better chance of succeeding if you will try to follow the advice given in the best bee books.

Another good way is to visit some successful beekeeper in your vicinity and learn how he proceeds to get his bees in condition for safe wintering.

A little later I will describe what is considered a good way to prepare bees for wintering here in the Pacific northwest. In the meantime don't fail to see that they have plenty of good stores to carry them through the cold season that will likely be here in two or three months. One of the oldest and best beekeepers in Wisconsin used to say that "too much honey in the hives for winter is just enough."

Made only of wheat and barley scientifically baked 20 hours — Supplies Vitamin-B and mineral elements. How can Grape-Nuts be other than a wonderfully appetizing, healthful food? "There's a Reason"

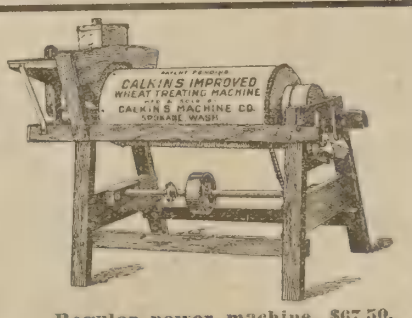
20 MULE TEAM BORAX



20 Mule Team Hauling Borax Out of Death Valley

The heavy things that must be washed thoroughly and come out clean-smelling, fresh and white, are best done when 20 Mule Team Borax is used. It softens all water and increases the cleaning value of *any soap* it is used with. 20 Mule Team Borax also acts as a *protective* for your finer fabrics and dainty colors. It is good for anything it touches and is known throughout the world as Nature's Greatest Cleanser. There are more than a hundred essential farm uses for 20 Mule Team Borax. It should be used with soap wherever soap is used. It is a solvent for pots and pans. It makes the skin white and smooth. 20 Mule Team Borax is in all clean kitchens. Is it in yours? At *all* grocers and drug stores. Send for the Magic Crystal Booklet. Pacific Coast Borax Co. New York—San Francisco—Chicago.

NATURES GREATEST CLEANSER



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Calkins "Junior" hand power, $47.50.

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The department editors of this paper are anxious to be of service to you. Do not fail to write to us if they can be of help to you.

More Vitamines

Leafy Foods and Dairy Products

"If the American people wish to save themselves and their children from malnutrition they must arrange their diet list to include more of three important foods," said Dr. E. V. McCollum of Johns Hopkins university, one of the leading experts in the science of nutrition in the United States, as he spoke to a Seattle audience on the subject of "What to Eat and Why."

"In the first place, we must have more raw foods—such as lettuce, celery and fresh fruits in salad or other palatable form. We also need more dairy products. Every one should have a quart of milk a day in some form or other. And finally we do not eat enough leafy foods, such as spinach, beet greens and chard. These foods contain vitamines and vitamines are, to quote Dr. McCarrison of the British army, 'the spark in the engine. They are the fundamental essential in all human diet. Lack of any or all of them spells malnutrition and that in turn physical and mental breakdown.

"It is a deplorable condition when one-third of our school children are suffering from malnutrition, and it is to correct these conditions that we have been studying the human diet problem in the light of prolonged animal experimentation.

"The best source of vitamine 'A,' without which the tear glands and salivary glands cease to secrete, is the oil of fish and animal livers, kidneys and pancreas, butterfats and the leaves of lettuce, spinach, carrot tops and turnips. It is found in no vegetable fats or oils.

General Malnutrition.

"General malnutrition results from the lack of vitamine 'B,'" he continued, "with definite damage to the processes of digestion and assimilation, the motor nerve cells of the spinal cord and possibly paralysis. This vitamine is found in almost all our food except polished rice, starch, sugars, fats and oils, white wheat flour and store corn meal.

"Vitamine 'C' is the most easily destroyed and the result is a breakdown of the capillary blood vessels, with the spilling of the blood into the tissues. Scurvy is the extreme of this condition. Vitamine 'C' is found in fresh uncooked fruit and vegetables, not in cereals, canned, preserved or cooked food.

Some Form of Rickets.

"A great many children have some form of rickets, which is caused largely by the lack of vitamine "D." Cases of bow legs, knock knees and swollen joints have been produced by the omission of such foods as have this vitamine in them. The best source of this vitamine is cod liver oil, but this should only be given as a preventive when the proper diet can not be supplied. This disease is rare in China and yet these people eat very little animal food. They get a large part of their diet from leaves of different plants and are thus able to supply the vitamines that are needed.

"On the other hand, we find that a leaf and seed diet such as the Chinese people eat does not produce a dominating people. It is also true with animals. No seed and grass eating animal ever ruled the wilds and they never will. The beasts that prey on other animals are more ferocious and come nearer being rulers than are the herbivorous animals. When the principle is applied to the human races we find that the meat and vegetable eaters have always been the most progressive.

"Vitamine 'X,' discovered recently by Drs. Evans and Bishop of the University of California, is the latest find in our field. Whole wheat and lettuce are rich in its contents."

Source of Vitamines.

Dr. McCollum noted that yeast is a source of "A" and "B" vitamines, oranges of "A" and "B" and "C" and cod liver oil of "A" and "D," and stated that a correct estimate of the health of the nation may be based on the condition of its teeth.

Dr. McCollum dwelt on the importance of the vitamines to the teeth and the relation of the health of these to the general health of the individual.

Bedrock of Cooperation

(Continued from page nine.)

ing on an average 210 pounds. Moreover, production is uniform each week because the amount of skim milk regulates the number of pigs the farmer must keep.

Common Trade Mark.

The 46 cooperative bacon plants are also federated for educational purposes into one national federation known as the National Federation of Danish Cooperative Bacon Factories. This federation has been able to influence government legislation that provides for the exporting of all bacon from Denmark under the common trade mark "Lur Brand," which can be stamped only on the highest class bacon from sound, healthy animals free from tuberculosis and other diseases.

The agents of the bacon factories on the bacon exchange in London are informed each week of the amount of bacon available and meet with the English wholesalers on the principal market days. As a result of this direct marketing scheme, the bulk of the Danish bacon is shipped direct from the cooperative bacon plants in Denmark to the provision wholesale houses in England. In a few instances, some of the cooperative plants have made direct contacts with the larger retail buyers in England and ship direct to them.

550 Egg Associations.

Forty years ago the Danish farmer looked upon egg production as a chore which might be handled by the women on the farm. The Danish egg trade to Great Britain was not a success because the eggs were of poor quality, irregular supply, and of no dependable grade, with the result of low prices to the producers.

Today, through standardization and cooperative marketing, Danish eggs are the third export commodity of the country. The 550 egg collecting associations, with a total membership of 50,000 farmers, are formed into one central egg marketing association known as the Danish Cooperative Egg Export association, with headquarters at Copenhagen. The central association owns 10 branch packing houses throughout the kingdom and a large packing house at Copenhagen. Loans are executed and contracts made with the farmers for delivering their total egg production, similar to the plan of operating the creamery and bacon plants.

The chief aim of the central association is to create better home and foreign markets for high-quality eggs, all buyers being assured fresh, high-quality eggs.

A stamping scheme has been devised so that each egg may be traced from the English breakfast table to the individual producer. The eggs are collected from the farmers and forwarded to the nearest packing house owned by the central association. Here under the supervision of the central association all eggs are examined, sorted, graded and packed. All eggs collected are paid for according to weight. The association influenced the producers to standardize their product. In 1921 the Danish egg export association handled 241,266 cases of eggs. While about 20 per cent of this number of eggs were disposed of on home markets, the remaining 80 per cent were exported. The 194,445 cases, or 80.6 per cent which were exported represented 10.8 per cent of the total egg export from Denmark.

In addition to the Danish cooperative egg export association, there are seven smaller egg associations operating along similar lines, but in the respective membership territory of seven different cooperative bacon plants. These associations exported 175,121 cases in 1921.

FARM WOODLOTS.

Farm woodlots offer a splendid opportunity for growing timber crops, according to statements from the forest service, United States department of agriculture. It is estimated that there are 150,000,000 acres now in farm wood lots which if placed under sound forestry methods would yield substantial revenues to their owners, as well as lumberto help relieve the timber shortage which has already begun to be felt.

Farmers' Want Ads

MONUMENTS F

COMPLETE STOCK. WRITE FOR DESIGNS and prices. Inland Monument Co., N1001 Monroe, Spokane.

HELP WANTED—Female 1

GIRLS DESIRING WORK FOR HALF BOARD and room, while attending school, write Gooding College, Gooding, Idaho, today.

HELP WANTED—Male 3

LOCAL SALESMEN FOR OUR COMPLETE line "Trees That Please," all or part time contracts. Write Capital City Nursery company, Salem, Ore.

MEN WANTING FOREST RANGER, RAILWAY mail clerk or carrier positions, write for particulars. Mokane, Dept. A11, Denver, Col.

(Continued on the following page.)

Great Northern Operating and Equipment Cost Advances

All the work that you do, all the work that everybody does, consists in moving from point to point yourself and in moving objects from one point to another. This is all that a railroad does. You know that it costs you something to do your own work. Do not forget that it costs the railroad immeasurable more to do its work, which is also your work, and without which the greater part of your labor and expense would be lost.

In traveling on a completely equipped train with dining, parlor and sleeping car service, the facilities are the same as in high class hotels. The cost to the traveler is immensely less.

Every item in the provision for both passenger and freight service costs more than it did. You travel over a mile of railroad track in a minute or two. This mile of track, exclusive of the grade and right of way, which cost $15,000 in 1913 now costs $25,000.

Here is a comparative list of the cost of Great Northern equipment ten years ago with the cost of similar equipment now:

	Cost in 1913	Cost in 1923
Mountain Type Engines	$24,000	$54,000
Sleeping Cars	16,000	30,000
Dining Cars	14,000	31,500
Day Coaches	9,000	20,250
Refrigerator Cars	1,200	2,700
Ore Cars	800	1,800
Box Cars	800	1,800
Flat Cars	650	1,462

Taxes have increased in these same ten years over 100 per cent. This makes a formidable addition to the operating expense of every railroad. But at the same time railroad freight and passenger rates have increased only about 40 per cent.

For everything we have, food, shelter, clothing, and transportation, we must pay. Transportation has made this country what it is, and if it is impaired the whole country suffers disaster. It is worth thinking about as a matter of self interest as well as a matter of justice that the service is being rendered, under cost conditions most unfavorable to the carrier and growing yearly more difficult, at a price to the public so little over that of ten years ago.

Take these facts into consideration whenever you think or talk about railroad rates.

LOUIS W. HILL,
Chairman of the Board.

Talk No. 6

FARMERS' WANT ADS

This is the farmers' "want," "sale" and "exchange" department for small advertisements of farmers, including live stock and poultry.

Advertising rates for ads running 1 to 3 times, 10c per word per insertion, with a special rate to Farmer subscribers, as follows: Ads running 4 to 12 times, 9c per word per insertion; ads running 13 times or more, 8c per word per insertion.

All commercial and land advertising, 10 cents per word per insertion. Open also to nonsubscribers.

In using these columns advertisers must observe (1) No advertisement will be accepted for less than $1.00 per insertion. (2) Every word, number and initial, including name and address, must be paid for. (3) New advertisements, changes of copy or cancellations must reach general office, Spokane, Wash., 10 days in advance of publication date. (4) Cash must accompany order.

Above rates include insertion in The Washington Farmer, The Idaho Farmer and The Oregon Farmer, which constitute the Pacific Northwest Farm Trio, 46 Review building, Spokane, Wash.

HELP WANTED—Male 3

WORKING MANAGER OR LESSEE, INTENSIfied farming; 65 acres, 14 Crawford, Portland.

HELP WANTED—GENERAL. 5

MEN AND WOMEN, AGE 17 TO 30, AT ONCE to train for positions with Western Union Telegraph Co. and various railroads. Pacific Telegraph Institute, Spokane, Wash.

AGENTS WANTED 9

SELL DRY GOODS REMNANTS—GREATEST bargains in line goods. Agents, Pacific Remnant Co., 169 N. Shaffer, Orange, Calif.

SALESMEN WANTED 12

ARE YOU LOOKING FOR A PAYING POSITION? Sell trees and plants for a reliable company. Terms on request., Salem Nursery Company, 428 Oregon bldg., Salem, Ore.

SCHOOLS AND COLLEGES 26

EARN $110 TO $250 MONTHLY; EXPENSES paid as railway traffic inspector; position guaranteed after completion of 3 months' home study course or money refunded. Excellent opportunities. Write for free booklet G-157. Stand. Business Training Inst., Buffalo, N. Y.

LEARN AT HOME—YOU CAN GET A PRACTIcal business college course by correspondence. Tuition, $25 a year. Montana Business Institute, Miles City, Montana.

FRESH FOOD PRODUCTS 51-3

FISH—4 LBS. SMOKED SALMON, $1; 4 LBS. Alaska salmon bellies, $1; 4 lbs. black cod, $1. 3 lbs. best codfish, $1; delivered by mail. Coffin Fish Co., Seattle, Wash.

BEES AND HONEY 53

ALFALFA-SWEET CLOVER HONEY—2 60-LB. cans, $9.75; one can, $5, f. o. b. Rigby; one 40-lb. can, prepaid to fourth zone, $5.75; quality guaranteed. Heckman & Larsen Honey Co., Rigby, Idaho.

FAMOUS KITTITAS VALLEY ALFALFA HONey, extracted; postpaid 2d and 3d zones: 10 lb. pail, $1.85; 3 10s, $5; 3 5s, $2.75; 60-lb., $8. Kittitas Valley Apiaries, Ellensburg, Wash.

QUEEN BEES—BUY THE BEST. UNSURpassed Italian queens, 1, $1; 6, $5.75; 12, $11; 50, $45; 100, $85. Circular free. J. D. Harrah, Freewater, Ore.

HAPPY HOME HONEY — ALFALFA AND clover; 60-lb. can, $7.50; two cans, $14.50; case six 10-lb. pails, $8.25. H. N. Paul, Mabton, Wash.

VALLEY BLOSSOM HONEY; QUALITY GUARanteed; 1 60-lb. can, $7.50; 2, $14.40. Ernest Sires, Route 7, Yakima, Wash.

PURE, WATER-WHITE SWEET CLOVER honey; 60-lb. can, $5; two, $9.75. H. R. Bowen, Roberts, Idaho.

EXTRACTED HONEY FOR SALE—WELLS D. Rose, Sunnyside, Wash.

MISCELLANEOUS—FOR SALE 60

SASH AND DOORS—O. B. WILLIAMS CO., 1943 First ave. So., Seattle. Chicken house sash, 20" wide by 25" high, 80c; a dozen different sizes in stock for immediate shipment. Skylights for chicken houses, 36"x40"; price, glazed, $2. This is the size recommended by the Western Washington experiment station. We carry them in stock for immediate shipment. Sash and doors for all purposes at lowest prices. All orders receive prompt attention. Our large illustrated catalog No. 35, showing full line of building material and built-in fixtures for the home, free on request. O. B. Williams Co. Established 1899.

PIPE—GET PARTICULARS ON OUR SPEcial flue pipe, 1¼, 1½ and 2 inch. Big saving on it. We also have all sizes second-hand and new standard pipe at low prices. We also save you on roofing, belting, pumps, engines, cables, etc. Alaska Junk Co., S120 Adams, Spokane, Wash.

TOBACCO—"OLD KAINTUCKEE" NATURAL leaf. Dark brown for chewing, light brown, mild for smoking. Fine as silk. None better. Sample pound, 60c; 5 pounds or more, 50c pound, postpaid. R. E. Acree, Obion Valley Tobacco Farm, Pryorsburg, Ky.

SPECIAL—ONE-POUND TIN "SATISFACTION tobacco" and pipe for $1. Smoking, chewing tobacco, cigars, cigarettes and complete line of pipes. Wholesale and retail. Peter M. Jacoy, 3 Washington st., Spokane.

WALL BOARD—WRITE FOR SAMPLE OF Washington plaster wall board; won't warp, won't burn. Manufactured by Washington Building Products company, 6851 E. Marginal Way, Seattle, Wash.

NATURAL LEAF TOBACCO—CHEWING, 5 lbs., $1.75; 10 lbs., $3. Smoking, 5 lbs., $1.25; 10 lbs., $2. Pay when received; pipe and recipe free. Farmers' Tobacco Union, B19, Paducah, Ky.

POCKET SIZE, 5-IN-ONE TOOL KITS, 45C; safety razors, uses Gillette blades 45c. Agents wanted. Army Blanket Supply Store, 309 Riverside ave., Spokane.

TOBACCO — FINE, YELLOW MAMMOTH chewing, 10 lbs., $3; smoking, 10 lbs., $2; 20 lbs., $3.50. Farmers' Club, Mayfield, Ky.

GRAIN BINS AND TANKS 90

METAL GRAIN BINS SAVE YOU MONEY. Write for circular T and prices. Spokane Culvert & Tank Co., Spokane, Wash.

MACHINERY—For Sale 93

HAVING SOLD MY ENTIRE GUERNSEY herd, I will sell at sacrifice three single unit Universal milking machines in good condition. Also a Zintheo Rotary vacuum pump. Outfit complete, $165. Dr. Park Weed Willis, Empire bldg., Seattle.

GANG PLOWS, NEW AND USED TRACTORS, small gas and steam engines, sawmills. Fallquist Bros., W20 Riverside ave., Spokane, Wn.

AUTOMOBILES—FOR SALE 112

SEE CHEVROLET FIRST—NEW AND USED cars at prices that will surprise you; stop in or write Inland Empire Chevrolet Sales Corp., 916 2d ave., Spokane. Open evenings. Open Sunday.

AUTO TRUCKS—For Sale 115

WHEAT HAULING AND TRUCK CONTRACTing season is now on. See our Ford ton trucks with the six-speed transmission and nower when needed; speed when you want it. National Motor Co., authorized Ford dealers, 1212 First. Phone Main 460, Spokane.

AUTO ACCESSORIES AND PARTS 119

INVESTIGATE — "THE RING WITH THE Spring" makes a poor engine good; makes a good engine better. Money back guarantee. Wire and disc wheel sales and service. Pacific Gear & Auto Parts Co., W1022 First ave., Spokane, Wash.

NEW AND USED AUTO PARTS—NEARLY all cars. A trial order is all we ask. C. & D. Auto Salvage & Supply Co., 1904 Grand ave., Kansas City, Mo.

STOVE REPAIRING 128

WRITE MYER RUBENS, SPOKANE, ABOUT stove repairs, welding broken parts, nickel plating.

FUR-BEARING ANIMALS 170

SILVER AND CROSS FOXES FOR SALE. William Rambo, 407 Sprague, Spokane.

PETS—Dogs, Birds, Etc. 171

FOR SALE — BOBTAIL SHEPHERDS, $10 each; 2 females, 8 mo. old; good drivers; very snappy, $15 each. Hentges, Valley, Wn.

RABBITS and HARES 173

MAKE MONEY RAISING RABBITS AND geese. Pedigreed New Zealands, Blue Flemish Giants; at right prices. Toulouse geese. Agnes Brenner, R. 4, Box 49, Tacoma, Wash.

PEDIGREED FLEMISH GIANT RABBITS. C. E. Cockerham, Newberg, Ore.

POULTRY 174

IF YOU NEED ANY PULLETS TO FILL OUT your flocks, we can supply February, March, April and May hatched White Leghorn pullets of Hollywood, Tancred or Tancred-Hollywood crossed strains at reasonable prices. We have about 250 very choice R. I. Red pullets. We ship all pullets with a guarantee of satisfaction or they may be returned to us within three days. We have a large assortment of used incubators which we will sell at very attractive prices. Write for quotation on pullets and incubators. Queen Hatchery, 1430 1st ave., Seattle, Wash.

CERTIFIED WHITE LEGHORN QUALITY chicks for summer and fall months, from selected free range, high egg producing breeding flocks, inspected and accredited by the Sonoma county farm bureau. Send for catalog and attractive prices. Safe delivery and full count guaranteed. Must Hatch Incubator Co., Inc., 445 Seventh st., Petaluma, Calif.

250,000 ACCREDITED BABY CHICKS FOR sale during May and June. Send in your order early. "A" grade, $6 for fifty; $11.50 per hundred; $110 per thousand. "AA" grade, $8.50 per fifty; $16 per hundred; $155 per thousand, f. o. b. Petaluma. Member of the Sonoma county farm bureau accredited hatchery list. White Hatchery, Petaluma, Calif.

WHITE LEGHORN BABY CHIX FROM flocks mated to males having sire's dam record of 240 to 297 eggs per year. Full particulars and interesting literature on request. We are accredited by Sonoma county farm bureau. The Pioneer Hatchery, 422 Sixth street, Petaluma, Cal.

SUMMER SALE "HENACRES" PULLETS: best for fall and winter eggs, $1.25 to $2 each. Hens for breeders, $1 to $1.50 each. High grade stock at reasonable prices. Booking orders now for 1924 baby chicks. Free catalog and price list. "Henacres," Box A, Prosser, Wash.

DOLLARS FOR YOUR EGGS—WE PAY THE top market prices for your eggs and poultry. Daily cash remittances. McClintock-Trunkey Co., produce department, Spokane.

S. C. BUFF LEGHORNS, EGG BRED, WINter laying hens; one and two years old; will make excellent breeders; $10 per dozen. Gustave Feller, Emmett, Idaho.

FOR SALE—35 ONE-YEAR-OLD S. C. WHITE Leghorn hens, thoroughbreds; good laying strain; $1 each. Theo. Danilson Jr., R. D. 2, Chewelah, Wash.

WHITE LEGHORN COCKERELS, DIRECT from Tancred Farms, from 314 egg stock. W. C. Oicles, Rt. 2, Box 38, Chehalis, Wash.

LIVE STOCK 177

JERSEY BULL CALF BARGAIN—DROPPED June 14, 1923. Sire, Andrew Hoag, double grandson of Capt. Tristram; granddam half sister to St. Mawes. Dam, Charity's Pogis St. Mawes. She traces 4 times to Rosaire's Olga Lad, four times to St. Mawes, once to Pogis 75th of Hood Farm and once to Octavia's Duke. Very low price, quality considered. S. O. Pool, Malaga, Wash.

WE GUARANTEE TO PAY THE HIGHEST market price for your poultry and live stock. Veal market growing stronger. Owing to the constant changes in the market we are unable to quote prices in this paper from week to week. We will furnish tags and prices when you are ready to ship. Write us what you have to sell. Prompt returns. John Lewis & Co., Spokane, Wn.

FOR SALE—REGISTERED HAMPSHIRES, Romneys and Rambouillets in both ewes and rams. All range raised, strong and healthy. We specialize on stud rams for small flocks. We can also furnish range and farm ewes in small or large lots. Personal attention to all orders. H. Stanley Coffin, Yakima, Wash.

REGISTERED SHROPSHIRES—FIFTY EWES, two years and up; fifteen yearling ewes, twelve rams, 68 ewe and ram lambs. Some show rams. Eight registered Oxford ewes. J. W. Cook, Brownsville, Ore.

TOP PRICES PAID FOR CREAM, EGGS, poultry, pork, veal, also fruits, berries and vegetables in season. Inland Products company, Second at Cedar, Department E, Spokane, Wash.

YEARLING HAMPSHIRE RAMS, $30. ONE and two year old Rambouillet rams, $25, $50. Essex hogs, $10, $50. These prices include registration papers. Dolph Phipps, Route 3, Medford, Ore.

WE PAY TOP PRICES FOR YOUR LIVE OR dressed veal, hogs, and poultry. Your check by return mail. Shipping tags on request. M. & J. Packing Co., Spokane.

JERSEY BULL, GLEN TANA VENTURE; sired by Morocco's Pioneer; dam, Fern's Lucena, dropped May 9, 1919. Sale or trade. C. W. Patton, Mica, Wash.

WANTED—TO TAKE ON SHARES, ONE HUNdred ewes, any breed; best of care; can give satisfactory references. Address W. P. Jeffers, Route 1, Bow, Wash.

FOR SALE—REGISTERED POLLED SHORThorn bull, calves; herd accredited; inspection invited. Whitla Ranch, Mica, Idaho.

REGISTERED SHROPSHIRE RAMS—FLOCK headers and range rams at reasonable prices. George Armstrong, Corvallis, Ore.

REGISTERED HOLSTEINS—BULLS, HEIFers and cows for sale; accredited herd. Oscar Dunlap, Junction City, Oregon.

REGISTERED BERKSHIRE BREEDING pigs, $16; big type, champion blood. Chas. O. Churchill, Shelton, Wash.

LIVE STOCK (Continued) 177

REGISTERED LINCOLN EWES—1, 2 AND 4 years old; good individuals. G. G. Hewitt, Independence, Ore.

FOR SALE—REGISTERED GUERNSEY BULL, dehorned; t. b. tested. Sam Rodius, Coeur d'Alene, Idaho.

REGISTERED HAMPSHIRE BREEDING bucks and ewe lambs. Far Niente Farm, R2, Bothell, Wash.

THOROUGHBRED CHESTER WHITE PIGS: big type. Shoreacres Ranch, Route 1, Vancouver, Wash.

REGISTERED SHROPSHIRE RAMS AND ewes. Write McK. Edwards, Valley, Wash.

FRESH MILCH GOATS AND KIDS. MAMIE Rand, E1024 Decatur, Spokane.

HARNESS and SADDLERY 189

SEND FOR FREE HARNESS AND SADDLE catalog today; cut out the middleman, buy direct from the manufacturer. Lowest prices in the west; satisfaction guaranteed. Established 1881. Write Pierce Harness Co., Dept. T, Spokane, Wash.

HOTELS 306

FAIRMONT HOTEL—RATES $1 DAY AND UP. 319 Riverside, Spokane. Free bus.

FAIRS 370

HARVEST FESTIVAL, NAMPA, IDAHO, SEPtember 18 to 21. Southwestern Idaho's great fair and livestock show. Premium list free. Write P. W. Duffes, secretary, Nampa, Idaho.

JACKSON COUNTY FAIR—SOUTHERN OREgon's great farm and livestock show, September 12 to 15. Premium list free. Write H. O. Frohbach, secretary, Medford, Ore.

TWIN FALLS COUNTY FAIR—SOUTHERN Idaho's great fair and livestock show, September 11 to 14. Premium list free. Write J. M. Markel, secretary, Filer, Idaho.

WESTERN WASHINGTON FAIR, PUYALLUP, October 1-7, both inclusive. 133,000 in attendance last year. You are invited to participate. W. H. Paulhamus, Manager.

NORTHWEST WASHINGTON FAIR—LYNDen, Sept. 24-29. Don't miss this great farm and livestock exhibition. Premium list free. A. E. Rusco, secretary, Lynden, Wash.

WASHINGTON STATE FAIR—THE GREAT fair and livestock show of Washington, Sept. 17 to 22. Premium list free. Write H. P. Vermilye, secretary, Yakima, Wash.

JOB PRINTING 372

WEDDING ANNOUNCEMENTS AND INVItations, catalogs, booklets, high school annuals, letter heads, envelopes, cards, butter wrappers, etc. Union Printing Co., 412 First ave., Spokane, Wash.

$1.50 POSTPAID—YOUR NAME AND ADdress on 200 sheets and 100 envelopes, Hammermill bond writing paper, neatly boxed. Parker Printing Co., 405 Pacific blk., Seattle, Wash.

CLEANING, DYEING, Etc. 420

FRENCH DRY CLEANING BY PARCEL post. Ladies' and gents' suits, furs, hats, etc., prompt service. Address City Dye Works (Dept. A), E422 Sprague ave., Spokane, Wash.

TANNING 425

ANY KIND OF HIDE TANNED WITH HAIR on, or for leather. Fur and taxidermy work done to order. M. R. Mohr Co., 321 Sprague, Spokane, Wash.

HIDES, PELTS AND WOOL 430

SHIP YOUR MOLESKINS TO W. E. JOHNSON, Uncas, Wash.

KODAK FILM DEVELOPING 472

FREE ENLARGEMENT WITH 75C ORDER high gloss print. Spokane Film Co.

FILMS DEVELOPED FREE—KODO. THE PICture King, S15 Stevens, Spokane.

MATERNITY HOMES 497

MATERNITY HOSPITAL; STRICTLY PRIvate; doctor in attendance; prices reasonable. Mrs. Elizabeth Peel, matron, W1324 Broadway, Spokane.

BUILDING MATERIAL 588

TO PATCH A HOLE OR BUILD A HOME use Perfection Plaster Wallboard. Easily handled with hammer and saw; fireproof, waterproof. Western Wallboard Co., Seattle, Wash.

LUMBER, LATH, SHINGLES, MILLWORK—Direct from mill to you. Free catalog and plan book. Home Builders Supply Company, Leary building, Seattle, Wash.

SEEDS 620

ORDERS FILLED PROMPTLY FOR VETCH, clover, pasture mixtures, gray and black oats, seed wheat and barley; hay of all kinds. Brownsville Warehouses, Chas. Sterling, owner, Brownsville, Ore.

TIMOTHY-ALSIKE FOR PASTURES, 5C; NO. 1 timothy, 6c pound. Meador, Norwood, Idaho. Samples free.

NURSERY STOCK 621

TREES—NOW BOOKING MAIL ORDERS AT reduced prices for limited time only. Apples, pears, peaches, nut trees, prunes, cherry, small fruits, etc. Live agents wanted. Lafayette Nursery Co., Lafayette, Ore.

NURSERY STOCK—PRUNES, WALNUTS, FILberts, fruit trees of all kinds, gooseberry and small fruits. Buy direct and save 50 per cent. Brooks Nursery, Lafayette, Ore.

PANSY PLANTS, STEELE'S STRAIN, STRONG seedlings, $2.50 per hundred. Catalogue ready. Blair's Pansy Gardens, R. 6, Box 428, Portland, Ore.

FARM LANDS FOR SALE 651

POTATO, POULTRY, BERRIES. ALL cleared and in meadow. A few feet from paved highway; located a half mile from railroad station, good store and sawmill; excellent neighbors, fine schools, close to several good towns. Priced at only $100 an acre. Sold in 5, 10 or 20 acre parcels. Small payment down, balance in 10 years at 6 per cent. This is the best land at the price that we know of. Write or call for full information. Carter, MacDonald & Miller, 208 Columbia st., Seattle, Wash.

FARM LANDS FOR SALE (Continued) 651

CUTOVER LANDS, EASY TO CLEAR; $8 TO $20 per acre; 25 miles north of Spokane; on hard surfaced highway; Great Northern and Milwaukee railways; excellent opportunity for dairying and stock raising with Spokane markets and creamery near at hand. Will help the man who will live upon this land and agree to clear a part each year by giving lumber to help start his buildings, and a purebred Jersey bull to groups of farmers. Interest and payments low. Write Milan Farms Development company, Dept. T, Old National Bank bldg., Spokane, Wash.

600-ACRE STOCK RANCH, TWELVE MILES back off the highway; 20 acres alfalfa, balance good grazing land; four-room house, some outbuildings, some orchard and berries; private irrigation ditch; lots water; fine fishing and hunting; plenty timber; some good grazing land near by, can be homesteaded; 50 tons hay in stack and another crop growing; all tools, machinery, crops and household goods go, $6000, some terms. Address Louis Howard, owner, Riggins, Idaho.

5000 ACRES, NEWAUKUM RIVER VALLEY; highest type level farming land; all rich, productive soil. No gravel. No floods. No crop failures. Well developed district. Near Chehalis, Washington, 20 acres up, $15 to $50, easiest terms. Settlers can get steady employment years to come; good wages; and live at home. See local representative, St. Helens hotel block, Chehalis, or write Graham Land company, American Bank bldg., Seattle.

DO YOU WANT A HOME IN A RICH VALLEY near Spokane, on three transcontinental railroads? Where soil is perfect, rainfall ample. Summers cool, winters moderate? The kind of stump land that pays to clear? Timothy and clover green eight months in year; natural stock country. Land cheap, 10 yearly payments at 6 per cent. Humbird Lumber Company, Box 00, Sandpoint, Idaho.

BIG OPENING SALE OF YAKIMA VALLEY farm land, under an assessed state and government approved irrigation project; best, deep soil; close to town and good roads. Price $25 per acre and up. Very easy terms. Western Lands, Inc., owners, 918 Green bldg., Seattle.

BIG LUMBER COMPANY LAND SALE—IN Skagit county; 40-acre tracts, $1400; $200 cash, balance easy. Lots work for the settler. Splendid district, roads, schools, towns. Information free. H. C. Peters, 726 3d ave., Seattle.

BARGAIN—140 ACRES; 50 IN CROPS, BALance pasture; partly equipped and stocked; on Corvallis-Newport highway. $60 acre; $2000 cash, balance 10 to 28 years, 6 per cent. Emil T. Raddant, Corvallis, Ore.

FORTY-ACRE FRUIT, DAIRY, POULTRY AND garden ranch and buildings; half mile from village; good school and Pacific highway; in beautiful Rogue river valley. Geo. Treichler, Medford, Ore.

CLOSING OUT 60 THOUSAND ACRES—ANYthing from 1-acre home tract to 10 thousand-acre stock farm. Write for particulars. Gateway Land Co., 706 Summit North, Seattle, Wn.

SELL YOUR PROPERTY QUICKLY FOR cash; no matter where located. Particulars free. Real Estate Salesman company, 501 Brownell, Lincoln, Neb.

MUST SELL 5 TO 7 THOUSAND ACRE STOCK ranch, in famous Yakima valley. Price no object. Gateway Land Co., 706 Summit North, Seattle, Wash.

200 ACRES GOOD DAIRY RANCH, STOCKED and equipped; in southwest. Write for particulars. Terms. B. Hedges, Denmark, Ore.

CUTOVER LANDS, DAIRY RANCHES, $10 acre up; ten years' time. Your own terms. Grosgong Land Co., Deer Park, Wash.

FOR SALE—10 ACRES IMPROVED WATERfront; near Tacoma; $2000. Joe Lundblade, Arlington, Wash.

320 ACRES LAND; 25 CLEARED; SPRING house, barn. Particulars, write Box 381, Cashmere, Wash.

BARGAINS IN DRY AND IRRIGATED farms. Oregon Mortgage Co., Paulsen bldg., Spokane.

FARM LANDS—Wanted 654

NO COMMISSION — SELL YOUR FARM through Washington Farm Bureau Exchange, represented in 45 states. Lists of farms for sale by owner mailed free. 312½ Lindelle, Spokane.

WANT TO HEAR FROM OWNER HAVING farm for sale; give particulars and lowest price. John J. Black, Chippewa Falls, Wis.

I HAVE INQUIRIES FOR FARMS IN NORTHwest. Describe fully and state price. R. A. McNown, 310 Wilkinson bldg., Omaha, Neb.

FARM LANDS FOR RENT 657

80 ACRES; 55 IN PASTURE, BALANCE IN cultivation; good buildings; with or without stock. Thomas Toomey, Vader, Wash.

ACRE TRACTS FOR SALE 669

SELL AT A BARGAIN—ON EASY TERMS; 20-acre tract, Lewiston orchards; water piped over place and in house; electric lights and phone; 20 acres in alfalfa, adjoining, can be leased, with 16 cows, making ideal dairy proposition. Also 3000-acre stock ranch with 100 cattle for sale or lease. O. P. Pring, 204 Eagle bldg., Spokane.

FOR SALE—FIVE-ACRE TRACT, CLOSE TO town; five-room house; good outbuildings; running water, orchard, currants, berries, grapes, beautiful yard; implements, cow, team, harness, wagon. A good living and cozy home. Mrs. D. S. Nail, Prescott, Wash.

IRRIGATED LANDS—For Sale 663

CORBIN ADDITION TO GREENACRES—IN the beautiful Spokane valley; 30 minutes from Spokane; paved road; 40 inches of water for irrigation; gravity flow. Ask for booklet with all information.

Return coupon—The Fred B. Grinnell company, Spokane, Wash. I am interested in the Spokane valley. Please send booklet and all information to

Name .....

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FOR SALE—MY SHARE IN 40 ACRES, UNder ditch; two miles from Pasco; $500 cash. Bernard Kassner, Tukwila, Wash.

FOR SALE OR EXCHANGE 702

FOR SALE OR EXCHANGE—FOR IMPROVED property, all or part 240 acres, considerably improved; level, productive land; suburban Vancouver; city water; great future value. Owner, Westenhaver, Eburne, British Columbia.

FOR INCOME PROPERTY—40 ACRES KENnewick irrigated land; value $12,000; improved. J. Jacot, Finley, Wash.

TO EXCHANGE—Real Estate 703

TRADE—UNENCUMBERED TIMBER CLAIM, left fork Grays river, Washington, for timber claim near Lewiston, Wallace & Co., Dreier bldg., Lewiston, Idaho.

$15,000—CLEAR TACOMA INCOME PROPerty for clear farm, equipped, same value. Write owner, 3206 N. 27th st., Tacoma, Wash.

Cattle Ranch To College

By Russell Doubleday Copyright by Doubleday & McClure Co

CHAPTER IX.

A "Bad Man's End."

"That's where Mexican Jack was killed," answered Abe, coming in the doorway, frying pan in hand. "He was shot just where you sit. I'll tell you about it after supper."

John moved away from the spot.

Before long the ranchman called them in, and they enjoyed a supper the like of which had not fallen to their lot since they left the mine. The compliment the boys paid Abe's cooking did much to win his heart. Though they were anxiously waiting to hear the story of the bullet holes and the spot of blood, Abe continued to talk about gravies, the advantages of a very hot pan in cooking and other culinary topics that would have interested John at another time, for he rather prided himself on his ability as cook, but which now seemed more than trivial.

The boys lent a hand and soon the tins were washed and the table cleared. The fire replenished, and Abe's pipe fairly started, all three drew their stools up to the blaze.

"Well, how about Mexican Jack?" ventured Ben at last, unable to restrain his curiosity longer.

"Oh, yes, I was going to tell you about that, wasn't I? Well, he was a hard case," continued the speaker. "Half Mexican, half white man—and all bad, he was. I made his acquaintance about 10 years ago at Boise City, and the first thing I heard of him was that he'd just killed a gambler—gambler was a hard case, so nobody cared much—and Jack skipped. Shortly after that he went to Denver and bullied the town. Oh, he was a regular 'bad man.' You know what a 'bad man' is, don't you?"

"Sure," said John. "Tough customer who knows he's tough and takes pride in it. They're always mighty quick with their guns, and dead shots. One of 'em shot a man in the arm, near our shack in Bismarck, and mother tied it up. It was queer; the bullet went right through and it looked like a rose where it came out."

"Well," continued Abe, "Jack was a 'bad man,' and he didn't care who knew it. He had a shooting scrape in Denver and had to jump the town in pretty lively style. The sheriff's posse got after him, but he killed two of 'em and got off. After that every sheriff in the country was looking for him, so he turned outlaw and road agent near Virginia City, and held up Ben Halliday's stages till the vigilance committee hung some of his partners and got too hot on his trail. Not a thing more did I hear of him till he turned up about two years ago with this bunch of sheep of your father's. He had turned herder and driven 'em all the way in from Utah." Miller stopped to relight his pipe, for he had forgotten to keep it going in the interest of his tale. The boys were impatient at the least delay; the ruddy firelight lit up their faces and showed their eager interest.

"Your father had bought this ranch and put me in charge just a little while before Mexican Jack came along; I spotted him at once and he spotted me, but I didn't let on, for I knew he was all-fired quick with his gun and I wasn't looking for trouble. Of course he never went to town: it wasn't healthy for him there; and if he wanted anything he had to wait till somebody who was going in would get it for him. Even with such care, though, he knew it wasn't safe for him to stay in one place very long, so one day in spring he told me he was going to quit and move on. Don't you boys ever turn 'bad men,'" said Abe, with a laugh; "it don't pay. Brave as that poor chap was, he was fairly afraid of his shadow when he got to thinking of sheriff's posses. One man isn't much good against the law, even out here. Well," he went on, "I went to town to get another man—it's 30 miles, so I stayed over night. Charley Boyd, who runs a liquor joint there, told me a young feller, an Englishman, he thought, had been in there several times asking about sheep. Charley said there might be some business in it, so I dropped in later.

"Boyd went up to a young chap who was sitting watching a faro game. 'Here's your man, Mr. Simmons,' said he. The stranger wanted to know all about the different bunches of sheep near there, so I told him and talked a good deal about one thing or another having to do with them. I remember I told him I was looking for a herder to take the place of a Mexican that was going to quit. Soon after that he left. I could not quite make him out, but it was plain enough he wasn't buying."

"What's all this got to do with Mexican Jack?" inquired Ben, who didn't see the drift of the narrative.

"If you'll wait a minute I'll tell you." Abe was vexed at the thoughtless interruption, and Ben subsided, realizing that he had been rather foolish. "In the morning I packed my stuff on the lead horse, mounted my own cayuse and started out. I had just topped the rise near the shack when a bullet went by with a hum, and then another and another, so I chased back for cover to the other side. I dismounted, crawled up to the top and looked over. There at the door sat Mexican Jack, six-shooter in hand. I couldn't understand why in the world he should shoot at me, so I rode over to look up Billy, the other herder, and find out what was up. He hadn't been to the shack since morning and knew nothing about it, so he left the sheep and we went down the coulee, which runs just below here, you know, till we got behind that clump of brush—perhaps you saw it. We peeked through pretty cautious, I can tell you. The Mexican was still there, but his body was all hunched up; he seemed drunk or asleep, for his six-shooter lay on the ground by his side.

"We covered him with our guns, for he was chained lightning with his shooting irons, and then yelled at him. He didn't answer or move an inch. We jumped out then, still keeping him covered, and walked slowly up, ready to riddle him if he should make a move with that deadly pistol hand of his. Once he quivered a bit and his right hand stirred toward his gun. I almost plunked him then, I was so nervous, but there was no other sign of wakefulness or life. We decided he must have gotten hold of some liquor somewhere, but when we got within about 50 feet of him Billy noticed a pool of blood at his side. Then we rushed forward—guns still ready, however—and just as we reached the steps he lurched forward and fell full on his face—dead!

"A couple of bullets had gone clean through him. We found out when we turned his body over to the authorities in town that Simmons, the young Englishman I had met, had come over to America a year before expressly to kill Mexican Jack, who had shot his brother in some quarrel. I had supplied the missing link of information, and he had gone early in the morning to our shack, where he had shot the Mexican twice. Jack evidently thought I had given him away purposely and tried to settle me."

"My! what a fiend," said John. "But what became of Simmons?"

"Oh, he went back to town and gave himself up, was tried and acquitted; for no jury out here would convict such a man for shooting a bad lot like Mexican Jack."

"I should think you'd be glad to get rid of him," exclaimed both boys in chorus. "Weren't you afraid to have him round so long?"

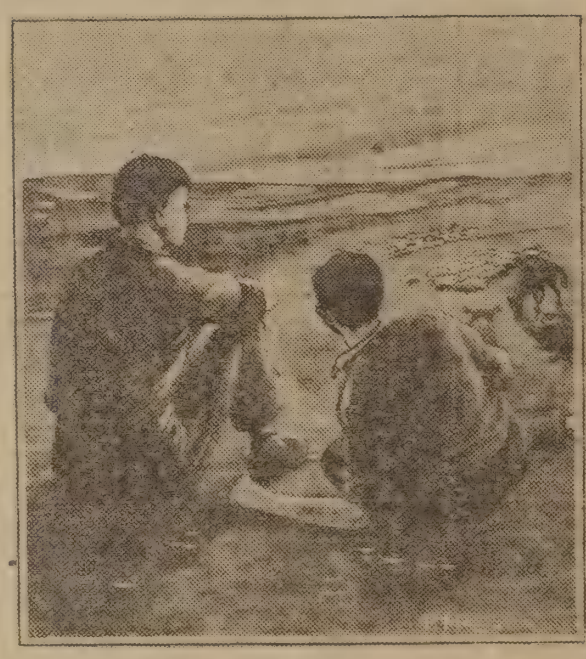
"Oh, no; he wouldn't trouble me, I guess, as long as I let him alone; he was a blamed good herder, and it was worth while to keep on the right side of him. Now, you boys want to tumble in, for we'll be going out right early in the morning to the range."

The 25-mile trip next day to the range where the sheep were grazing was made without incident, but the country was all new to the boys and they plied their guide with questions. They learned that Abe Miller was to stay with them on the range and teach them their duties, another man taking charge at the ranch house during his absence. It was expected that Mr. and Mrs. Worth would move to the new mine (about 15 miles from the ranch house) in a couple of months.

Their education as herders completed, the boys would be given sole charge of a large bunch of several thousand sheep. A kind of shed, open in front and built of round, chinked logs, entirely lacking in comforts of every kind, was to be their home. Polly, Dick and Pete, the three sheep dogs, and the great flock of woolly animals would then be their only companions.

Abe initiated them at once into the routine of their new occupation and introduced them to Polly and her two sons, Dick and Pete, the ever-vigilant, intelligent dogs who were to be their capable assistants.

It was hardly the work that an enterprising, wide-awake, active person, young or old, would choose. Untiring vigilance was the one thing necessary. Watchfulness never ceasing, day and night, rain and shine, was the chief occupation of the sheep herder. Polly, the dog, was a much better herder than her young masters at first, and Dick and Pete were not far behind. They moved the "bunch" to fresh feeding grounds at the command, and fully understood the wigwag code of the plains. When driving at a distance from camp Polly would trot to a hill top and watch for the boys' signal: if John waved horizontally she would drive them farther, Dick and Pete assisting; when the bunch had been driven far enough John's hat would be flapped up and down, and the dogs, with almost human intelligence, would at once stop their charges.



"I'd go crazy if I had to stay here with these woolly idiots," said John one day.

The attacks of coyotes, wolves and, more rarely, mountain lions were the greatest danger to the sheep that the young shepherds had to guard against. Some of these four-footed enemies were almost always prowling about, looking hungrily for a chance at a stray sheep or lamb. A coyote or wolf among an unprotected flock will destroy a surprising number of sheep in a few minutes, seemingly for the pure love of killing, so there was good reason for the sharpest kind of lookout.

After the novelty of the life wore off, the boys began to wish themselves back at the mine. For weeks at a time they did not see another human being. Each day was like every other day; in the morning the rope corral enclosing the flock was let down and the sheep were driven by the dogs to a place where the feed was good; then the boys mounted their horses and followed to the grazing ground. During the two mid hours of the day the animals rested, lying down quietly, and the brothers would take advantage of this time to get in as much sport as the spot afforded. Rifles were always slung on the saddle, and the slinking coyotes gave plenty of opportunity to show good markmanship. Occasionally the curiously marked antelope appeared, looking, as Charley Green once said, "as if some one had started to paint the whole lot tan but had got tired of the job and left patches of white at odd places"; then the young hunters would set out, and in the excitement of a hunt forget for a time the monotony of the life. Seldom was it safe for both to go at once; only at noon, when the sheep were lying down in open, level country, could the dogs be left wholly in charge.

Toward evening the bunch must be corralled for the night—a difficult task if there are many lambs in the flock. The boys found, often to their disgust, that a lamb can run like a deer when it gets thoroughly frightened. It was shortly after Abe had left them that, in accordance with his teaching, they began to "round up" the flock preparatory to stretching the rope corral. Ben was on one side with Polly and Dick, John on the other with Pete; all was going well, and John and Pete, neither very experienced in the business in hand, began to feel the pride that goeth before a fall. Suddenly the sheep 50 yards from where John stood began to scatter. Pete was sent forthwith to force them back, and while he was busy there a lamb, long and clumsy of leg, apparently not strong enough to stand alone, started out on a voyage of discovery not 10 yards from the boy. It would not do to let it stray far, for a coyote would make short work of it, so John sped off in pursuit.

As he drew near the little woolly thing it increased its speed, running as you would imagine a rickety table would run, but it kept going faster and faster. John, who unfortunately was on foot, found to his mortification that he could not overtake it. It looked as if he would have to give up the chase. At last, however, he tried gradually turning to one side and heading it back to the bunch; even then it might have got away if Polly, taking in the situation, had not flown to the rescue. John came back panting, hot, and tired, only to find Ben sitting calmly in his saddle with a broad grin on his countenance. Even the dogs seemed to be laughing, their open mouths and lolling tongues giving their faces a look of keen enjoyment over his discomfiture.

Even after the flock was safely corralled it required almost as much watching as if in the open. The boys usually took turns, each watching half the night. A fire was built on one side of the enclosure and watcher lay on the other. The sheep, probably the most helpless animals one could find, lay right up against each other, their closely packed bodies looking at night like a patch of snow.

As the young herder fought with himself to keep awake, the howl of a coyote often broke the stillness; then he must start up, gun in hand, and make a round of the flock. From time to time he replenished the fire and made a careful scrutiny of the country round in search of the lurking enemies of his charges. Till he woke his brother about midnight there was hardly a minute's rest. Then Ben took up the vigil, while John slept till daylight; and so began another weary day exactly like the preceding one.

While in summer sheep are docile and amiable, though never so interesting as are cattle, horses or mules, in winter they become stupid, intraceable and aggravating to the herder. It was in the winter that the boys' hardships were encountered, for they found it necessary more than once literally to carry some of the flock through snowdrifts to the ranch. They would not be driven or led, but when a trail had been made, and a number carried and forced along it, the remainder would pluck up courage to follow through the bank of snow.

The boys spent all one summer and winter with the sheep. From time to time Mr. Worth, who had moved his entire outfit over to the new mine, came out to the range to inspect the animals; and toward the end of the year the boys each

(Continued on the following page.)

Bits of Fun FOR Everyone

Offer Declined.

Caddie—I got that ball we lost this morning, sir—got it from a small kid.

Golfer—Good! I'll hand you what you gave for it.

Caddie—No, thanks; I gave him a punch in the eye.—Boston Transcript.

He Knew What Was What.

The superintendent of schools, says the Argonant, was visiting a class of very young pupils. He chose a youngster to quiz, and said: "Now, Johnny, I'm going to ask you to solve a very difficult sum. How much is three times eight?"

"Twenty-four," the youngster replied promptly.

"Well, now, that is excellent. That is very good indeed," said the superintendent.

"It's better than that, sir," said Johnny with a cheerful grin; "it's perfect!"

In Bad Taste.

May—Oh! Ray, dear, is my hair in your way?

Ray—You said a mouthful, Maytime!—Topics of the Day Films.

Accomplished.

"Everybody should lie on the right side," is the advice of a medical man. The only exception, we gather, is the politician who can do it on both sides.—Punch (London).

Does He "Short Circuit?"

He—Here comes a friend of mine. He's a human dynamo.

She—Really?

He—Yes, everything he has on is charged.—Bell Telephone Magazine.

"Not Dutch, but Germy."

Tom—Remember that old Dutch girl of mine?

Jerry—Yes, you mean that cross-eyed girl?

Tom—Yep, that's her. She was so cross-eyed the tears ran down her back when she cried.

Jerry—Why, that is what you call bacteria.

When It Occurs.

A psychiatric board was testing the mentality of a weak-faced negro soldier.

"Did you ever hear voices without being able to tell who is speaking or where the sound comes from?"

"Yes, suh," answered the negro.

"When does this occur?"

"When I'se talkin' over the telephone."—Transmitter.

FAMILY CIRCLE

ALICE W. BARLAND
EDITORIAL CONTRIBUTOR

The Flower Garden

By RUTH GIPSON PLOWHEAD.

PLANNING YOUR PERENNIAL GARDEN.

This is the first of a serious of garden talks showing how ornamental flower effects can be obtained with the least work and expense. Most of us are too busy to spare more than the stray minutes among the flowers, but those few minutes can be used to produce some very lovely results. Among the most decorative and easily raised flowers are the perennials, many of which increase in size and beauty from year to year and require little care save division and cultivation.

So, though we think of spring as the busy time in the garden, if you are planning bulbs and perennials for next year, your seeds should be obtained at once and planted as soon as possible. Plants so started should bloom next year, whereas if you wait until spring the blooming season will be delayed a year. In my own back yard a number of perennials are already started—several varieties of columbine, for-get-me-nots, carnations, pyrethrum, delphinium, and even some experimental boxes of tulip seeds. I have used small boxes so as to be able to watch them more carefully, but if you have an unused spot in the garden, which can always be kept damp, it will be ideal for your seed rows. In the spring the plants can be transplanted to their permanent beds.

Press the seeds well into the soil, and it is a good idea to cover the beds with burlap until germination. It is necessary that the soil should never dry out if the seeds are to germinate. Some perennials are weeks in starting, but if undisturbed until spring will often start then.

Some of the very easily raised perennials which might be started in late summer are: Hollyhocks, perennial sunflowers, gaillardia, oriential poppies, sweet rockets. Each flower lover has her favorites, but all the above are most easily grown from seed. If bought from the nursery most of these would cost at least 25 cents a clump.

There are several hardy and lovely perennials that are not as well known as the old standbys and I would like to tell you about them.

Sweet rocket: This is an old-fashioned flower, growing about the height of a perennial phlox and looking much the same. It is grown in shades of pink and white. The delightful thing about this flower is its wonderfully sweet odor and its early spring blooming. It makes a showy mass when planted in large clumps.

Pyrethrum or painted daisy is a plant with lovely fernlike leaves and flowers in shades of pink and white, somewhat smaller than a Shasta daisy. It is always much admired in the garden and makes fine individual bouquets or combines most artistically with roses and gypsophila.

Gaillardia or blanket flower: This is also of a daisylike form, but comes in bronze, red and yellow shading. This is most easily grown and has a wonderfully long blooming season, from June until the heavy frosts come.

Anchusa Italica: This seems to be little known in many gardens. I do not know its common name, but do know that it bears one of the loveliest blue flowers that we have. The plant is several feet tall, and the flowers are somewhat like large for-get-me-nots. For cutting or for garden show it is equally attractive.

Home Recipes

Sweet cucumber pickles: The following will make one-half gallon, said to be very like those we buy. Use cucumbers about two inches long, leaving on a little of the stem. Soak one day and night in weak salt water, drain and wash thoroughly. Heat enough water to cover with one cup of vinegar added. When hot drop in the pickles and stand on the back of the stove for one hour or till they change color, never boil.

Have ready the following mixture prepared hot: Three cups of vinegar, one cup of water, one and one-half cups of sugar, two teaspoons of whole mixed spices. Drain the pickles and put into the spiced vinegar for 10 minutes. Pack into jars and pour the liquid over and seal tight.

Washington. E. D. G.

Dill pickles: Cut from the vines and put into a jar, keg or barrel with dill leaves between layers. Add salt to a pail of water until it will hold up an egg. Pour over the pickles and weight down.

MRS. S. A. C.

Easy way to can beans: Use fresh beans cut in inch pieces; to five pints of beans add one small teacup of salt and enough water to cook. Boil 10 minutes and seal. When used pour off the water, add cold water and bring slowly to a boil. When tender season, but use no salt. Should they be too salty freshen twice.

To can chicken: Kill the fowl and draw at once; wash carefully and allow to become perfectly cold. Cut into convenient pieces, drop into boiling water, then dip at once into cold water. Pack immediately into glass jars, well sterilized, fill with boiling water, adding one level teaspoon of salt to each quart jar. Put rubbers and caps into position, but not tight, and process for three hours in boiler with false bottom of wood or wire.

Remove from boiler, tighten caps, test and put away in a cool place.

Easy canning method of peas, beans and corn: Take nine measures of vegetables, one of sugar and one-half measure of salt and just enough water to cover. Put on the stove and boil just 5 minutes from the time they begin to boil. Put in cans and seal.

Care must be taken not to have too much water, as all the liquid must be canned and having just enough to cover the vegetables in the cans. I sometimes run short on the last can, then I add boiling water with sugar and salt. One can cook them longer, but it isn't necessary, as it saves time and fuel in the hot season. I pick peas and beans and get them ready in the evening; the next morning I measure and wash them and have the cooking and sealing all over in a very little while.

When you want to use them rinse two or three times in cold water, put on the stove in cold water and heat and if still too salty change the water. Cook until done and season and they will be just like fresh.

Try cooking pumpkin for pies in your meat roaster in the oven. When the pumpkin is small I cut into halves, remove the seeds and put in the roaster with a very little water and cook till done. When done I pick out the peeling and stir with a spoon, as it needs no mashing or putting through a sieve. Try this and you will never again peel a pumpkin.

A BUSY MOTHER.

To can corn: Take the corn when in the milk stage just right for table use and with a sharp, thin bladed knife cut the corn from the cob, but do not scrape the cob. Take 11 cups of corn, one cup of sugar and two-thirds cup of salt, one quart boiling water. Place all in a granite dishpan, set on the back of the stove with a slow fire and let it boil through thoroughly, stirring often. Have glass jars sterilized, fill them with the corn, seal and put away for use. When wanted pour cold water over and let stand a couple of hours, drain and season in the usual way. It will be like fresh corn. Do not cook more than double this recipe at once.

MISS E. W. M.

Cattle Ranch to College

(Continued from preceding page.)

time besought their father to let them go back with him. For the first time they realized the meaning of an expression they had often heard: "as crazy as a sheepherder." The shepherd's life in the far west is as uninteresting, ambitionless and lonely an existence as falls to the lot of man. For long periods of time a shepherd is so entirely alone with his flock and his dogs that the experience not infrequently costs him his reason. It was a terribly lonely life for youngsters such as they; though each was company for the other, they both longed to hear the home sounds and see the familiar faces. Mr. Worth, however, would not consent to their return till the year was up. He felt that the discipline was good for them, and besides he was never willing to have them let go of anything without finishing it.

The new mine was the most important and largest that had been opened. It was situated on the line of the railroad that had just been constructed, and was of a more permanent character than the preceding ones. Many of the miners brought their wives and families with them, so that they formed quite a settlement. Occasionally all the miners' sons would ride out to visit the Worth boys, who were delighted to see them, though there was little in common between them. The miners were easterners, as a rule, and knew nothing of horsemanship, hunting or plainscraft; but they were boys and were gladly received as such. They regaled John and Ben with accounts of the happenings at the mine, but while they listened eagerly, this only added to their impatience to return and made them more discontented with their present life.

When the snow began to melt and the grass to grow green again, the brothers occupied most of their time in thinking what they would do when they got back to civilization, for the time of their release was drawing near.

"I'd go crazy if I had to stay here with these woolly idiots another year," said John one day.

"Yes," returned Ben, "it's about as tame as anything could be. But what are we going to do when we get back? You can bet your bottom dollar father won't let us sit around and enjoy the view."

"I suppose we'll have to get to work at something." John stroked Polly's head reflectively as he spoke, and the good dog, undemonstrative always, showed her pleasure only by the slow wagging of her bushy tail.

"But what?" It was Ben who spoke. "I'll be switched if I want to go to coal mining, and I guess you don't care about it, either."

"That's right," replied John, laconically. "I've had enough of mining to last me a lifetime." He shivered a little at the remembrance of his experience.

For a time both were silent; each was trying to think of something he might turn his hand to that would suit his father and at the same time please himself. It was not an altogether cheerful prospect that lay before them. They would soon change the solitude for their bustling, busy home. It was home, and that was good to think of. Yet it was a home where a boy's love of fun and his healthy animal spirits were not considered: his capacity for work was what counted. A home where uncongenial, hard labor awaited them unless they could think of some other occupation that would satisfy their stern, just, absolutely honest but unyielding father.

"Well?" said Ben at last.

"Well!" returned John in much the same tone, "there is one thing we might do—perhaps."

"Well?" said Ben again, eagerly.

"You remember when young Watson was over here the other night," John began. "He said that a mail route was to be run from Ragged Edge camp to the railroad, through the pass in the mountain——"

"Yes, and he had the job. That shuts us out, doesn't it?"

"Wait a minute!" exclaimed John, impatiently. "He's a tenderfoot, and he'll never in the world be able to make that trip on time, in winter—he'll never be able to make it at all. You'll see that after he has been late a few times we'll have a chance. Then I intend to apply for the job. See?"

John was the more aggressive, the stronger of the two, both in mind and body. The younger brother had learned to lean on his more independent spirit, so it was John who always had the deciding voice when there was a doubtful plan. Ben's yielding disposition enabled him to get along more comfortably with every one, and especially with the supreme authority in the household.

The Worth boys soon learned from their occasional visitors that they would be expected to show their prowess as boxers and wrestlers on their arrival in camp, so they determined to practice up. Every day at noon, when the sheep lay down, the two went at each other good humoredly, but with seriousness, advising one another when a mistake was made. Every blow, every trick, that Tom Mallory had taught John they tried till they knew it perfectly. Every feint, every fall, that the Indians practiced they perfected, till by the time their term with the sheep was up their bodies were as supple and their muscles as strong as constant exercise and clean, healthy living in the open air could make them.

At last the new men arrived, the boys turned over the sheep to them, and promptly saddled up for their ride across the mountains. They were glad to get away from the ranch, but when they reviewed the past long months and realized that they had not flinched, they experienced that peculiar pleasure that comes from carrying through a hard job.

(To be continued.)

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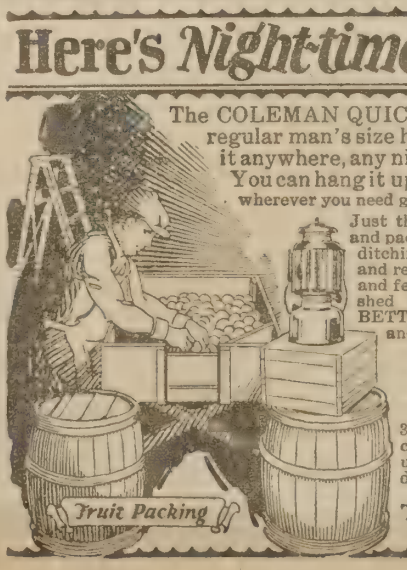

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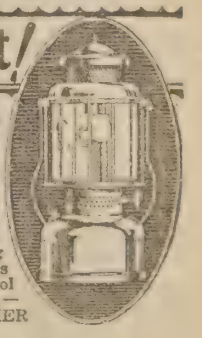

Just the light for fruit picking and packing; irrigation work and ditching; road grading; building and repair work; for use in barns and feed lots. Use it in your tool shed and garage — anywhere — BETTER LIGHT means EASIER and BETTER WORK.

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THE COLEMAN LAMP COMPANY.
Wichita, Kansas.

High Points in News of the Week

At this writing there appears to be little to indicate that an extra session of congress will be called by President Coolidge to consider wheat price fixing legislation or any other issue. The president has repeatedly stated that in his opinion congress could not enact legislation in time to do the wheat growers any real good. Others point out the fact that several different remedies have been proposed by farm organizations and individuals and that congressmen and senators who oppose price fixing would use this division of opinion as an excuse for not enacting any remedial legislation.

The American Farm Bureau federation is urging wheat growers to hold their wheat as long as possible for higher prices.

Senator Stanfield of Oregon last week announced that he was planning to introduce a measure when congress convenes which would, if enacted, require the government to turn back to the actual wheat growers the $51,000,000 which the government made in profit in handling the farmers' wheat during the war. Senator Stanfield calculated that this would be equivalent to an increase in price of 7 or 8 cents a bushel.

Secretary Wallace of the department of agriculture last week issued a statement in which he declared that the present ruinously low prices of wheat are not a new agricultural disease but just one more acute symptom of the general trouble from which agriculture is suffering. He said that the disease itself is the distorted relationship between prices of farm products and the prices of what the farmer must buy. He frankly said that he did not know whether or not relief would result from the government setting up a wheat buying agency.

* * *

President Coolidge last week appointed Governor Gifford Pinchot of Pennsylvania as a mediator between the anthracite coal mine owners and the miners who are planning a general strike beginning September 1. Governor Pinchot announces that his first act will be to call representatives of the two factions together to find out if there exists a basis upon which negotiations for the prevention of a strike may be entered into. Nearly all the anthracite coal mines are in Pennsylvania.

President Coolidge has let it be known that the government will use its entire power if necessary to supply coal to consumers should the strike be carried out as announced. * * *

Whether there is an early collapse of the German government in prospect is a problem troubling the nations of the world. The United States and Great Britain fear that there is. A news dispatch from Washington, D. C., last week said the internal situation in Germany is regarded in Washington with grave apprehension.

* * *

Premier Poincare of France last week sent a reply to the British note recently delivered concerning the situation existing between Germany and the allied nations. The French premier reiterated his former statement that France will not evacuate the Ruhr district until Germany begins paying reparations to France. He said also that the severe methods employed in the Ruhr by the French would not be altered until Germany ceases her program of passive resistance. Also he declared that France would make no reductions in the amount of reparations due unless other nations which France owes makes corresponding reductions in her debts to them.

* * *

Secretary Mellon of the United States treasury has returned from a tour of Europe investigating European financial conditions. Following a conference with President Coolidge he announced that this country would not exert undue pressure upon foreign nations owing this country. He finds conditions in Europe are not such as to enable them to pay their debts promptly. He is convinced that there is no practical way in which this country can give definite assistance to Europe at this time.

* * *

It is expected that within a few weeks agreement will be reached by which diplomatic relations between the United States and Mexico will be resumed after some 15 years of lack of such relationship.

* * *

A suit has been filed in Oregon attacking the constitutionality of the compulsory public school law enacted by the voters of Oregon at the last general election by a vote of about 115,000 to 103,000. The suit is brought by the Society of the Sisters of the Holy Names of Jesus and Mary. The act would go into effect in 1925 and would require the parents of children between the ages of eight and 16 years to send them to the public schools and not private schools.

Premier Kato of Japan died in Tokyo, August 23. Premier Kato was leader of the Japanese delegation at the conference for limitation of armaments at Washington, D. C., two years ago.

* * *

Airplanes last week carried mail from coast to coast in a minimum time of 26 hours and 14 minutes between San Francisco and New York.

* * *

President and Mrs. Coolidge have moved into the White House following the withdrawal of Mrs. Harding who will spend the next year or more at the home of her brother.

* * *

Former Secretary Meredith of the department of agriculture has brought a libel suit against Senator Brookhart of Iowa. Mr. Meredith claims that the senator declared in a recent speech that Meredith "sat in the Wall Street game and helped to produce the greatest panic in farm prices in the history of agriculture." Mr. Meredith claims this alleged statement to be false and libelous.

* * *

Senator Hess of Ohio is advocating a constitutional amendment changing the term of office of the president of the United States to six or seven years and forbidding a second term immediately following.

* * *

President Coolidge has announced that his administration will stand behind Governor General Leonard Wood of the Philippines on the same basis as did the Harding administration.

Farm Business and Markets Outlook

(Continued from page five.)

the last 10 days. Consuming demand has not broadened and is inactive at the higher quotation. The advance is believed to be due to buying by short interests .

Hay Markets Firm.

The hay market remains firm, with the demand in excess of the receipts in the principal distributing markets. But little top grade hay is available and low grades are selling to better advantage. Farmers are not offering hay freely, in spite of the advance.

Prices per ton, in carlots: Chicago—No. 1 timothy, $27@28; No. 2, $24@26; No. 1 light clover mixed, $24@27; No. 1 clover, $22@24; No. 1 clover mixed, $23@25; No. 1 and choice alfalfa, $18@29; upland prairie, $16@18; rye straw, $12@13; oat and wheat straw, $10@11.

Egg Prices Go Higher.

Egg prices advanced sharply last week as receipts continued light and supplies of top grades were insufficient to meet trade demand and appear firmly entrenched on the new level. Some short held eggs able to pass as fresh firsts were withdrawn to supplement the supply. Eggs have been moving out of storage at a faster rate than they have been going in throughout the first half of the month, which will probably be the case from now on. The number of eggs disappearing into consumptive channels at the four leading cities thus far in August is larger than last year and the largest on record for the corresponding period.

Butter and Cheese.

Further advances were scored in the butter market last week as the effect of the "bearish" cold storage report wore off.

Sharply higher country cheese quotations were responsible for advances in distributing markets last week.

Fruits and Vegetables.

Carlot shipments of potatoes are running considerably smaller than at this time last year or two years ago. Prices have advanced, with U. S. No. 1 Cobblers at $1.25 to $2.50 per 100 pounds and early Ohios at $1.90 to $2.10 on midwestern markets.

Carlot shipments of apples continue to run rather light for this season of the year and prices have advaneed. No. 1 Duchess, Transparent, Wealthy and Golden Sweet apples are quoted at 75 cents to $1.50 per bushel on the Chicago market. The early varieties promise to be well cleaned up early in the season, paving the way for a good market on the later varieties as soon as they are ready.

LATEST QUOTATIONS.

The Live Stock Market.

PORTLAND, Aug. 25.—Cattle—Choice steers, $7.25@8; medium to good steers, $6.75@7.25; fair to medium steers, $5.75@6.75; common to fair steers, $4.75@5.75; choice heifers, $5.50@5.75; choice cows and heifers, $5@5.50; medium to good cows, heifers,, $4@5; fair to medium cows, heifers, $3@4; common cows, $2@3; canners, $1.50@2; bulls, $3@4; choice dairy calves, $9@10; prime light calves, $9@10.50; medium light calves, $8@9; heavy calves, $5@8.

Hogs—Prime light, $9.50@9.75; smooth heavy, 230 to 300 lbs., $8@9.25; smooth heavy, 300 lbs. and up, $7@8; rough heavy, $5@7; fat pigs, $8.75@9.25; feeder pigs, $8.50@8.80; stags, subject to dockage, $2.50@4.

Sheep—East of mountain lambs, $10@10.50; choice valley lambs, $10@10.50; medium valley lambs, $9.50@10; common valley lambs, $8.50@9.50; cull lambs, $7@8.50; light yearlings, $7.50@8 heavy yearlings, $6@6.50; light wethers, $6@6.50; heavy wethers, $5.50@6; ewes, $1.50@5.50.

SPOKANE, Aug. 25.—Cattle—Prime steers, $6.75@7.25; good to choice steers, $6.25@6.75; medium to good steers, $5.50@6.25; fair to medium steers, $5@5.50; common to fair steers, $4.25@5; choice cows and heifers, $5@5.50; good to choice cows, heifers, $4.50@5; medium to good cows, heifers, $4@4.50; fair to medium cows, heifers, $3@4; canners,, $2@2.50; bulls, $3.25@4; light veal calves, $8@9; heavy veal calves, $6.50@8; stockers and feeders, $4@5.25.

Hogs—Prime mixed, $9.25@9.75; medium, $9@9.50; heavies, $6.25@8.75; fat pigs, $9@9.25; stockers and feeders, $8.75@9.

Sheep—Prime lambs, $9@10; fair to medium, $7.50@8.50; yearlings, $7@8; wethers, $5.50@7; mutton ewes, $3@5.

The Grain Market.

PORTLAND, Ore., Aug. 25.—Wheat. Hard white, Bluestem, Bart, $1.08; soft white, western white, $1.07; hard winter, northern spring, western red, $1.02.

Grain futures: Wheat—Bluestem and Bart, August, $1.08; September, $1.07; October, $1.05; soft white, western white, August, $1.05; soft white, western white, August, $1.07; September, $1.05; October, $1.03; hard winter, northern spring, western red, August, $1.02; September, $1; October, 98c.

Oats—No. 2 white feed, August, $26; September, $25.50; October, $25; No. 2 gray, August, $25; September, October, $24.50.

Barley—14-lb. minimum, August September, October, $26.

Corn—No. 1 eastern yellow for shipment, August, $37.50; September, $37; October, $36.50.

SEATTLE, Aug. 25.—Bid quotations: Wheat—Hard, soft and western white, $1.07; hard and soft red winter, western red, $1.04; northern spring, $1.05; Big Bend Bluestem, $1.08.

LEWISTON, Idaho, Aug. 25.—Red, 84c; white, No. 1, 88c.

WALLA WALLA, Aug. 25.—Bluestem and Bart, 92c; Club, 90c; Turkey Red, 89c.

RITZVILLE, Wash., Aug. 25.—Bart, 90c; red, 87c; Fife, 85c.

DAYTON, Wash., Aug. 25.—Club, 93c; red, 90c.

Hay and Grain Feed.

PORTLAND, Ore., Aug. 25.—Flour—City delivery prices: Fancy patents, $7.50 per barrel; whole wheat, $6.40; graham, $6.20; bakers' hard wheat, $6.70; bakers' Bluestem patents, $6.95; valley bakers', $5.70; straights, $5.55.

Millfeed—City delivery prices: Millrun, $26 per ton; middlings, $38; scratch feed, $47; rolled barley, $36@38; cracked corn, $47; rolled oats, $38.

Hay—Buying prices f. o. b. Portland: Alfalfa, $15.50@16 ton; cheat, $13@14; valley timothy, $18@19; eastern Oregon timothy, $20@22; clover, $13@14; oat, $14@15; oat and vetch, $15@16; straw, $8 per ton.

SPOKANE, Aug. 25.—Wheat—Feed wheat, $38 ton; oats, $40 per ton; rolled, $42; corn, $44 per ton; cracked corn, $46 per ton; barley, $36 per ton; rolled, $38; bran, $23 ton; bran and shorts, $24 ton; shorts, $26 ton.

Hay—Alfalfa, $20 ton in ton lots, $16@19 carload lots; new timothy, $21@22 in ton lots, delivered; $19 a ton in car lots f. o. b. Spokane.

General Produce.

PORTLAND, Ore., Aug. 25.—Butter—Cubes, extras, 43c lb.; prices, parchment wrapped, box lots, 47c; cartons, 48c. Butterfat, 40c delivered Portland; average station buying price, 43c lb.

Eggs—Buying price. White hennery standards, 35c per dozen; mixed color standards, 30c dozen. Selling price, Front street, selects, 40c; candled ranch, 38c. Association selling prices, cash at store, selects, 40c; standards, 38c; bakers', 32c; pullets, 32c.

Cheese—Price to jobbers, f. o. b. Tillamook: Triplets, 28c; longhorns, 29c; loaf, 30c lb.

Poultry—Hens, 14@23c; broilers, 25@27c; ducks, nominal; geese, nominal; turkeys, nominal.

Pork—Fancy, 13c per lb.

Veal—Fancy, 16c per lb.

Onions—Walla Walla Globes, $1.75@2 per 100.

Potatoes—New Oregon, $1.25@1.75 per 100; sweet potatoes, 8@10c per pound.

Vegetables—Cabbage, Oregon, bulk, 1¾@3c lb.; lettuce, $1.25@1.50 crate; garlic, 17¾@20c lb.; tomatoes, 75c@$1.15 box; celery, 75c@$1.10 doz.; peppers, green, 6@8c lb.; cucumbers, 40@60c box; corn, 75c@$1.35 sack; bunched beets, 35@40c dozen; bunched carrots, 35@45c dozen; radishes, 30@35c dozen; green onions, 30@35c dozen; beets, $2@2.50 sack; carrots, $2@2.50 sack; rutabagas, $2 sack; eggplant, 8@10c pound; summer squash, $1@1.25 crate.

SEATTLE, Aug. 25.—Eggs—Select local ranch, white shells, cases included, 35c per doz f. o. b. Seattle; mixed colors, 35c per doz.; pullets, 24c per dozen; checks, 20c per doz.; cases returned to shippers, 1c less; do to stores, f. o. b., 30c per dozen, loss off; eastern Washington, case count, 28c per dozen, f. o. b. Seattle.

Butterfat—F. o. b. Seattle: A grade, 48c per lb.; raw milk, $2.25 per cwt.

Poultry—Hens, 4½ lbs. and up, 22@23c per lb.; do 3½ and under 4½ lbs., 15c per lb.; broilers, 1½ lbs. and heavier, 24c per lb.; do heavy breeds, 1 to 1½ lbs., 23@24c per lb.; do 1½ lbs. and up, 23c per lb.; hens, 3 to 3½ lbs., 12c per lb.; do dry picked, 3c above live; capons, live, fat, 6 to 10 lbs., 35c per lb.; do dry picked, fancy, dressed, 38c per lb.; do roosters, 11c per lb.; Belgian hares, 3½ lbs. and heavier, 12c per lb.; geese, fat live, 15c per lb.; ducklings, live, 3½ lbs. and up, 16c per lb.; ducks, old, over 3 lbs., 15c per lb.; turkeys, fat, dry picked, 8 to 10 lbs., 30c per lb.; do live, 25c per lb.; squabs, large, dressed, $4 per doz.; prgeons, $2; guineas, $8 per doz.

Veal—Fancy light, 15@16c per lb.; do medium, 10@14c per lb.; heavy, 7@14c per lb.

Mutton—Fat, 9c per lb.; spring lambs, fat, 15@16c per lb.

Hogs—Good block, 90 to 150 lbs., 8@11c nominal; do heavy, 8@10c.

SPOKANE, Aug. 25.—Poultry, live weight—Hens, 4 lbs. and over, 18c; light hens, under 4 lbs., 12c; springs, 18@20c; old roosters, 8c.

Fresh ranch eggs—$7.50 to $8.50 case; fancy poultry farm, $8.50@$9 case.

Butterfat—46c lb.

Hides, Pelts and Wool.

PORTLAND, Ore., Aug. 25.—Hides—Salted hides, all weights, 5c; green hides, all weights, 4c; salted bulls, 4c; green bulls, 5c; salted or green calf, 10c; salted or green kips, 7c; hair-slipped hides and skins, half price; flint dry hides, 11c; dry salted hides, 7c; culls and damaged, half price. Horse hides, green or salted, each, $1@1.30; colt skins, each, 25c; dry horse with tail and mane on, 50c.

Pelts—Flint dry sheep pelts, long, 20c; flint dry sheep pelts, short, 10c; flint dry sheep pelts, pieces, 10c; flint dry shearlings, each, 5@20c; dry salted pelts, 15c; salted pelts, long, each, $1@1.50; salted pelts, short, each, 50c@$1; salted pelts, shearings, each, 10@30c; salted goats, long, each, $1@2; salted goats, short, each, 50c@$1; dry goats, long, per lb., 15c; dry goats, short, each, 25@50c; goat shearings, 5@15c.

Wool—Eastern Oregon, average to choice, 38@40c; valley wool, fine, 39c; medium, 30c; coarse, 25c; Cotswold and braid, 10c; matted, 15c.

Range of Live Stock Prices for Week Ending August 22

CATTLE.	Chicago.	Spokane.	Portland.	N. Salt Lake.
Choice and prime heavy steers (1100 lb. up)	11.65@13.00			
Good heavy steers	10.35@11.85			
Medium heavy steers	8.40@10.50			
Common heavy steers	6.50@ 8.60			
Choice and prime light steers (1100 lb. down)	11.50@12.75			
Good light steers	10.15@11.60			
Medium light steers	8.35@10.25	6.25@ 7.25	6.75@ 8.00	6.25@ 7.25
Common light steers	5.65@ 8.50	4.25@ 6.50	4.75@ 6.75	5.00@ 6.50
Common to choice butcher heifers	4.15@10.65	3.00@ 5.50	3.00@ 5.50	3.75@ 5.25
Common to choice butcher cows	3.25@ 9.35	2.50@ 5.00	2.50@ 5.00	3.00@ 4.75
Bologna and beef bulls	3.25@ 5.00	3.25@ 4.00	3.00@ 4.00	2.50@ 4.50
Canners and cutters, cows and heifers	2.25@ 3.40	2.00@ 2.50	1.50@ 2.00	1.50@ 3.00
Canner steers	3.25@ 5.65	2.50@ 3.75	2.25@ 3.75	2.25@ 4.00
Medium to choice light veals	8.25@13.00	8.00@ 9.00	8.00@10.00	7.00@ 8.00
Common to choice heavy veals	3.00@12.75	6.50@ 8.00	5.00@ 8.00	
Common to choice feeders (750 lb. up)	5.90@ 9.00			
Common to choice feeders (750 lb. down)	4.50@ 8.50	4.00@ 5.25		4.25@ 5.25
Common to choice stocker cows and heifers	3.25@ 5.75			
HOGS.				
Top of market	9.05	9.50	9.65	7.90
Bulk of sales	6.70@ 8.80	8.25@ 9.25	8.50@ 9.50	7.25@ 7.75
Heavy (250 lb. up)	7.60@ 8.80	8.00@ 9.25	8.75@ 9.25	
Medium (200-250 lb.)	7.80@ 9.00	8.50@ 9.50	9.00@ 9.50	7.25@ 7.75
Light (150-200 lb.)	7.30@ 9.00	8.50@ 9.50	9.00@ 9.65	7.40@ 7.90
Light lights (130-150 lb.)	7.20@ 8.90	8.50@ 9.25	9.00@ 9.50	
Smooth packing sows (250 lb. up)	6.20@ 7.15	6.75@ 7.50	7.00@ 7.50	5.75@ 6.30
Rough packing sows (200 lb. up)	6.00@ 6.60	6.00@ 6.75	6.50@ 7.00	5.30@ 5.75
Medium to choice pigs (130 lb. down)	6.75@ 8.50	8.50@ 9.00	8.25@ 8.75	
Stock pigs		8.25@ 8.75	8.25@ 8.75	
SHEEP AND LAMBS.				
Medium to prime lambs (84 lb. down)	10.75@14.00	8.75@10.00	9.00@10.25	9.75@11.15
Culls and common lambs	8.00@11.50	7.00@ 8.75	6.00@ 9.00	8.00@ 9.75
Medium to prime yearling wethers	8.00@11.75	6.00@ 8.00	6.00@ 8.00	6.00@ 7.00
Medium to prime wethers	5.50@ 9.75	4.00@ 7.00	5.50@ 6.50	4.75@ 5.75
Medium to choice ewes	4.50@ 8.50	3.00@ 5.00	3.50@ 5.50	3.00@ 4.00
Culls and common ewes	1.00@ 4.50	1.00@ 3.00	1.50@ 3.50	1.50@ 3.00
Feeder lambs	11.00@13.85			

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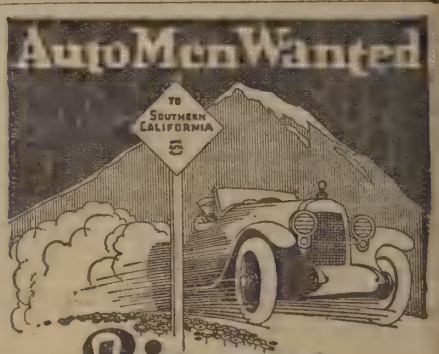

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Just Folks

Estimates can be colored.

Remedies are a pastime with politicians.

The beginning inspires; the end sobers.

What the other fellow thinks has much to do with the success or failure of any movement. If you simply ignore all those who do not agree with you, you might as well give up at once. Honestly listen to the other fellow and the chances are he will listen to you. Then you two have hopes of getting together.

We might as well take it for granted that nothing in this world is ever done in the best way possible. Limitation of conditions, limitation of brain power, make themselves felt everywhere.

Most of us take the longest route, occupy the longest time and waste a lot of effort before we accomplish our project. Some shorten the route and the time and are in the ranks of leadership. Now and then, one thinks and acts directly and becomes the superman.

Hence, you may possibly have thought out the best way of raising a crop of wheat, of fattening a beef steer, of getting the most eggs from your farm flock, of organizing your own farm community into the happiest association, of the best method of pushing your cooperative movement—yet in every one of these projects there are limitations of circumstances, limitations of selfishness, which have to be met and which seriously modify that pet idea of your own.

The best workable plan ever devised is more or less of a makeshift and has to have constant attention in order to keep it going.

This should give encouragement to those who see disaster in deviating from any set plan.

In the meantime, the distinctive purpose can not be abandoned. There come times when it is better to wait than to surrender, for the quarter loaf is not worth the battle—but the whole loaf is out of the question.

In giving up much, if you can substantially hold on to the one purpose, you are doing about all you can reasonably expect in a cooperative movement.

Having your own way is one thing and agreeing to a common way is quite another thing. E A S

Latest High Class Patterns for the Home

Please order the patterns you desire at least two or three weeks before you wish to use them. Desiring to obtain the latest high-class patterns for its readers, THE FARMER has made arrangements to have them sent direct from the east, and under present mailing conditions it takes about that time for them to reach you.

4394-4418. A Jaunty Two-Piece Suit. Jacket 4394 cut in 6 sizes: 36, 38, 40, 42, 44 and 46 inches bust measure. Skirt 4418 cut in 7 sizes: 3 for misses, 16, 18 and 20 years—and 4 for ladies, 31, 33, 35 and 37 inches waist measure. To make the suit for a 38-inch size requires 5 1-4 yards of 40-inch material. The width of the skirt at the foot is 2 1-8 yards. Two separate patterns. 10c for each pattern.

4458. Misses' Dress. Cut in 3 sizes: 16, 18 and 20 years. An 18 year size requires 4 1-8 yards of 40-inch material. The width at the foot is 2 1-2 yards. Price 10c.

4158. Lady's Dress. Cut in 7 sizes: 36, 38, 40, 42, 44, 46 and 48 inches bust measure. A 38-inch size requires 3 1-4 yards of 54-inch material. The width at the foot with plaits extended is about 2 1-4 yards. Price 10c.

4468. Child's Rompers. Cut in 4 sizes: 6 months, 1, 2 and 3 years. A 1 year size requires 1 1-4 yards of 36-inch material. Price 10c.

4116. Girl's Dress. Cut in 4 sizes: 6, 8, 10 and 12 years. A 10 year size requires 3 yards of 40-inch material. Price 10c.

3971. Lady's Apron Dress. Cut in 4 sizes: Small, 34-36; medium, 38-40; large, 42-44; extra large, 46-48 inches bust measure. A medium size requires 4 yards of 36-inch material. The width at the foot is about 2 yards. Price 10c.

3929. Lady's House Dress. Cut in 7 sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. A 38-inch size requires 6 1-8 yards of 36-inch material. The width of the skirt at the foot is 2 yards. Price 10c.

4241. Child's Dress. Cut in 5 sizes: 1, 2, 3, 4, and 5 years. A 2 year size requires 2 yards of 32-inch material. Without the bertha 3-8 yard less will be required, of 40-inch material. Price 10c.

4153. Girl's Dress. Cut in 4 sizes: 8, 10, 12 and 14 years. A 10 year size requires 4 1-2 yards of 32-inch material. Price 10c.

4475. Child's Bloomer Dress. Cut in 4 sizes: 4, 6, 8 and 10 years. An 8 year size requires 3 3-4 yards of 27-inch material. Price 10c.

4247. Lady's Corset Cover. Cut in 4 sizes: Small, 34-36; medium, 38-40; large, 42-44; extra large, 46-48 inches bust measure. A medium size requires 1 5-8 yards of 36-inch material. Price 10 cents.

4463. Lady's Dressing Sack. Cut in 4 sizes: Small, 34-36; medium, 38-40; large, 42-44; extra large, 46-48 inches bust measure. A medium size requires 2 3-4 yards of 32-inch material. Price 10c.

Send 12c in silver or stamps for our up-to-date fall and winter 1923-1924 book of fashions.

Please fill in this order and mail with remittance to:

PATTERN DEPT., PACIFIC NORTHWEST FARM TRIO, Spokane, Wash.

Enclosed find ..... cents for which send me the following:

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Name .....

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Be sure to give the pattern number and the correct size.

"Oh Mother—

Kellogg's

is just what Bobby an' I wanted for our breakfast"

Little appetites, like the big ones, get mighty sharp when you bring out generous bowls of crisp, delicious Kellogg's Corn Flakes for breakfast or for lunch! Watch how fast they disappear; see the bowls handed back for another supply!

That's because Kellogg's are not only delicious, but wholesome for growing children—and wonderfully sustaining for men and women.

Every work-day it takes more than the annual output of a 450-acre farm to supply the raw corn used in the "million packages a day" made in the Kellogg factories!

For extra treats, serve Kellogg's Corn Flakes with stewed fruit or with bananas or other fresh fruits in season. Hear everybody say, "Great—s'more, please!"

Kellogg's Corn Flakes are sold only in the RED and GREEN package that bears the signature of W. K. Kellogg. None are genuine without it.

Kellogg's CORN FLAKES

Also makers of Kellogg's KRUMBLES and Kellogg's BRAN

SEE THE DISPLAY of

CHARTER OAK STOVES

CHARTER OAK RANGES

IN THE SHOW WINDOWS AND STORE OF

Holley-Mason Hardware Co.

Corner Howard and Railroad, Spokane.

FAIR WEEK

Charter Oaks have an enviable reputation of 75 years to sustain. They have been used in millions of homes by four generations.

GALLOWAY'S BARGAINS

Catalog FREE

Before you buy an Engine, Spreader, Separator or any other machine get Galloway's new prices, save one-fourth to one-half. Satisfaction guaranteed to you.

Don't buy any farm necessity before you get this Bargain Book. Write to Wm. Galloway Co. Box 2457 Waterloo, Iowa

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Hotel and Restaurant

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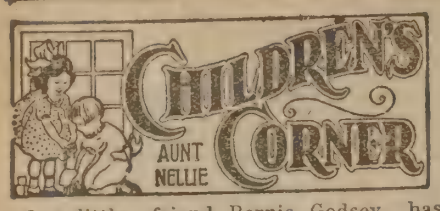
UP TO DATE.

Opposite Union Station, Spokane.

LOOK AT THE GOOD FARM BARGAINS THAT ARE OFFERED ON THE FARMERS' "WANT AD" PAGE THIS WEEK.



Our little friend Bernis Godsey has moved since she wrote to us before and now lives way down in southwest Washington. She says she likes their new location very much. There is a big tunnel back of her home, through which the railroad runs.

On her birthday, June 21, Edith Puckett received many nice presents. She was 11 years old then. Snowball is a pretty little white kitten belonging to Edith and thinks she is an important member of the Puckett household. The Pucketts live in southeast Washington.

Aunt Nellie thanks Violet Pflugrad for a little poem and her letter. This little girl is a western Washington housin. She says it has been very hot there this summer.

The cousins and Aunt Nellie welcome you to the Corner, Martha Keiska, and we shall look forward to another letter from you. This little girl in western Washington was 8 years old January 1, 1923. She has two pet kittens.

Indeed we haven't forgotten you, Esther Kiehn. Aunt Nellie has so many letters that some of them have to be held over. Esther's home is in eastern Washington. She has five brothers and two sisters.

"I should like to become a Corner cousin," says Josephine Sanders, a southern Washington girl, in a recent letter. "I am 10 years old August 14. My school closed May 22. We take THE FARMER. I have a brother 7 years old."

Birthday Greetings

THURSDAY, August 30—Cora Turner, 11 years old.

FRIDAY, August 31—Elna Early, 10 years old; Myrtle Matre, 11; Hattie Becker, 11; Laila Paavola, 9; Emma Rennick, 10; Carl Sieveke, 10; Inez Smelcer; Patricia Stuhr, 8.

SATURDAY, September 1—Jenny Johnson, 11 years old; Flora McAuley, 10; Annie Schilbeff, 11 years old; Bessie Sherwood, 8; John Thaden, 3.

SUNDAY, September 2—Donald DeHart, 11 years old; Gudveig Hammervold, 11.

MONDAY, September 3—Mary Hoard, 8 years old.

TUESDAY, September 4—Nadine Hutchens, 11 years old.

BEDTIME STORIES

By THORNTON W. BURGESS.

BULLY IS PERSISTENT.

When Farmer Brown's boy pulled Bully's nest out of the hole in the apple tree in the old orchard and tore it to pieces and carried away the six eggs that were in it he thought that Bully and his wife would surely leave the old orchard. That is why he did what seemed like such a dreadful thing. He wanted them to leave the old orchard, because he knew

The next day he visited the old orchard to see if Bully had left.

that if they didn't the other birds would, and that would be truly dreadful. He knew that other little feathered people simply couldn't live with such noisy, quarrelsome neighbors as Bully and his wife, and wouldn't live there. He knew that unless something was done the Bullys would have the old orchard to themselves the next spring, and then how the worms and the insects would thrive on the trees! But he couldn't quite make up his mind to kill or really hurt Bully and Mrs. Bully, so he thought that if he took their eggs and destroyed their nest there couldn't be any baby sparrows to grow up and make more trouble, and then perhaps Bully and his wife would go away from the old orchard.

But Farmer Brown's boy didn't know Bully. No, indeed! He didn't know how persistent Bully can be. The next day he visited the old orchard to see if Bully had left. What do you think he found? Why, he found that Bully and his wife had a new nest half built in the very same hole that the old one had been in!

He tore this to pieces only to find another on the next day. And so it was on the following day and the day after that Farmer Brown's boy just had to admire the spunk and persistence of Bully and Mrs. Bully.

"You certainly deserve to be left alone," said he, "but I can't do it. You are a nuisance, and so you have got to go if I have to come here and break up your nest every day all summer."

A day or two after that Farmer Brown's boy found no nest when he put his hand in the hollow of the tree. "At last they've given up," thought he. "I hope they have left the old orchard for good." He was almost out of the old orchard on the other side when his sharp eyes caught sight of a little bird just disappearing in a hole in the very last tree.

He walked up and pounded on the tree. Out popped—whom do you think? Why, Mrs. Bully to be sure! She and Bully were building a nest there. It took Farmer Brown's boy three days to make Bully and his wife understand that they couldn't build there or anywhere else in the old orchard. Finally they gave up and flew away. And where do you think they went? Why, straight to Farmer Brown's barn, and there, way up under the eaves, where only the longest ladder could reach them, they built a nest and raised their young. Farmer Brown's boy said that such boldness and impudence deserved a reward and so, as long as they were out of the old orchard and not bothering other birds, he would leave them alone.

And in the old orchard there was great rejoicing, for now no one wanted to move away, and for the first time every one there looked on Farmer Brown's boy as their friend.

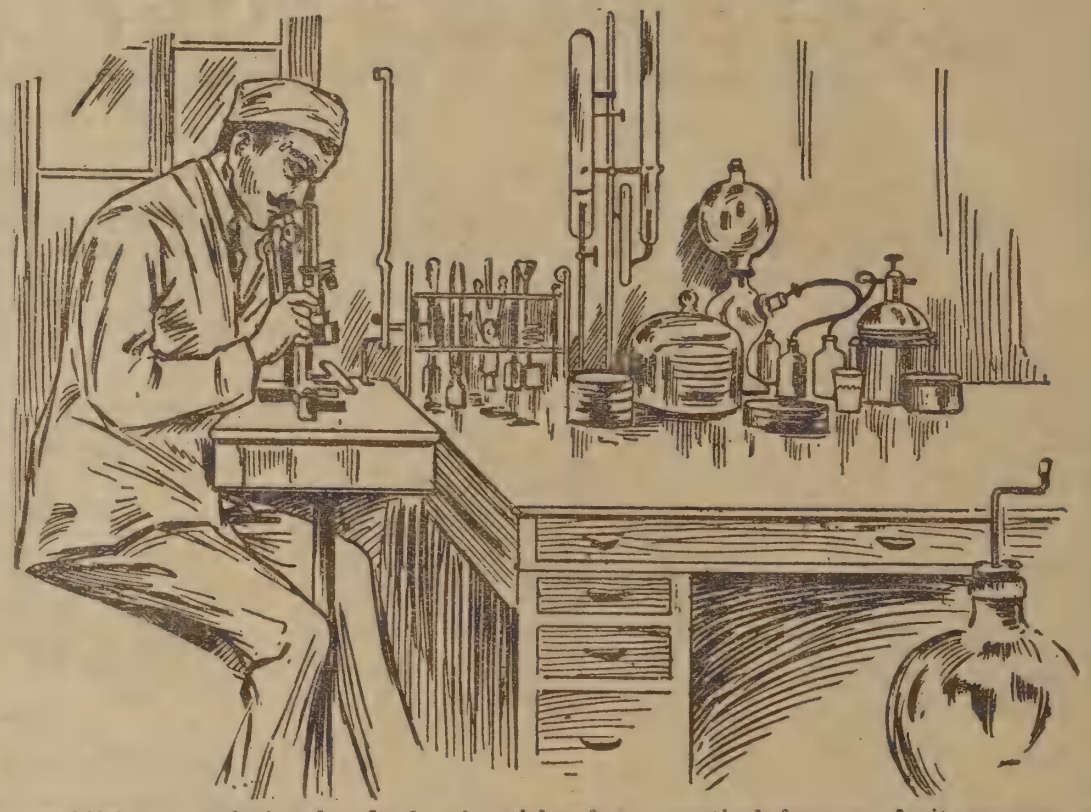
(Copyright by J. G. Lloyd.)

LETTERS WELCOMED BY AUNT NELLIE.

Among recent letters received by Aunt Nellie are those from cousins whose names follow. A few of these will be published each week in the regular edition of THE FARMER and others will appear from time to time in The Junior Farmer:

Lena Schauerman, Dorothy Pomeroy, Miriam Eddie, Dana G. Urquhart, Guy Turner, Zelva Phelps, Mary Kathleen McDonald, Vera Domerude, Anna Mae Tarter, Esther Thieman, La Verne Risting, Esther Wick, Mary Roberts, Robert Moore, Olive Martin, Odna Evans, Levira Viola Berthoif, Beulah E. Warren, Eva Paavola, Mary Hall, Mayme Kynse.

Scientists, as Well as Practical Farmers, Contribute to Your State Farm Weekly



In addition to printing hundreds of articles from practical farmers, fruit growers, market gardeners, stock breeders and dairymen, The Washington Farmer gives space to the scientist and the agricultural expert who carry on careful research work with regard to seeds, plant growth, soils, fertilizers, the care and breeding of poultry and farm animals, the eradication of pests, and many other matters which have a close bearing on agricultural production and prosperity of this state. He has a vast store of information garnered together from many sources which can help solve the farm problems peculiar to this section. What the experimenters at the agricultural schools are finding out, what the scientists who specialize on agricultural problems discover are given to our readers in complete, reliable form. This feature helps round out the paper and gives it greater value to those who make a business of farming.

Your state farm weekly gives big value at low cost on account of its cooperative subscription plan.

We say to our friends: "Send your subscription orders direct. Get your neighbor to do the same. We will give you and your neighbor the benefit of every penny which would ordinarily go to the agent handling the subscription."

If you believe in cooperation, help us make our plan an even greater success during the coming year than it has been in the past. Send in your order, if you haven't already done so, and let as many neighbors as possible know about our money-saving plan.

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Aug. 30, 1923.
THE WASHINGTON FARMER,
Review Bldg., Spokane, Wash.

I desire to take advantage of your Cooperative Plan in securing new and renewal subscriptions.

I enclose herewith $.....for a.....year subscription to

THE WASHINGTON FARMER.

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If your subscription is already paid in advance, it will be extended from the date to which it is paid.

News for Breeders

SWISS VALLEY GIRL.

Partly because of her own record at the pail, but largely because of the records of her progeny both in milk production and in the show ring, Swiss Valley Girl stands out as one of the greatest cows of the Brown Swiss breed. The old cow has been dead for several years, but she left nine daughters and three sons to keep the family name alive, and one of them alone, Swiss Valley Girl 7th, has won more show ring honors than any other animal of the breed, besides making two creditable official records. Seven of the nine daughters have completed yearly tests at various stages of maturity, the average of them being 12,002.2 pounds of milk and 465.09 of butterfat, and have won repeatedly in the show ring as well. Granddaughters also are carrying on the good work, and one of them, Nan of Lakeview, produced 647.3 pounds of fat, the largest production of any animal of Swiss Valley Girl blood.

HAVE 35 REGISTERED GUERNSEYS.

There are 35 head of registered Guernseys on the Noble Brothers' farm at Bow, Skagit county. The blood lines run to the May Rose and Governor of the Chene families. The herd bull is a May Rose animal, and, although only 18 months old, he has been in the herd over a year and has two calves which are promising individuals and well marked. All milk on this farm is separated and the cream sold to the association, while the skim milk is retained at home for feeding pigs, calves and chickens. Calves are fed bran, whole oats and some oil meal, after they have been fed whole milk from two to three months. After this age they will eat grain very readily. The grains that are fed are raised on the farm except in a few cases and they also have clover hay and silage during the winter.

CALLS FOR WASHINGTON CATTLE.

The Mutual Dairy Loan association of Missoula, Mont., has just purchased a carload of grade heifers from Robert Kooistra, Carnation, Wash. Jim Hurlburt of Mt. Vernon, Wash., has also recently shipped a carload of grades to Los Angeles, Cal. Dr. Alfred Hendrickson of Burlington, Wash., reports much increased activity in the sale of Holstein cattle and many calls for test stock for outside shipment.

BUYS NEW HERD BULL.

R. E. Waugh, a breeder of Holsteins at Mt. Vernon, Skagit county, announces the purchase of a grandson of Sir Korndyke Ormsby Piebe. The calf, which will be used as the new herd sire, is also a grandson of Sir Canary Houwtje, one of the animals owned at one time by J. H. Hulbert of LaConner. Mr. Waugh secured the calf from the Walter Johnson herd at Mt. Vernon.

W. J. ORTON BUYS BULL.

W. J. Orton of Renton, King county, recently secured from Wallace & Fordyce of Sunnyside, Yakima county, a yearling bull sired by Chicona Lover Bold and out of Aloha Darling, one of the prettiest things in the Fawndale farm herd. The youngster, Fawndale Bolder by name, placed fourth in a junior calf class of 18 at the Pacific International last fall.

ADDS TO GUERNSEY HERD.

San Juan county purebred Guernsey herds were augmented recently when N. P. Hodgen of Richardson purchased a purebred Guernsey cow, a heifer and a bull from Gus Heimstra of Everson, Whatcom county. Oscar Weeks of Lopez also purchased two purebred Guernsey heifers from H. B. Douglas of Ferndale, Whatcom county.

HIGH PRODUCING GUERNSEY.

Bob's R. S. Royalette, a senior 3-year-old Guernsey in the Valley Gem farms herd at Arlington, has recently been credited with 641.40 pounds of fat and 13,349 pounds of milk. This places her first among Washington Guernseys of that age and eighth place in class DD in the United States.

BUT FEW REACTORS.

There were only six reactors among 4263 head of dairy cows tested for tuberculosis in Pacific county. This is less than 1-7 of 1 per cent. Dr. F. E. Allen, federal veterinarian, working under the direction of the state department, tested 92 per cent of all the dairy cows in the county.

BUYS PUREBRED GUERNSEY BULL.

With the purchase by Mrs. L. Perkinson of a purebred Guernsey bull for her herd, the Lewis County Cow-testing association again enters the 100 per cent purebred bull honor list.

HEIFER COMPLETES RECORD.

Not the desire for money return, but his sporting instincts, prompt Piet Bergsma of Ferndale, Wash., to attempt records like the one he completed some time ago on Johanna Boelyn Gem Segis. As he himself put it, "It was no fun caring for the heifer at 1:30 a. m., through that blizzard," and probably there are not many breeders who would add to their other farm tasks that of milking a cow four times a day, without the element of adventure that is attached to the making of every official record.

Value of Wheat as Feed

(Continued from page seven.)

steer would cost $60, add the feed cost of $14.62 and taking the average gain from the above data, the 1185-pound fat steer would cost $74.62, including only the feed. The necessary selling price of the steer to break even would be $6.30.

Wheat has been used quite successfully in rations with most classes of live stock which are being fitted for the show and sale ring. One of the standard mixtures for fitting calves and lambs for the show ring at the Washington State college is three pounds oats, two pounds wheat, one pound peas, one pound millrun and one of linseed oil meal.

NEED PLENTY FRESH AIR.

"Some means should be provided to give the animals in a barn continuous supply of fresh air without excessive drafts," says Professor L. J. Smith of the division of agricultural engineering at the State College of Washington, in his new bulletin on "Plans for Small Barns."

"Windows hinged at the bottom, the use of muslin instead of glass, openings between pairs of loft floor joists, standard out-take flues up to cupolas, and halved doors are common methods. Animals must have plenty of fresh air if they are to be kept healthy."

We Buy and Sell

Grade and Pure Bred Dairy Cattle. We can save you money whether you wish to buy or sell. One or a carload.

Graham Livestock Co.

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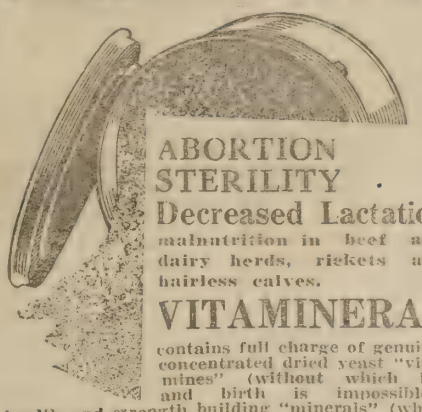
NEAR CARSTENS' PACKING PLANT.

CORRECT TREATMENT FOR



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Decreased Lactation

malnutrition in beef and dairy herds, rickets and hairless calves.

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contains full charge of genuine, concentrated dried yeast "vitamines" (without which life and birth is impossible); health and strength building "minerals" (which cattle do not get from ordinary natural or prepared feeds).

Vitamineral is indorsed and used by leading veterinarians, farm advisers, county agents and big breeders everywhere. Secretary Axby (Indiana State Vet. Ass'n.) has had miraculous results with VITAMINERAL in entire herds afflicted with abortion; he advises every veterinarian and breeder to use it.

Avoid dangerous, fatal contagion; make more beef; increase milk flow and butter fat; get healthy, sturdy calves.

Ask your veterinarian or write for free illustrated book "Vigorize Your Herd."

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Breeders' Dept.

American Hampshire Sheep Association

has a valuable booklet with illustrations telling you the superiority of this breed. We believe the Hampshire to be the best all round sheep in the world. Also have list of breeders; some near you. This literature is free. Write

COMFORT A. TYLER, Secretary.
72 Woodland Ave., Detroit, Mich.

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Fitted show rams for good registered flock headers; range rams in lots to suit.

20 Shropshire ewes, sired by imp. Brewin 92; 20 Oxford breeding ewes, 40 Dorset breeding ewes and ewe lambs. All priced according to value.

FLOYD T. FOX, Silverton, Ore.

Lincoln and Cotswold Sheep--Angora Goats

Range or stud rams and ewes, from one to a carload. Angora bucks and does. Priced for quick sale.

WM. RIDDELL & SONS, Monmouth, Ore.

Oxford Downs I have 21 registered yearling rams for sale, well kept and large for their age. Can also spare a few choice ewes.

DAVID H. LOONEY, Jefferson, Ore.

800 Registered SHROPSHIRES

FOR SALE—Original foundation from the Oak Hills Stock Farm (this flock was famous for winning at the various shows) and nothing but the very best of imported bucks have been used for several generations. This is a complete dispersal of the entire flock, including ewes of various ages, ewe lambs, the outstanding stud rams and two-year-old yearling and ram lambs. Some excellent show prospects. Registration papers with all if requested. These will be sold in lots to suit from one to a carload, either sex. For quick action, write today.

P. A. SMITH, Yamhill, Ore.

THOMPSON'S Gold Medal Jerseys

AT AUCTION, EUGENE, ORE., OCT. 5, 1923.

This sale includes the entire herd of mature Jerseys and a number of younger animals, a total of about 20 head. Included in the offering are four cows with official gold medal records, one a world's record class leader (gold and silver medal), six cows with silver medals, young stock, both sexes, from medal cows, sired by bulls of gold medal ancestry. The pedigrees of the offering are full of gold medal production records. For the convenience of the buyers the sale will be held on the Eugene fairgrounds.

Catalogue being prepared gives details.

E. A. RHOTEN, Sale Manager, Salem, Ore.
OWEN A. THOMPSON, Owner, Blachley, Ore.
COL. J. W. HUGHES, Auctioneer, Forest Grove, Ore.

Jerseys for Sale or Trade
Pool Farm Offers 10 Cows

Besides these, 3 yearling heifers, 1 heifer calf, 3 bulls ready for service and 3 bull calves. All are richly bred, with register of merit and show records behind them.

S. O. POOL, Malaga, Wash.

JerseyType and Production

Two medal sires in service. Young bulls out of dams of heavy producing families.

J. M. DICKSON & SON. Shedd, Ore.

Registered Ayrshire Bulls Sired by Willowmoor Peter Pan 16th; dams of excellent breeding. Attractive prices.

J. U. Smith, Rt. 1, Box 135, Newburg, Ore.

Linn County Holsteins

Cows, heifers, bulls and calves.

LINN CO. HOLSTEIN ASSOCIATION.
GEO. A. McCART, Sec. Harrisburg, Ore.

May Rose Pure Bred Guernseys

Calves, both sexes. Heifers and cows at prices farmers can afford to pay.

NOBLES BROS. Bow, Wash.

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FARMERS! Why not diversify, work from both ends? Produce beef as well as milk at a minimum cost. We are offering bull calves from profitable milking cows of approved Shorthorn type. Herd headed by Gretna Challenger, grand champion Washington state fair and Western Royal, 1922. Visit the herd or write

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Poland China Boars

About 25 "tops" out of 100 head, sired by Kin-Son Fashion, full brother of The Monarch, and by Paramount, the boar whose get has never been defeated, from 800 pound sows, every one a breeder. Every one of these is a herd boar prospect. Priced so that farmers or breeders can buy them. First come, first served. KIN-SON LIVE STOCK CO.
A. L. Wilson, Mgr., Route 5, Nampa, Idaho.

Whitman County Poland China

Breeders' Association, offers you real big type boars or sows, young or matured stock of the very best blood lines obtainable. Satisfaction guaranteed or money back.

A. H. HALLING, Secy., Colfax, Wash.

Spotted Poland China Hogs

Registered, either sex, any age. Purebred. Good blood lines. Satisfaction guaranteed. Buy in the west and save express.

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Modern type and good blood lines. Poland Chinas, Duroc Jerseys, Berkshires. Bred to farrow in September.

ANIMAL HUSBANDRY DEPT. OREGON AGRICULTURAL COLLEGE.
Corvallis, Ore.

Pioneer Herd Hampshire Swine

Lookout and Cl[illegible] breeding. Nonrelated [illegible] at all times. Twelve years a breeder and exhibitor of [illegible] swine. I will attend [illegible], Salem and Yakima [illegible] these fairs.

J. M. FRUITTS, Cambridge, Idaho.

Hampshire Spring Pigs

Best blood lines, well grown, good individuals. Booking orders for fall weanlings. Will sell few good sows.

E. P. CANFIELD, Carlton, Ore.

Quarjo Hampshires

for sale now. Bred sows and gilts; spring pigs.

W. B. LINDSAY, Quarjo Ranch, Merlin, Ore.

Choice Duroc Jerseys

[illegible], bred to farrow in September. Service boars: Sensation breeding.

GEO. DEBOK, Oregon City, Ore.

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200 Hutton Building, Spokane.

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Our show herd will be exhibited at

Chehalis, Spokane, Lewiston (Idaho), Yakima and Salem (Oregon.)

Remember that none of these animals were purchased for show purposes, have all been in the herd three years or over, and with only two exceptions, the whole herd was bred at Hollywood Farm.

Hollywood Farm Hollywood, Wash.

LAWSON'S R. of M. JERSEYS
At Auction, Tuesday, October 9

Twenty-six head cows, heifers and few selected young bulls, all very closely related to gold medal producers and show cattle. The offering includes twenty head from the herd of G. W. Lawson and six offered by John Michaelbrook. Among them are a number of R. of M. cows, others on test. One heifer now on test has produced 198 lbs. fat in three months, 20 days, others are full brothers or sisters to cows now qualifying for gold medals.

A son of St. Mawes Golden Poppy, also a son of Captain Tristram are herd bulls on the Lawson farm. Most of the offering were sired by, or are bred to, one of these great bulls. The catalog now being prepared gives details. If your name is not already on my 1923 list, send for catalog.

G. W. LAWSON, McMinnville, Ore.
JOHN MICHAELBROOK, McMinnville, Ore.
Owners.
E. A. RHOTEN, Sale Manager, Salem, Ore.

WORLD'S RECORD JERSEY HERD
Auction Sale, Sept. 28, 1923

This offering consists of 33 head of carefully selected animals from the herd that holds the world's record for butterfat production—19 cows averaging 685 lbs.

Included in the sale list are the medal of merit cow, Helma of Ashwood 1903 lbs. fat) and two of her sons; the gold medal cow, Olga of Ashwood; the silver medal cow, Figgis of Ashwood and two silver medal daughters by St. Mawes of Ashwood; a dozen beautiful daughters of Pogis 99th of Hood Farm 39th—all out of medal winning dams; four choice daughters of Carry-on of Oregon and two of the best heifer calves from the recent importation of Reid & West.

The blood of the medal of merit bulls, Holger and Rinda Lad of S. B. predominates in this offering.

Write today for catalog.

McARTHUR & STAUFF, Owners, Rickreall, Ore E. A. RHOTEN, Sale Manager, Salem, Ore.

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FOR THE MEN AND THE FARM: Everything a man uses or wears, from tools and hardware and famous Riverside Tires, to virgin wool suits—often one-third less than prices you are paying.

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48 hour service is our promise to you. But we do better than our promise — because most of our orders are actually shipped within 24 hours.

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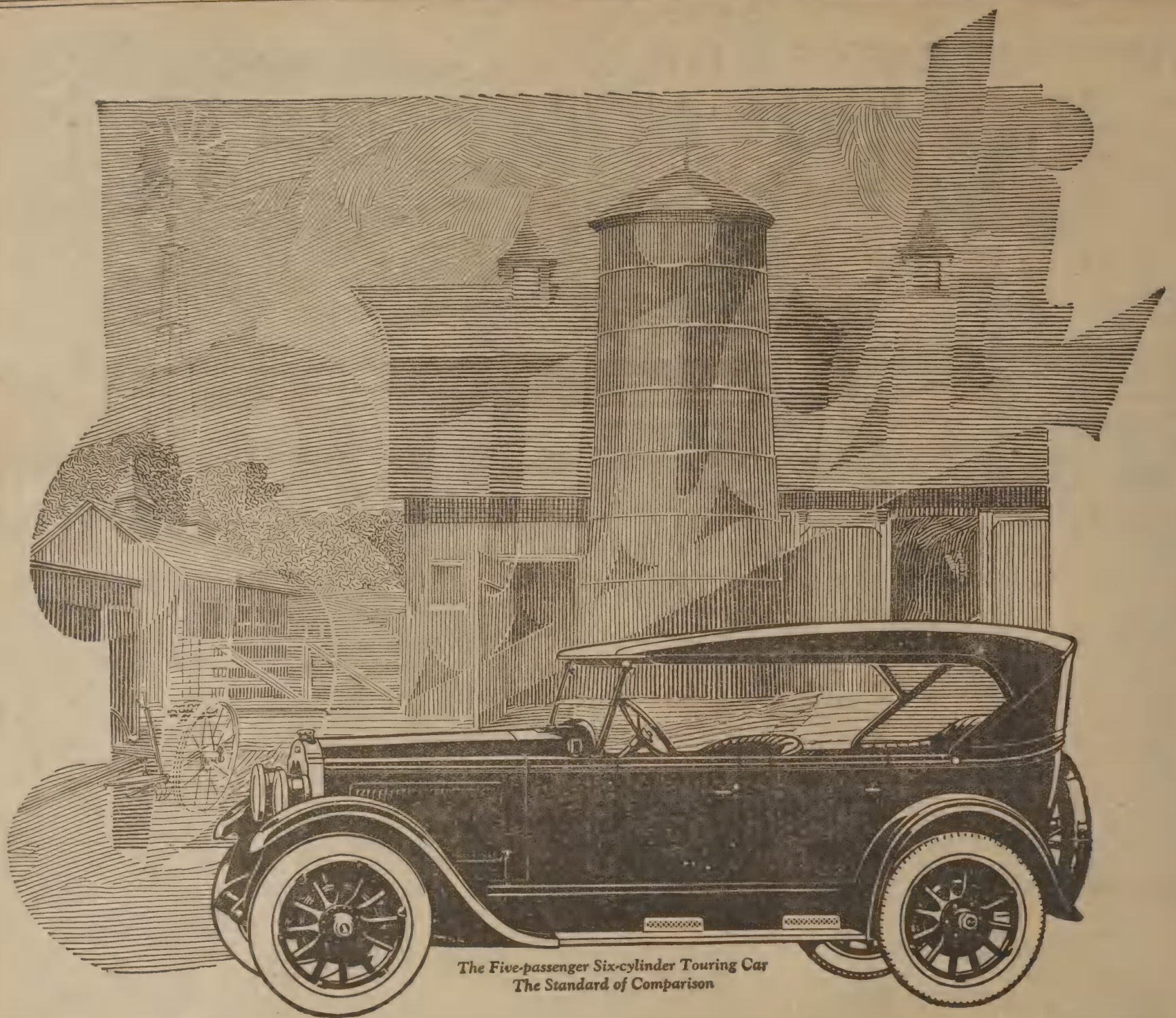
SPOKANE. SEATTLE.

Livestock Improvement Creates Serious Problems--Page 3



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Improvement of Live Stock Creates Big Problem

Domestication Multiplies Animal Ills; High Production Tends to Lower Resistance

By E. E. WEGNER, Dean College of Veterinary Science, State College of Washington

The improvement of our live stock has been a reality of which we are all justly proud. The records that many of the best breeds of dairy cattle have established is little less than phenomenal. The gains of our beef breeds and the increased weight and early maturity of our horses are facts that we are proud to contemplate. The egg production of the hens deserves notice and commendation. The value of an article or an animal should be in proportion to the amount of wealth that it will create. It is no idle boast that the animals of this country are being improved very rapidly and the campaigns for better bred sires and further improvement of all kinds of live stock are of tremendous value to the nation. While as yet the percentage of purebred animals is very small, the number of good grades represents a vast improvement.

I would not suggest that we were forging too far ahead in our desire to increase production and losing on one end while gaining on the other, but I do wish to bring out for consideration the effects upon the animal of certain practices under domestication. Not that we should discontinue our improvements, but rather that we should realize the attending dangers and seek to prevent their operation. In our desire for greater production the effect upon the stamina of the animal has been lost sight of. Should we produce an animal capable of yielding twice the present amount, we would still not be satisfied, because man is never satisfied with his accomplishments.

Must We Slow Up?

Is it possible to continue the present production advancement indefinitely, and if not, why not? What are the limiting factors? That question brings squarely before us a discussion of the effects of artificial handling under domestication. An analysis of this subject throws some light upon the limiting factors of the future and unless we find efficient means of disposing of these influences we can not hope to continue indefinitely.

Stamina is of greatest importance. Nothing is gained by high production unless the pace can be maintained for a considerable time. There can be no question as to the effect of high production on the animal body; it is the same as the effect of high speed on a motor. The best of engineering care must be given if the high rate of speed is to be maintained.

Production vs. Stamina.

Under domestication animals have been afforded protection from certain natural enemies, but other dangers have been added that may prove to be more considerable unless care is taken to control them. The cow was originally intended to produce enough milk to supply her calf until it was old enough to feed on the vegetation of the range. Man has increased her production many fold by careful selection and mating of individuals of superior qualities. This has frequently resulted in line-breeding or inbreeding to a dangerous extent, and though the production may have been increased, it was at the expense of the animal stamina. Chickens that normally laid a nest full of eggs to be hatched to propagate the species now lay 20 times that number, and man isn't satisfied yet. It is possible to require 20 times the amount of work that nature intended and still maintain normal health? Egg and milk production is work, and when one body function is severely overtaxed, may it not be detrimental to other body activities? Certainly the high producer of today does not show the individual resistance to disease that her rugged ancestor showed.

Horses that have been developed to earlier maturity and greater weight have not been so badly affected as the animals that produce raw food products, but the effects of close breeding and artificial protection with rich feeding has created an animal with less resistance than the ancestor of the open range. The hog, once lean and gaunt, was a hardy animal that lived a life of toil and activity as he ate the vegetation of the fields and rooted the hard earth for a great portion of his food. Today he is fat, languid and lazy as he eats his rich, prepared meal from a clean trough. A professional gorger is ever at his command to cause him to make a pound of flesh on less feed. He now has small lungs and weak muscles, but he is an economical food producer.

Housing Affects Health.

If the demands made upon our animals are more severe than they formerly were one might suppose that this condition was balanced by the better protection from disease. That, if the resisting powers are impaired, the artificial protection afforded more than makes up for it. The facts are that under domestication diseases spread more rapidly than under natural conditions. The same stables, barns, sties and sheds are used for one generation of animals after another. The corrals and pastures are in constant use and greater numbers of animals are required to inhabit these small quarters. The result of this system of management is that diseases are much more prevalent today than they ever were. The problem of animal management, to keep the herd or flock on a paying basis, is very much more complex than it has ever been, and the future will show the absolute necessity of having a sufficient number of scientifically trained men to control this serious aspect of animal production.

Natural Conditions Best.

Under natural conditions animals roamed the ranges over wide areas, bedding one night in one spot and the next night a mile or miles away; always on virgin soil. Infections spread very slowly under those conditions. Contrast this with the conditions at present, where the animals lie in the small lots on the average farm.

To be more specific, I might mention such diseases as navel infection in foals. This did not cause much loss when the mare dropped a foal on the clean, open range. White scours in the calves now takes its toll in increasing numbers as our intensification increases. Lump-jaw spreads more rapidly now. Glanders and tuberculosis involve great numbers in a short time when they are kept in narrow quarters. I am not saying that we must return to the open range conditions of years ago, for we can never do that; but we must prepare to protect the wealth producers in our herds from the losses that present living conditions invite.

Parasites of swine had become such a curse on certain places that these animals could no longer be raised profitably. The eggs of the parasites lived over from one generation of hogs to the next and infected the little pigs; killed a great number and stunted the rest. Hog cholera spreads rapidly in the swine herd. Bull-nose and necrotic inflammation of the bowels are becoming more prevalent, because the young pigs are quartered in the old pen where past generations of hogs have been kept.

Sheep that are herded in large bands are more certainly affected with scab. Recently we treated 1300 of these animals for foot-rot which would not have spread so rapidly had the animals been loosely herded. The great ranges of the west are practically gone and we must raise our live stock in the farm yards and small pastures in the future. We need, therefore, at present men who can see the great problems of the live stock raiser and fit themselves, by the study of animal disease, to control these conditions as they arise.

We have seen the healthy young horses taken from the pastures on the farms to the city sale stables and come down with influenza in a few days because these stables were hotbeds of infection, as many such cases had occurred previously. Notice this same disease as its spreads through an entire bunch of horses on the farm when it once gets a start. Distemper does the same thing, and other infections spread with similar rapidity.

Dairy Barn Troubles.

In cattle, probably the most closely housed of any of our animals, we see the difficulties of controlling calf scours and calf pneumonia, two of the most serious diseases of young cattle that take the profits from the breeder and prevent normal additions to his herd. In the adults, infectious inflammation of the udder (garget) is the scourge of the dairyman in certain herds where it has obtained a hold. Foot-rot and lump-jaw are two others that are rapidly spread. Tuberculosis and hemorrhagic septicaemia cause much loss when they get started. Anthrax, in localities where it is prevalent, is a terrible disease. Abortion, when due to infection, is spread easily when animals are confined to small quarters.

In short, the more closely animals are associated with each other, the more rapidly infectious diseases of all kinds will spread. Our economic conditions force us to raise our live stock on smaller and smaller tracts, and as these crowding conditions become more acute the danger from disease increases. One may ask, "Why the same conditions do not prevail in man?" We answer that strict sanitary regulations are enforced by nations, states, counties and cities. People are not grouped in great numbers in single undivided apartments and this family isolation prevents the rapid spread of infections.

A Challenge to Men.

This field in animal care is big enough to attract the best brains of the young men of this nation because there is not an old farm in this country that has not lost live stock from some of the above causes.

There may be some who think that this question is not serious, but it is because they are familiar with only a few herds. If I could show you the letters and inquiries that come to me from all parts of the northwest you would be convinced that the need was acute. Some say, "We are broke unless this loss can be stopped," and others virtually have tears in them. Recently I was advised that a dairy herd was taken over by the bank; couldn't make expenses. The production was low and the reproduction lower. Good animals to start with, but they couldn't make the grade in the face of domestic difficulties. That's where the man with a full understanding of these problems should be doing his work and helping to strengthen the back of this great industry.

Real Sanitation Needed.

How are these conditions to be handled? There are different ways of handling them. No two can be handled in exactly the same way. Sanitation is the thing that we most need and that implies more than sprinkling a few handfuls of lime about the floors and premises. It may mean taking the calf from the mother as it is dropped and keeping it in special quarters for a few months or having it dropped on clean pasture. The same applies to the foal. It may be necessary to take the sow and rid her of worms and clean her skin and place her to farrow in a newly built or scalded house placed on ground where hogs have not lived in order to keep them away from the infections. Change the hog lots; plow up the old one and sow grass or grain. Some diseases, such as tuberculosis and glanders, may be controlled by carefully testing the animals and getting rid of the spreaders. Certain others, like blackleg, hog cholera and anthrax may be controlled by vaccination. Early recognition and rigid quarantine are necessary in other cases such as necrophorus infection, dog distemper and so on. The use of antiseptics is always helpful and may be used to good advantage, but it is not all. The problem is a large one and requires a broad and liberal education in the science of animal diseases.

The Feeding System.

I could not close this article without commenting upon the effect of our present method of feeding, since it differs so widely from the natural one. Keep in mind that our animals were intended to roam wide areas of ground in search of food. They grazed on the hills and in the valleys. They roamed over sandy plains, rocky slopes and fertile bottoms. They traveled far to water and always hunted the salt-lick. They cropped the grass in all stages of its growth. Under those conditions the animals were quite sure to find a great variety of essential body building substances.

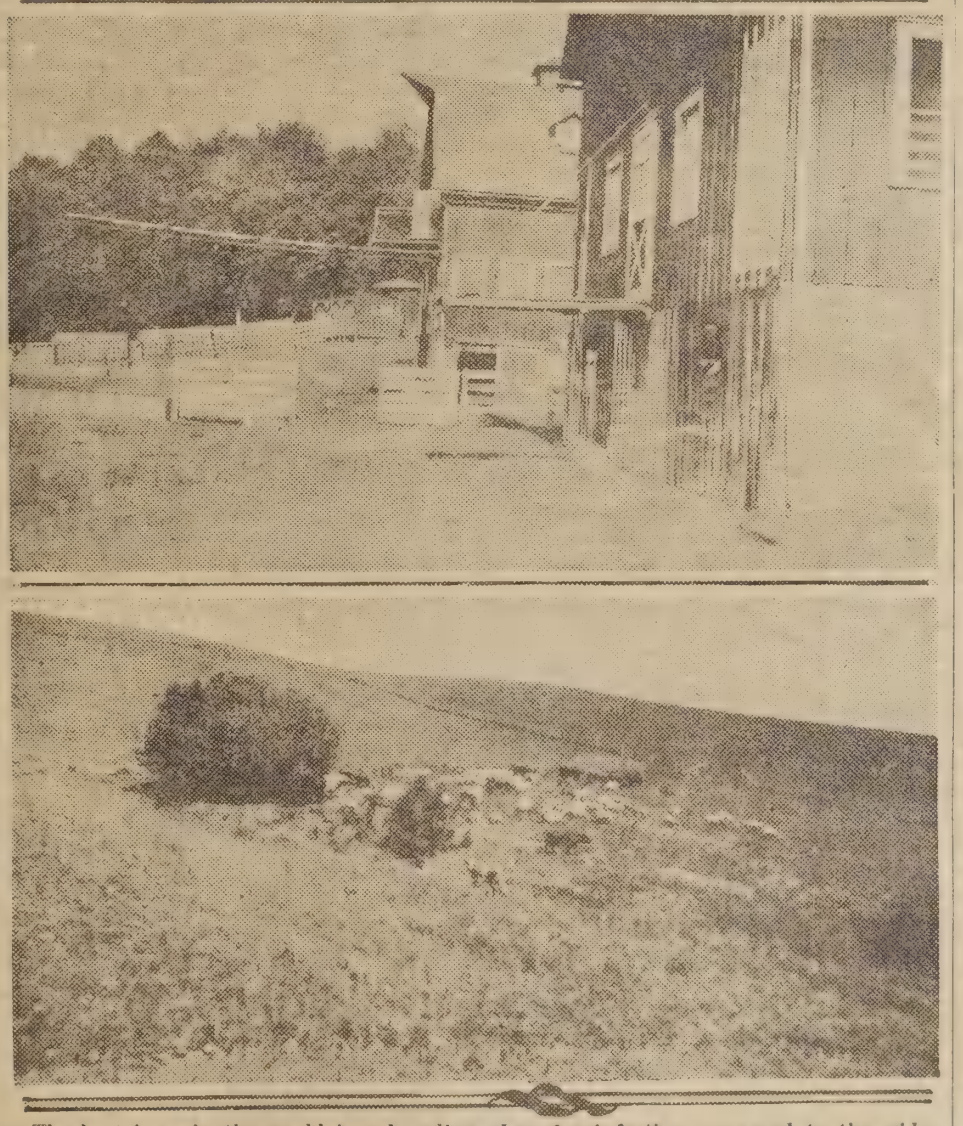
Minerals Often Overlooked.

Certain mineral substances are as essential to normal body development and activity as the carbon and nitrogen. In certain districts in this region the lack of iodine causes the incomplete development of the young and the calves are born with goiter, the pigs hairless and the colts weak and crooked. The lack of one element is responsible for this. It is significant that the wild animals with natural freedom appear to be free from this trouble. Lack of minerals is distinctly seen in the form of rickets in the growing animals, particularly, and may be corrected by giving feeds that contain a high calcium content. We find also that adults when fed on forage deficient in calcium show weakening of the bones, stiffness and lameness, and this is not uncommon. Considering that the grains contain a low calcium content, our high grain feeding is likely to cause trouble unless it is supplemented by a legume hay which contains a liberal amount.

Animals Often Poorly Nourished.

If our working horses suffer from this deficiency, what about the dairy cow and the hen that, aside from the requirements of their bodies, must have materials for the manufacture of milk and eggs? The cow must have enough for the maintenance of her body plus the requirements for milk production and in addition she may be nourishing a fetus at the same time. The shortage under these conditions means that the milk production will be lessened, or the female will rob her body to supply the deficiency or she will be required to drop her fetus from the womb undeveloped. All three of these conditions are common, some animals manifesting one more prominently than the others, but suffering a real physical inconvenience in all cases. Sway backed, soft boned and lame cows are a common sight in the dairies. Low milk records and abortions and sterilities are without doubt frequently the direct result of feeding materials that do not supply all the es-

(Continued on page eleven.)



The best barn in the world is a breeding place for infection compared to the wide, open pasture or the natural range.

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Train for Farming Profession

One of the reasons so many young men and women have left the farm is that farming has been made, too often, merely a means of existence rather than a life work, a profession, a calling. Director E. L. French of the state department of agriculture hit the nail on the head in an address not so long ago.

"There are too many of our boys today under the impression that they should take up some kind of professional life, and consequently pay too little attention to agriculture as a calling," says Director French. "The state of Washington is just beginning to develop its wonderful possibilities. We will, in time, get down to more constructive methods of agriculture than we have ever known in the past and this is going to require more specialists who have had a scientific training. When we consider the facts we will see that as yet we have paid but little attention to the permanent upbuilding of our soils, but if we are to continue as a leading agricultural district we must lay particular emphasis on this point. We are going to need more trained men to help us attain our aim. In our work in the department of agriculture we find that there is actually a shortage of trained men to conduct the different lines of work. This is because about nine out of every 10 boys attending our higher institutions have the impression that the professional life has greater possibilities for them and some even consider it more respectable. This is a mistaken idea.

"Many will argue that agricultural positions do not pay as well as do some other lines of work. This is true to a certain extent, but it should be remembered that there are few professions that do not call for several years of struggling along before they can be made to produce satisfactory income.

"The young men graduating from our high schools who have had some farm training should study the possibilities that are offered in a course in agriculture. Practical experience will enable a man to take up farm work and in many cases he will be able to 'get by,' but if his foundation is fortified with a college education the broad field which lies before him offers added possibilities."

Remember Last Season

A news dispatch from Wenatchee says that the general superintendent of transportation for the Great Northern reports over 7000 refrigerator cars now on the system compared with about 2500 on September 1, 1922. On the western division of the road there are now 2638 "reefers" compared with 635 on the same division last year. Among the 7000 cars now on the line are several hundred of a new type being built especially for the Western Fruit Growers' Express, painted a rich yellow color. These are said to be the very latest thing in reefers, containing improved ventilating, heating and icing facilities.

That should be encouraging to the fruit growers of the territory served by the Great Northern. Wenatchee is to be congratulated on its agitation for improved service. It is entitled to have its crop of fruit moved efficiently, which was not done last year. Likewise, the Great Northern is to be complimented upon its apparent efforts to furnish adequate transportation facilities for the coming season. May the district and the railroad cooperate to the end that fruit will be handled without losses this year.

Result in Happier Homes

It is not always convenient to have a model kitchen made from the old one, but many times a slight change will add much to the convenience of the housewife, as was the case in the kitchen of Mrs. C. C. Wade of Montesano, Grays Harbor county.

Her kitchen was arranged so that only a small amount of light could get in from the two small side windows. A large pantry had been built next to the other side, but in such a way as to shut off the light. There had been no plans for a sink and the one who worked over the stove must do a great amount of walking when preparing a meal.

After securing the assistance of the home demonstration agent, and Miss Minerva Lawrence of the state college, she arranged to have the pantry opened up and a sink built in with a double window over it. All of the wall space has been built up with closed closets and two coolers. Some of these cupboards have been built high and can be used for storage. Even the space beneath the sink has been closed with two doors, but a small space has been allowed at the bottom for the toes when one is standing close to the sink.

The material for the remodeling has been estimated at $54 and the work of the carpenter would, of course, be in addition to that. But the value of improvements of this character can hardly be measured in dollars. Health, comfort, happiness and general satisfaction are the measure of such things in the housewife's workshop.

This Should Give Courage

Business failures in the twelfth district of the federal reserve bank during the first six months of 1923 were less, both in number and liabilities, than during the first six months of 1922, according to official report. This district includes Washington, Oregon, Idaho, Utah, California, Nevada and most of Arizona. The figures on the business failures for January to July of these two years follow:

	First Half 1923	First Half 1922	Percentage Decrease 1923 Compared with 1922
Number	1,078	1,148	6.0
Liabilities	$14,296,328	$19,885,666	28.1

In the country as a whole, the record for the first six months of 1923 compared with the same period in 1922 shows a decline of 27.3 per cent in the number of failures and of 30.6 per cent in the liabilities of failures involved.

The record of business failures in the states of this district during June, 1923, shows a decline of 27 per cent in the number of failures as compared with both May, 1923, and June, 1922. Liabilities of failures during June, 1923, were respectively 21 per cent and 37 per cent less than those of failures reported for May, 1923, or June, 1922, and were smaller than in any month since February, 1921. The average liabilities of business failures during June, 1923, were $10,478, compared with $9,657 in May, 1923, and $12,248 in June, 1922.

Lewis County Clover Industry

Lewis county is going into the grass and seed production. W. F. Mueller of Claquato has 35 acres of clover seed this year and Harry Smith of the same section, 25 acres. Alfred Gregg has 30 acres; J. A. Scollard has nearly 100 acres, and many others are going into the business. The seed is reported of a good quality and the yield large, while prices are satisfactory. The second cutting of red clover is allowed to mature for seed. Clover hullers are coming into use.

While the middle west has produced the bulk of clover seed, it has been grown quite extensively in Oregon.

Washington State Gleanings

Miss Pauline Child of Sprague has left for the Hawaiian islands to resume her position as teacher in the government schools for the third year. Miss Frances Simas accompanied Miss Child and will teach in the islands.

ALFALFA DOES WELL IN CLALLAM.

C. N. McLaughlin of Clallam county reported to County Agent A. W. Holland that he planted a new field of alfalfa in the spring and it is making a fine stand. Last year A. N. Taylor of Jamestown harvested 42 tons of first-class alfalfa from seven acres of land and sold the third crop in the field for $60.

POULTRYMEN GET PEDIGREED BIRDS.

Jacob Erving, owner of the Standard hatchery, has received 100 high pedigreed cockerels from Hollywood Poultry farm. The birds will be apportioned among local poultrymen who will produce hatching eggs under the accredited system. Later 200 to 300 more cockerels will be purchased for distribution.

GROWERS ASK FOR INSPECTOR.

Lewis county berry growers, through President L. G. Colyn of the Lewis County Berry Growers' association, have presented a petition to the county commissioners asking that a county horticultural inspector be appointed to serve six months each year. The request is made because of the growing importance of the berry and other fruit business in Lewis county.

PEACH SHIPMENTS HEAVY.

Shipments of Elberta peaches from the lower Yakima valley district alone are nearly 40 cars a day, according to County Agent A. E. Lovett, who is arranging orchard tours through the district. Horticultural experts from the state college will make the trips with growers and point out new systems and experimental features employed under their direction.

INTER-ISLAND FAIR SEPTEMBER 27-29.

The fourth annual Anacortes Inter-Island fair will be held this year September 27, 28 and 29. This fair is held under the direction of the Anacortes Chamber of Commerce, and in the past has been pronounced one of the best exhibitions of its kind in northwest Washington.

The committee in charge of the fair includes Charles P. Stapp, chairman; E. P. Barker, C. D. England, F. G. Abbey, Mrs. Douglas Allmond, Sam Mendelson, A. C. Thompson and C. F. Stafford.

HOLD 1924 POULTRY SHOW.

It has been decided to hold the 1924 Centralia poultry show from January 14 to 19 next. The chamber of commerce has had this matter under consideration for some time and an organization has just been perfected.

H. H. Collier, Tacoma; C. W. Harris, Seattle, and F. J. Oeltjen of this city met recently with a local committee. A. R. Badger will head the Centralia poultry show as president; Earl H. Colson will be vice president, while L. L. Lynn, secretary of the chamber of commerce, will act as secretary-manager.

BELIEVES ORCHARDISTS NEED HELP.

"We have worked and saved and struggled for six years in the Kennewick district, and at last have come to the point of asking whether it wouldn't be better, as suggested by some one at the previous conference, to pull our orchards out," declared J. A. McLean, representative of the Yakima Valley Fruit Growers' association at the second Portland conference on coordination. "We'd be glad to quit if we could, but we can't. We've got to have help of some knd." McLean has a 12-year-old orchard. Last season his returns for Jonathans, after the association had deducted 40 cents for its services in grading, packing and marketing, netted him 26 cents per box with which to pay all expenses of producing.

MAKES MONEY ON ORCHARD.

Herbert Williams of White Salmon, Wash., was one of the few apple growers at the recent Portland conference on coordination to assert that conditions were any way to his liking. He had made a profit on his orchard every year since it was five years old, he said, and a satisfactory profit every year until 1922, when he netted $1 per box. He admitted having had business experience before he started orcharding, something which the average fruit grower has not had, and it was pointed out that as an independent he probably had benefited, without paying for it, from the stabilizing influence of the cooperative associations. He expressed the opinion that White Salmon growers as a class have made money, but said nevertheless that he would work as hard as the next one to establish a central selling agency.

POULTRY CULLING SCHOOL HELD.

Announcement was made by the county farm office at Montesano that 13 Grays Harbor county poultrymen qualified to do culling at the poultry culling school recently held by W. D. Buchanan, poultry specialist of the Washington State college.

Mr. Buchanan spent a day training these men in understanding the poultry score card, and in scoring 10 birds each. They will receive certificates stating that their culling will be recognized by the specialists. Each of the 13 have agreed to do culling at 1 cent a bird if the owner catches the birds, and 2 cents if they do their own catching.

Those taking the training were R. E. Huttula, Paul Seifret, D. V. Drake, Ray Cox, Robert Ruddel, Mrs. F. A. Lumber, Armis Jarvi and Mrs. R. D. Ruddel, Elma; Clarence Glenn Jr. and Mrs. J. M. Spencer, Montesano, and Mr. and Mrs. C. M. Purkapile, Aberdeen.

FORM PEACH POOL.

Contracts of sale for 100,000 boxes of peaches were placed in the hands of bankers by the peach growers of the upper Yakima valley August 24 to be sold at minimum price of 75 cents a box, f. o. b. Yakima county, by peach growers working in harmony with shippers and bankers. More than 100 representative growers, bankers and dealers met and, after Chairman B. V. Davis had explained the agreement and contract, signers were easily obtained, with promises by those present to get in touch with their neighbors and get their signatures. It is thought by those interested that between 60 and 75 per cent of the tonnage will be obtained.

This is the first organization for disposal of crops in the valley where shippers and bankers have been taken into the confidence of the growers, with the possible exception of the four-county hay growers' organization, which is being formed.

Glorification of Work

Is One Condition of Continuing Business Prosperity

The "glorification of work" was laid down as one of the conditions of continuing business prosperity in a recent address by A. R. Erskine, president of the Studebaker corporation. According to the dictionary, to glorify work is to bestow honor and distinction upon it; to shed radiance or splendor on it; to transform it into something more splendid.

In place of being cast out of paradise into a world cursed by labor, Mr. Erskine evidently would have Adam and Eve ejected into a paradise of work. These two theories of work have had a lot to do with the misery and happiness of human beings.

Not only is work glorified in and of itself like that done by an Edison, a Burbank, a Shakespeare or a Michelangelo, but the so-called humblest kinds of work are transformed and glorified by the light of the home fires which are kept burning.

Other conditions of continuing business prosperity cited by Mr. Erskine are correct teaching of the principles of economics; the inspiration of honesty, confidence, courage and optimism; encouraging of constructive forces and the condemnation of those which are destructive; the enforcement of law and order and respect to our institutions.

This leader in the business world also notes the conditions in the United States which are conducive to business prosperity. Our exports average but 6 per cent of our production and hence we have by far the biggest and richest home market of any industrial nation in the world's history. Our producers are themselves the greatest consumers of their own production and only need constant employment to insure national prosperity. Panics induced by overexpansion of loans, withdrawal of credit or restricted supply of money are highly improbable, if not impossible, under our present federal reserve banking system.

Mr. Erskine further believes that business prosperity may continue indefinitely if the psychology of the nation is properly directed. In other words, the mental attitude of the nation largely determines the state of business. The continuous operation of business at the nearest possible approach to the capacity of productive facilities insures the greatest possible employment, happiness and prosperity to society.

There are, however, serious obstacles to be overcome in the path of business prosperity. Business will not function freely unless employers are optimistic, confident and courageous. We must be rid of that baneful habit of the human race—superficial criticism. Those who care nothing for history or facts concerning the things they seek to discredit are the enemies who upset business.

The printed page and the schoolroom must be drafted into this campaign for continuing business prosperity. Even grade schools, as well as high schools, should teach and feature economics as a regular study.

Of course, depressions may occur, owing to inflation of the price level, overproduction, unpreventable wars, and other upheavals may bring disasters, but "that is no reason why we should not eliminate the psychological agency of ruin."

As a man thinketh so is he, and Mr. Erskine would have him think more heartily and more healthfully of those things which make for health, happiness and prosperity.

Woman Farmer Succeeds

"Mrs. Luttrell's is an interesting story of what thrift and carefully planned work will accomplish," writes W. E. Martin in the Oklahoma Extention News, concerning a Marshall county woman who made a success at farming under trying circumstances. "Five years ago her husband died, leaving a debt of $1200 on the farm. There was only one son to carry on the work, and shortly after Mr. Luttrell's death this son was killed in an explosion. Mrs. Luttrell, however, did not resort to charity but she and her two grown daughters rolled up their sleeves and went to work themselves. Since then they have done all the work of the farm, even to cutting their own wood. She has paid off the $1200 debt, and told me she didn't want to ever have a loan on the place if she could possibly get along without it. She has kept the three smaller children in school most of the time. Two years ago I terraced her farm and she has kept these terraces up in good shape. As a money crop she raised hogs and cattle. She has 20 head of cattle and 75 head of hogs on hand now, as well as a large flock of poultry. In many ways she is a better farmer than lots of men in her community."

Seeking Pleasure

Enjoyment of That Which Is Worth While Is Desirable

He that loveth pleasure shall be a poor man; he that loveth wine and oil shall not be rich.—Proverbs 21:17.

Is there something inherently wrong in pleasure that the writer of the Proverbs should declare that he who loves it must therefore be poor? It hardly seems so, if pleasure be defined in a broad sense. But as certainly as day follows night, trouble follows in the wake of him who loves temporary pleasure above things of lasting and true worth.

Unbridled love of pleasure is the cause of much of the world's distress today. The love of joy-riding has led to the failure of many a man and woman. The love of the so-called pleasures of the gambling hall has wrecked homes and destroyed manhood. The love of the false pleasures of idleness signs the death warrant of worth-while living.

Too many people today are seeking their pleasure in the superficial things of life; too few find it in real living.

There is unexcelled pleasures to the right-minded man or woman in every small success that crowns his relentless effort to do something worth while. Nothing wrong with that kind of pleasure! There is mighty pleasure to the honest heart that strives ever to do the right thing in the right way for friend or foe, and there is no penalty attached for the loving of such pleasure.

No, the penalty follows him who seeks out worthless things and activities and thinks he takes pleasure in them. The second part of the text better suggests the meaning which the writer intended. He that loveth wine and oil shall not be rich, for these things typify the superficial, the fleeting things of life, and neither spiritual nor material prosperity can result from them. Like the flowers of the field, the wind passeth over them and they are gone. But he that taketh pleasure in the things that are real, the things that are permanent, eternal, everlasting shall be rich indeed.

FARM BUSINESS AND MARKETS OUTLOOK

HIGH prices for factory products which farmers must buy are due chiefly to high wages in industry and commerce, but those self-same wages explain the record rate at which many farm products are being consumed. At least a few crumbs from the urban prosperity banquet table are falling to the former.

More butter, cheese, eggs and poultry are disappearing into consumptive channels, as shown by the combined records for Chicago, New York, Boston and Philadelphia, than ever before at this time of year. The hog market is handling the largest summer runs ever known at better prices than seemed possible for such heavy production and per capita consumption of pork in the last 12 months has shown a phenomenal increase. Nor is this heavy consumption of pork at the expense of the market for beef. Receipts of cattle are as heavy as a year ago and prices are higher.

Index numbers of retail prices of 22 principal articles of food in the principal cities in the United States were 3.5 per cent higher in July than a year previous. Clothing prices certainly are higher. Not only is the consumer buying more, but he is paying more per unit.

Cattle Supply in Expansion Stage.

The summer and fall beef harvest became more general last week. Receipts at the leading markets increased about 15 per cent and are now nearly one-third larger than the first week in August

Demand for good beef maintains surprising breadth and prices have held remarkably considering the size of the run. Prime heavy steers have held to the levels recently attained with a new top of $13.10. On all grades below choice only a moderate decline was registered.

Shipments of stockers and feeders from the 12 leading markets in the last four weeks have not been quite so heavy as in the same period last year, but feedlots will probably be about as well filled as a year ago. Higher prices for fat cattle than last August tend to offset the advance in corn.

New Top on Hog Market.

Advancing hog prices have not started a deluge in the last three weeks and the gains have been held. Evidently the old crop of hogs is being cleaned up at last. Top prices last week went above $9 at Chicago for the first time this year.

The course of the market is uncertain, but a further bare spot and high prices now seem probable in the next month before many spring pigs are ready for the shambles.

Lamb Supply Far Below Average.

Receipts of sheep and lambs at the 11 leading markets were the largest of the year last week, but in spite of the 35 per cent increase over the preceding week they totaled only about 245,000, compared with a 10-year average for the corresponding period of 340,000. Dressed lamb prices were aviating as a result of the small runs in the preceding two weeks and feeder buyers are taking all thin lambs as well as many with considerable flesh and weight. Prices were advanced during the week on both

Wool Buyers in Waiting Mood.

But little wool is changing hands at present, as mills are awaiting developments in the cloth markets and the trend in foreign wool markets, including the London series starting September 4, and on new clip wools in Australia, New Zealand, South Africa and Argentine, which will begin to be offered in the next month.

Excess Wheat Mostly Vanished.

Numerous revisions in the world's wheat supply statistics have disposed of most of the excess which was in prospect two months ago. The crop estimate for the United States has been reduced about 42,000,000 bushels in that time and the official estimate for Canada is about 50,000,000 bushels under the July promise. In addition, our spring wheat was damaged by rust and winter wheat by excessive rains at harvest time, while rust and blight have made an unusually high percentage of the Canadian crop of low milling quality. With good wheat selling at low prices, the off grades are extremely cheap, increasing the probability that a large amount will be fed.

Corn and Oats.

This year's corn crop will probably exceed 3,000,000,000 bushels if it is not injured by frost.

Seed and Feed.

Cloverseed and timothy prices advanced last week.

The feed market is firm, with both wheat and corn feeds quoted higher than a week ago.

Country loadings of hay are reported to be of small volume, receipts at the leading distributing markets are light and demand from consuming sections, particularly the southeast, is increasing, so that prices are firm.

Eggs, Butter and Cheese.

The trend of the fresh egg market is unquestionably upward, with high grades advancing much more rapidly than low grades.

A moderate setback in the butter market occurred last week as a result of a small increase in receipts at the principal markets, a temporary decline in the distributing demand and belief on the part of the butter trade that fall production would be relatively heavy.

LATEST QUOTATIONS.

The Live Stock Market.

PORTLAND, Ore., Sept. 1.—Cattle—Choice steers, $7.00@7.50 medium to good steers, $6.50@7.00; fair to medium steers, $5.50@6.50; common to fair steers, $4.50@5.50; choice heifers, $5.00@5.50; choice cows and heifers, $4.50@5.00; medium to good cows, heifers, $4.00@4.50; fair to medium cows, heifers, $3.50@4.00; common cows, $2.50@3.50; canners, $1.50@2.50; Bulls, $3.25@4.25; choice feeders, $5.00@5.25; fair to good feeders, $4.50@5.00; choice dairy calves, $9.00@10.00; prime light, $8.00@9.00; heavy calves, $5.00@8.00.

Hogs—Prime light, $10.00@10.25; smooth heavy, 230-300 lbs., $8.50@9.75; do 300 lbs. and up $7.50@8.50; rough heavy, $6.00@7.50; fat pigs, $9.25@9.75; feeder pigs, $9.00@9.25; stags, subject to dockage, $2.50@5.00.

Sheep—East-of-mountain lambs, $10.00@10.75; choice valley lambs, $10.00@10.50; medium valley lambs, $9.50@10.00; common valley lambs, $8.50@9.50; cull lambs, $7.00@8.50; light yearlings, $7.50@8.00; heavy yearlings, $6.00@6.50; light wethers, $6.00@6.50; heavy wethers, $5.50@6.00; ewes, $1.50@5.50.

SPOKANE, Aug. 31.—Cattle—Prime steers, $6.75@7.25; good to choice steers, $6.25@6.75; medium to good steers, $5.50@6.25; fair to medium steers, $5.00@5.50; common to fair steers, $4.25@5.00; choice cows and heifers, $5.00@5.50; good to choice cows and heifers, $4.50@5.00; medium to good cows and heifers, $4.00@4.50; fair to medium cows and heifers, $3.00@4.00; canners, $2.00@2.50; bulls, $3.25@4.00; light veal calves, $8.00@9.00; heavy veal calves, $6.50@8.00; stockers and feeders, $4.00@5.25

Hogs—Prime mixed, $9.50@10.50; medium, $9.25@9.75; heavies, $6.50@9.00; fat pigs, $9.00@9.50; stockers and feeders, $9.00@9.25.

Sheep—Prime lambs, $9.00@10.00; fair to medium, $7.50@8.50; yearlings, $7.00@8.00; wethers, $5.50@7.00; mutton ewes, $3.00@5.00.

The Grain Market.

PORTLAND, Ore., Sept. 1.—Wheat, hard white, Bluestem, Bart, $1.06; soft white, western white, $1.05; northern spring, $1.02; hard winter, western red, $1.01.

DAYTON, Wash., Sept. 1.—Club, 93c; red, 90c.

PULLMAN, Wash., Sept. 1.—Red, 85c; white, 90c.

DAVENPORT, Wash., Sept.—Bluestem, 89c; Gold Corn

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Know Your Chickens by Their Parents

Owing to a strong demand for high class chicks from flocks that have been inspected under uniform supervision and clearly defined rules and in order to maintain the same high standard of all flocks, Washington recently placed itself on the list as the second state in the Union to organize a statewide accredited hatchery association. The accredited hatchery plan was already operating in the state before the organization of the Washington Accredited Hatchery and Breeders' association, but only by county units. Mason county was the first to establish itself. The breeders who delivered eggs to the central plant at Shelton were well pleased, their hatch this year being 70 per cent of all eggs set. They ordered the greater part of the chicks to build up their own flocks, but hope to have more chicks to sell outside of the county next year. Whatcom county has also found the accredited plan to work successfully. Now the poultrymen of the entire state of Washington, which has as good stock as can be found anywhere in the world, are on a basis where they can work together and call for supervision and certification from the state college, thus establishing a standard which will sell the chicks on the name of the association.

Twenty-five thousand chicks were hatched in the Mason county accredited hatchery this year, all of which were purchased or spoken for before the hatchery started. The loss of chicks from the hatchery was very small, the percentage being as low as 4 per cent in a large number of cases, while the heaviest loss was 20 per cent. The cause for the heavy loss was the removing of the chicks from the incubator while too young, the buyer himself taking the blame because of being unable to make a second trip.

One thousand breeders have been added to the number that have already supplied eggs to the hatchery and the 1924 hatch will be from some of the highest class hens as well as from the flocks that have been culled over and accredited by the state accredited plan. The hatchery will have to increase its capacity for next season and furnish room for a third more eggs than were hatched last year.

Much of the credit for the success of the hatchery is due H. E. Drew, the county agent, who helped the breeders in drawing up the plans which would enable them to produce high class chicks from their own flocks. The plan has been a splendid example to other districts of the state and has doubtless helped to influence the establishment of the statewide accredited hatchery plan which will soon be in operation.

The object of the new state association is to improve the standard of poultry by means of official supervision and certification of hatcheries and breeding flocks in cooperation with the state college. Any individual, firm or corporation within the state, engaged in hatching chicks or producing hatching eggs, is eligible to membership when they shall have complied with the rules of the association and been approved by the supervisor.

The officers are Jay Todd, Seattle, president; E. R. Wills of Prosser, vice president, and P. S. Dickey of Tacoma, secretary-treasurer. The annual meeting shall be held the second Monday in September of each year.

In order to become accredited a hatchery must first file with the state college, through the association secretary, not later than October 1, a list of all flocks from which he intends to use hatching eggs, and a supplementary list of later purchases. It must agree to hatch no eggs and sell no chicks except from accredited flocks, provided that it may sell chicks other than Leghorn if they are plainly marked "Not Accredited." When a hatchery has complied with all the rules of the association and all the flocks furnishing it with hatching eggs have been passed by the supervisor it will receive a certificate entitling it to a place on the accredited list and to use the seal o remblem of the association.

Hatching eggs must average 24 ounces to the dozen, with no individual egg under 1 1-12 ounces, and eggs shall be uniform in size, shape, color and shell texture. Fowls used for breeders must be in good, healthy condition, vigorous, well-developed, fully matured and free from foreign color. The females must be culled according to the standards of the state college and passed on by the supervisor as to vigor and maturity. The males shall be passed on by the supervisor as to vigor, maturity and standard size. They shall be from trap-nested dams of not less than 200 eggs for season of 1924 and 225 eggs thereafter.

After the 1924 breeding season all males used shall be from accredited trap-nested flocks, or flocks certified to by other state or national associations. A sealed leg band shall be placed on each male bird passed by the supervisor.

No artificial lighting shall be used in longer than 12 hours and none on 1-year-olds or older, prior to January 1.

Adequate range must be allowed breeders from November 1 to end of breeding season and grain must constitute at least 50 per cent of all grain and mash fed and an ample supply of green feed must be provided at all times.

There shall be a charge to cover cost of supervision of 2 cents per hen, with a minimum of $5 per flock and $2 per thousand eggs hatching capacity, with a minimum of $10 per hatchery. The minimum fee must accompany application, 50 per cent of additional fees shall be paid by January 1, and the balance on or before March 1. Surplus funds shall be returned to members.

General supervision of the work is in charge of the state college, which will appoint and train supervisors, issue certificates to supervisors, hatcheries and the breeding pens prior to January 1, and none after that date will make the day breeders and publish a list of all accredited hatcheries.

At least five times during the breeding season the supervisor or a deputy supervisor shall make official visits to each flock and hatchery.

The accredited trap-nesters' rules are made a part of the rules and regulations of the association. Under these, all stock entered shall be trap-nested on the owner's premises, during the period of 52 consecutive weeks from day first egg is laid in trapnest. Only eggs actually found in trap-nest shall be counted and the entrant shall record each egg laid and shall keep posted in the house in which the fowls are kept, for the information of supervisors and others, a record of same. All flocks will be under unannounced supervision, official visits being made at least once every 30 days and may be at irregular intervals.

The rules adopted by the association were first outlined by W. D. Buchanan, poultry specialist at the college.

Fair at Elma Makes Good

By HORACE ADDIS.

Judged by the quality of the exhibits, taken as a whole, and by the attendance, the Grays Harbor fair held at Elma, August 29-September 1, was the most successful in its history. It is the goal of Secretary Palmer, County Agriculturist Cowan and others of the management to have each succeeding fair at least a little better than the one preceding. Even the races set a new record by the lowering of the track record over three seconds, in one of the most hotly contested races seen on the ground, in the 2:14 pace. Good racing was one of the attractions every day. As much can not be said of the carnival, where game of chance were permitted. This is the one criticism, and I feel it should be made of every fair which allows this class of entertainment.

Potatoes and Honey.

The agricultural pavilion was well filled, but two classes of exhibits were of an outstanding nature. Greeting the eye as one enters, the exhibit of potatoes of Perkins & Wedekind of Brady, was remarkable both for quality and for style of arrangement. There were 28 boxes, in four rows. Each represented a variety, and small potatoes, seed potatoes, larger commercial size and the large baking size each had its own box, the potatoes ranged together on end. Probably nothing in the entire fair attracted so much attention or is such an advertisement of Garys Harbor county potatoes, Foster & Brinkley of Elma had an exhibit of almost if not quite as good quality, though not so large or as well displayed.

Honey was the other striking exhibit of this building. Few know that Grays Harbor ranks second only to Yakima as a honey producing county. J. J. Mahoney won first; M. Townsend, second, and William Highland, all of Elma, third. Miss Helen Shermer of Garden City, a young lady of 20, had a unique display, showing the mountains and the "queen bee," on which she was awarded a special prize. Mr. Mahoney had specimens of cooking and canning, with honey in place of sugar. The Grays Harbor Bee club of five boys had a big exhibit of good honey.

Oakville Community club, the Elma Parent-Teacher association and the Porter Community club each had a creditable community exhibit, winning in the order named. There was a beautiful display of grains and grasses and good vegetables. Boys' and Girls' club members had about 30 entries in this department.

The women's art department was filled with those notable specimens of needlework and other handiwork of women that it seems always possible to secure, in any community. A simply wonderful display of flowers was made, of which dahlias formed the major part. Commercial displays were good and largely made by local firms.

The Baby Show.

The baby show was in realty a baby clinic, in which valuable advice rather than prizes and information was given.

A large part of one building was devoted to home economics work, in charge of Miss Mabel Webber. Three canning clubs made exhibits and one gave demonstrations each day. These were Oakville, Satsop and Montesano. In addition to this, demonstrations of labor saving devices in the kitchen were given, such as the fireless cooker. Miss Minerva Lawrence's college booth, showing the hanging of curtains and draperies, was among these exhibits. One booth showed what a family of five should have in the cellar, including fruits, vegetables and meats, most of them home-made products. There are 11 clothing clubs, three canning clubs, one cooking club and one room improvement club, in the county, and all were represented. The clothing club takes up not only sewing processes, but the selection and choosing of clothes and the knowing how to wear them.

Autos and dairy machinery were displayed in tents and the dog show, an excellent one, had its own building.

With the Poultry.

The poultry pavilion, which is an excellent one, large, light and well ventilated, was filled with birds of the best quality this fair has ever had. White Leghorns easily led in numbers, with Barred Rocks second. Fancy as well as utility breeds were well represented, and there was a good show of turkeys, ducks and geese. County birds were shown mostly in the utility classes, but there were some good Grays Harbor birds in the fancy classes.

The Live Stock.

The live stock barns were well filled with the best and most uniform lot of animals this fair has ever had. There were not as many animals as a year ago, when a sale was held, but the average quality was better.

Jerseys led in both numbers and quality. John R. Martin of Satsop showed nine head; John H. Taylor, Montesano, eight; Parker Askew, Montesano, eight, besides his two boys, Benjamin and Walter, one each; Ford Twidwell, two, and Dollie Twidwell, one calf; Mr. Beckwith, Elma, one, and George Hepworth, Elma, one. Taylor's senior yearling bull, Oxford Fern's Theater Cup, was made champion of the breed and grand champion of all dairy breeds. Taylor won champion honors on his mature cow, Gertie's Lucy, and she not only won championship of dairy breeds, but the first prize for dairy cow, based on both production and show type, given by the Aberdeen chamber of commerce.

Holsteins had a number of exhibitors, including a few club boys, A. A. Seifert, Elma, showed four head; Edward Valentine, Montesano, three; Jordon Pierce, Montesano, one cow, Blossom Wayne Boone, on which he won championship; W. J. Burns, Montesano, three; George Mouncer, Elma, one; Warren Brown, Montesano, one, in a club class; Ellis Mouncer, two grades, in club work. Seifert's bull, Sir Viceroy Longfield DeKol, was made champion of the breed.

J. M. Olson, of Elma, made the entire Guernsey show, with 10 head. His mature bull, Chicona Premier, and his junior yearling heifer, Skylark Topsy of Orchard Hill, were the champions. The later is a granddaughter of the great cow Samamish Topsy, that died last year.

F. H. Porter, of Halsey, Ore., showed the 14 head of good Red Polled with which he is making the circuit. As usual Peach Knot was made champion bull and Violet champion cow.

Milking Shorthorns were represented by the herd of E. C. Truesdell, of Centralia, 14 head. Foothills Clansman, a mature bull, and Ora Jewel, a roan two-year-old heifer, were placed as champions.

Berkshires led in numbers in the big barn, but the show was made by one exhibitor, the Earlken Berkshire compny, of Goldendale, Wash., with 16 head. Riverby Laurel Epoch, that could have won in strong competition, was made champion, with Royal Dominator's Fussy, champion sow.

Poland Chinas had the largest number of exhibitors. Fred Mouncer, Satsop, had three head and won championship on his boar, King of the Harbor. Robert Paulson, Montesano, with three head, had

(Continued on page nineteen.)

Effect of the Tariff on Wheat

In the Fifth congressional district of Washington, where the resignation of Congressman J. Stanley Webster, to take appointment as federal judge, has brought on a special election, the effect of the new tariff law on farm products has become an issue. Judge Sam B. Hill of Waterville, the democratic nominee for congress, and other democratic speakers are contending that the tariff is more detrimental than beneficial to the farmers. State Senator Charles Myers, the republican nominee, is telling the wheat growers that they would have a harder lot if it were not for the tariff, which is keeping out Canadian wheat. Mr. Myers is a grower and has 320 acres in wheat this year near Davenport.

Two Spokane authorities in the grain trade, who look at the industry from different angles—one a wheat buyer, the other a miller—were recently interviewed on the subject, as was also the attorney for the American Wheat Growers, Associated. "Certainly the tariff does protect our growers on the milling varieties," said R. J. Stephens of the Stephens Grain company. "If it were not for the tariff American millers all along the Canadian boundary line would be free to bring in western Canadian wheat and use it to depress the prices paid for American-grown grain. We repeatedly have seen the milling prices here run well above the export prices."

G. I. Toevs, vice president of the Centennial Mill company, concurs in Mr. Stephens' view that the tariff of 30 cents a bushel gives the growers in the Inland Empire better prices than they would receive if there were free trade in wheat. Mr. Toevs said that just now both millers and exporters are offering better prices than are warranted by the export market. "This is due entirely to the fact," he explained, "that early in the season ships are chartered for wheat and flour and when they arrive for loading and wheat is not available an artificial demand for early delivery is created, and the dealers are compelled to pay a premium in order to get the wheat to market promptly."

Mr. Toevs thinks that the wheat growers will find it profitable to sell a part of their crop for quick delivery. "I should like to see us export, or sell for export, 200,000,000 bushels in wheat and flour before the first of the year. We should then be in position to get better prices for what was left. But as long as we have a large surplus available we can not hope for higher prices."

Julius H. Barnes, who was head of the United States grain corporation for the government during the war, says that the grain growers of the northwest are getting benefit from the tariff on wheat. "For instance," said Mr. Barnes, "the new crop of northwest spring wheat of strong milling quality has advanced in price recently in the Minneapolis market until today it could be sold for fall delivery at $1.15 per bushel. The same quality of wheat of equal milling value for fall delivery in the Winnipeg market will not bring above 95 cents at the time this comparison is written. Moreover, the Canadian farmer is paid in Canadian dollars, which are 2 per cent below American dollars in their buying value today."

The democratic point of view is expressed by F. A. Garrecht, attorney for the American Wheat Growers, Associated, the national cooperative marketing organization, who declares that the principal agency of disaster to the farmer today is the manner in which the tariff system operates against the farmer. "The tariff must be revised to insure agricultural equality and a fair exchange value with other commodities on the domestic market or the protective principle will perish," says Attorney Garrecht. "The 6,000,000 farmers are producing a surplus of wheat far above home consumption. This surplus must find a market abroad. It is fundamental both in theory and experience that the world price for this surplus fixes the home price for the whole crop. Therefore, no tariff can increase the home price of a crop of which we export a surplus. There is a slight exception in some localities near the Canadian border where ordinarily millers might import certain hard spring wheat for blending and where growers in Montana may receive a slight benefit as to certain quality and a limited quantity. But growers of winter wheat receive no benefit and for all practical purposes the ordinary general price is the Liverpool market less cost of transportation. From this it follows that the price of wheat, being controlled by world price, receives no benefit from the tariff.

"Besides, to whatever extent the tariff affords protection to industry it becomes a differential against the farmer for he is compelled to buy in a protected market, but must sell or accept the price made in a free trade market.

"Manufacturing industries, entrenched behind the tariff wall, resist the slump in world conditions. They are so thoroughly organized that they can regulate supply to demand or hold their surplus, and not being compelled to sell abroad the world market does not fix the home price for them. Thus organization and the tariff hold up the price. The result of this system is a spread so wide between the price for which the farmer sells, which is the world price, and the price of what he buys, which is the highly protected domestic price, that the farmer's buying power is destroyed with the dire results we see on every hand."

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Sharood heartily recommends this attractive frock of good quality cotton gabardine. It is designed along slenderizing lines for stout women. The skirt is finished with two wide loose panels attached at waist and bottom. The edges are bound in black and embroidered in contrasting color. Collar is in the new long roll shawl effect, embroidered to match panels on skirt, as are also the vestee and tabs on the bell-shaped sleeves. Dress is gathered at waistline at back and finished with tie sash. Sizes 44 to 54 bust measure. State length desired. **Order navy by No. 52-E7610; brown, No. 52E7612. Send no Money. Pay $3.48 and postage on arrival. State size and length.**

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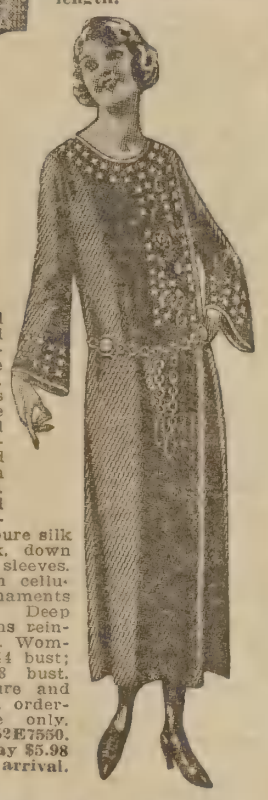

For women and misses of refined taste, this charming dress will have a strong appeal. The material is an unusually fine quality all wool storm serge. Model has neck and sleeves bound with red silk braid. Hand embroidered in beautiful contrasting colors of pure silk floss around neck, down front and on sleeves. Metal girdle with celluloid and metal ornaments encircling waist. Deep hem and all seams reinforced and serged. Women's sizes 34 to 44 bust; misses, 32 to 38 bust. State bust measure and skirt length when ordering. Navy blue only. **Order by No. 52E7550. Send no money. Pay $5.98 and postage on arrival. Money back if not satisfied.**

SEND NO MONEY

Here is the very pick of the choicest fall styles—the most fetching garments of the season—at positively unequaled bargain prices Sharood challenges the world to match these values. Order right from this page. Get the most fetching advanced styles at the lowest prices in America.

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An exceptionally attractive fine quality cotton gabardine dress for women and misses. Long roll collar in shawl effect, sleeves and belt piped in red. Entire front of blouse enhanced with exquisite allover embroidered design in Bulgarian effect with rich harmonious colors. Two streamers at both sides and front. Wide belt embroidered to match blouse. Sizes for women, 34 to 44 bust; for misses, 32 to 38 bust. State length desired. Colors, navy or brown. **Order navy by No. 52E7500. Brown by No. 52E7502. Send no money. Pay $2.98 and postage on arrival for either color. State size.**

Women's Patent Leather Gun Metal or Brown Calf-Finished OXFORDS

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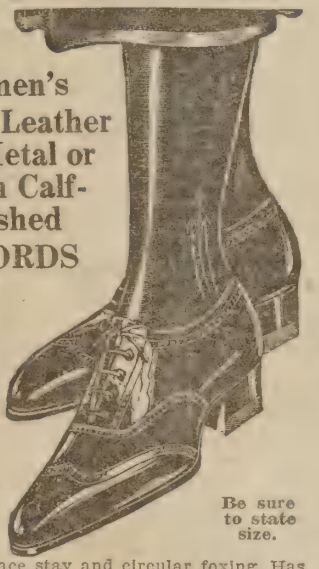

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Be sure to state size.

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A leading style in all the big cities for fall wear. One-strap one-buckle pump of rich black patent or brown calf finished leather. Is well made with perforated sewed tip and medallion toe. Fancy perforation on vamp, strap and quarter. One-piece medium extension oak sole; low flapper walking heel with rubber top lift. Sizes 2½ to 8; wide widths. **Black patent No. 52J20. Brown calf finish No. 52J21. Send no money. Pay $1.98 and postage on arrival for either leather. State sizes.**

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Classy stitchdown Oxford for women. Wonderfully comfortable and stylish. Uppers of brown or patent leather. Smooth leather insoles. Flexible stitched down oak outsoles. Low rubber heels. Sizes 2½ to 8. Wide widths.

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One of the most novel and attractive children's garments ever produced, and sure to be a big favorite for fall and winter. A charming two-piece middy dress, including snappy Balkan middy of all red flannel cotton warp with round collar and cuffs. The front, collar, cuffs and Balkan bottom are embroidered in exquisite contrasting colors. Rope girdle with tassels at waist. Skirt of navy blue serge in clustered plaited style hangs from a white muslin under-waist. Furnished in red blouse and blue skirt combination only. Sizes 7 to 14 years. **Order No. 52G8326. Send no money. Pay $1.98 and postage on arrival. Be sure to state size.**

Men's Vici, Cushion SoleShoes

$2.98

Men's comfort and dress shoes. Cushion soles and rubber heels. Sizes 6 to 12. **Order soft toe model by No. 52A618. Order blucher cut with tip toe by No. 52A617. Send no money. Pay $2.98 and postage for either style.**

Novelty Cross-Strap Model in Rich Black Patent Leather

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State Size

Every one will admire this early fall style cross-strap pump. The vamp and quarter are of selected black patent leather with rich black suede four-bar effect cross straps. Medium pointed dress toe has imitation perforated tip. Vamp and quarter neatly perforated. Straps fasten on each side with buttons. One-piece leather sole with Baby Louis leather heel and metal plate. Sizes 2½ to 8; wide widths. **No. 52J12. Send no money. Pay $2.98 and postage on arrival. State size.**

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Women's black satin dress pump, one-strap, one-button style, with fancy buckle and ornament on strap. Plain vamp with medium toe and close edge trim sole with low rubber heels. Genuine oak soles. A dressy, stylish new spring fashion that will be all the rage among the best dressed women. Sizes 2½ to 8; wide widths. **Order by No. 52J252. Send no money. Pay only $1.98 and postage on arrival. State size.**

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Men's Winter Underwear .. $1.19 Up

They are the best bargains you'll find at anything near this sale price. Heavy weight flat knit union suits of select long fiber cotton in popular Jaeger or gray Random color. Heavily brushed fleece lining on inside. Wrists and ankles are elastic knit. Sizes 34 to 46 chest. Buy a year's supply right now—today. **Jaeger color No. 52C-1279. Pay $1.19 and postage on arrival. Gray Random No. 52C-1280. Pay $1.29 and postage on arrival. State size.**

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$2.98

Give Size.

Men's French-toe dress shoes or oxfords, in brown mahogany calf-finished leather. Have medium toes, oak soles and rubber heels. Perforated on vamp, toe and eyelet stay. Sensational values. Sizes 6 to 11, wide widths. **Order Oxfords by No. 52A658. Order Shoe by No. 52A660. Send no money. Pay $2.98 and postage on arrival for either style. State size.**

Be Sure to Mention All Sizes, Colors, etc., and Send All Orders From This Page Direct to **SHAROOD CO.** Dept. 52 MINNEAPOLIS MINNESOTA

Bedrock of Cooperation in Denmark

By CHRIS L. CHRISTENSEN
United States Department of Agriculture

AN interesting and rather unique aspect of the Danish cooperative associations is that in the constitution and by-laws of practically all the cooperative associations provision is made that all disputes and disagreements arising between members and the associations are to be settled by a board of arbitration, and in most cases the association's constitution and by-laws specifically state that such disputes and disagreements can not be carried into the courts. The members of this board of arbitration are elected from among the members by the associations. The system has worked out satisfactorily, the men on the arbitration boards have a sympathetic understanding of the farmers' problems.

III. PRINCIPLES OF SUCCESS.

In their 40 years of experience in cooperative marketing the Danes have evolved certain fundamental principles upon which each of their associations must rest in order to be successful.

Strictly Business.

1. The Danish cooperative associations are strictly business organizations. They are organized, operate and function purely along economic lines and are developed free from all political, state, religious or social class influence. They have found that to build on a business basis is not only sound but highly essential, as it always provides a common ground upon which the membership may meet.

As to Government Aid.

In the whole field of agricultural cooperation in Denmark there is only one instance where a cooperative association has received financial support or aid from the government, that being the cooperative breeding associations for cattle, horses and swine. These associations are undoubtedly looked upon as of high educational value in furthering better live stock improvement. They may be classified as improvement rather than business associations.

Sufficient Patronage.

2. No cooperative association is organized in Denmark, whether it be local or national, until a sufficient amount of patronage is assured to enable the association to operate in an economical and efficient manner. In the cooperative bacon factory it was found in building the plants in pre-war years that such a plant could not operate efficiently unless it handled at least 25,000 to 30,000 pigs annually.

Consequently, before an association built its plant, sufficient membership guaranteeing this necessary supply of hogs was subscribed before the association was completed.

The same principle is true of the cooperative creamery. In pre-war days no community would go ahead with a cooperative creamery unless it was sure that the total milk production from at least 500 or 600 cows in that community would be delivered to the creamery for a definite period ranging from 5 to 10 years. No effort, however, has been made among the Danish farmers to control the volume of production unless the volume is necessary for efficient operation. Efficiency and economy in operation, and not monopoly, is the goal.

Intelligent Membership.

3. The structure of the cooperative organizations from the local to the central association rests upon an intelligent membership. The Danish cooperation organization is characterized by strong local organizations which possess an intelligent, well-informed producer membership, informed of the activities of both the local and central associations. While the Danes fully appreciate the value of sound central organization, they insist that a strong local development is essential to efficient cooperative busines operations. It is of further significance to find that the large Danish cooperative associations which have now been operating successfully for 25 to 35 years have in each case started from a comparatively small beginning and as its management and membership gained wider experience, it enlarged its business activities along sound lines.

One Man One Vote.

4. In all Danish cooperative associations one man has one vote. The vote of the small farmer with two or three cows counts as much as the vote of the larger farmer with 200 or 300 cows.

Membership Control.

5. The affairs of the local associations as well as of the central associations are managed through a democratic producers' membership control. In the local associations a board of directors is elected by the members. This board appoints a technically trained, qualified manager to lead the actual business operations of the association. In the central associations representatives are appointed by the members of each local association, which in turn appoints a board of directors for the central association.

Sound Business Management.

6. Sound, capable business management is recognized as one of the most essential factors for the success of any cooperative association in Denmark. The members have come to recognize more and more the value of employing highly trained technical and efficient business men, familiar with the trade, to handle the business of their association. It is appreciated that only the right salary can attract the right type of manager.

Along Commodity Lines.

7. The Danes have found it sound business to organize their cooperative marketing and selling associations along commodity lines. The trend of agricultural cooperation in Denmark has been toward specialization. Both in the selling of agricultural products and in the buying of farm supplies special associations for special purposes are formed. As a result of organizing along commodity lines it is not uncommon in Denmark today to find a farmer on a 40 or 50 acre tract who is a member of 12 or 15 cooperative associations. His milk is delivered to the cooperative creamery, his pigs to the cooperative bacon factory, his eggs to the cooperative egg marketing association; he will be a member of a cooperative buying association through which he purchases his feeding stuffs, such as corn and oil cakes, and of another through which he is supplied with commercial fertilizer, and so on.

The value of organizing along commodity lines is the assurance that the members within a particular association handling a single commodity have identical interests, and that each commodity, whether in selling or buying, requires special treatment and handling, which necessitates the employment of skilled men who possess expert knowledge of that one commodity.

In organizing along commodity lines, the Danish cooperative movement is characterized by a strong local development, the local association being usually formed in a local community for one purpose, which with similar associations formed for similar purposes in other communities will federate to form the central association. In practically all cases the membership of the central association consists of local associations, which in turn are made up of individual members rather than the individual members being tied to the central association directly.

Contract Agreements.

8. That an association may be assured of a proper volume of business, contract agreements are made between the association and its members for the delivery of their total production for a definite period. The same principle applies to the purchasing associations. These contract agreements exist between both the central

(Continued on page fourteen.)

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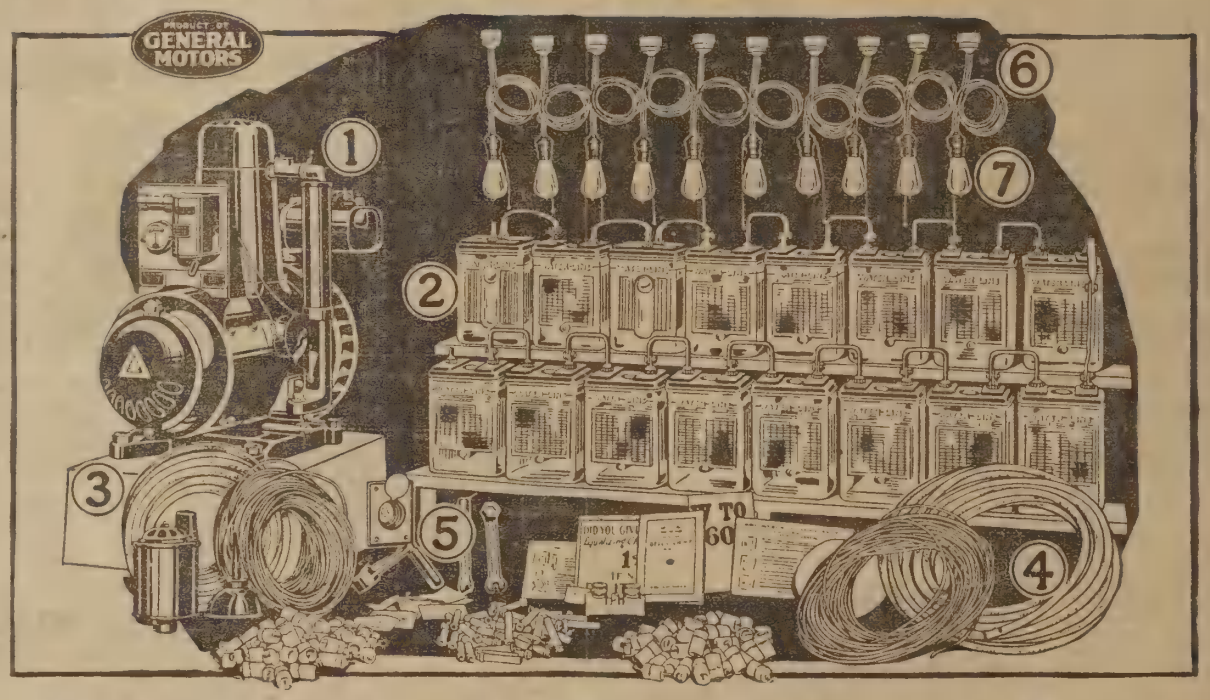

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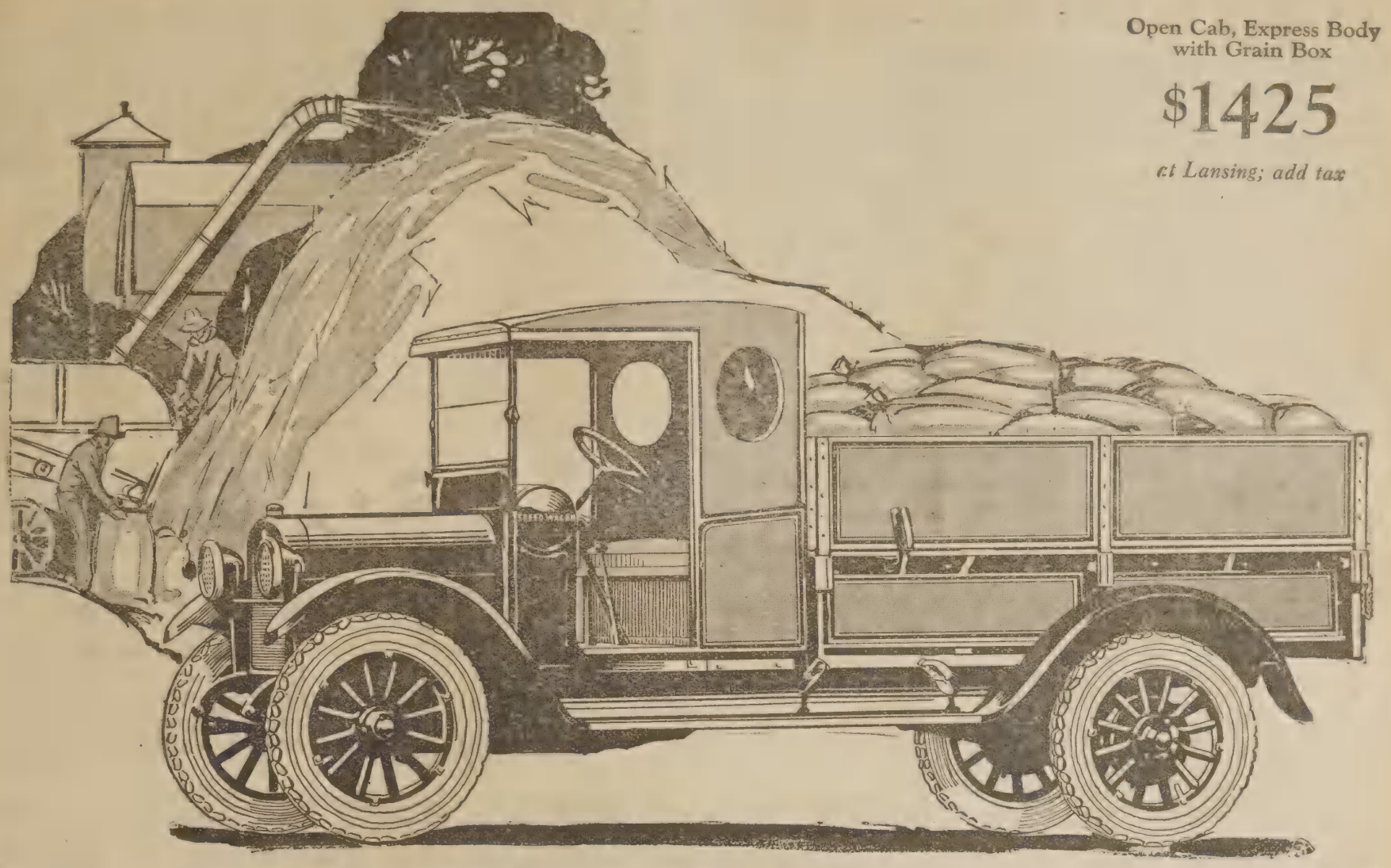

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QUICK movement of grain often turns loss to profit. Changing weather, unexpected twists of the market, changes in car-loading dates—or a dozen other occasions may require fast moves.

Speed Wagon fleetness lugs load after load of grain quickly and cheaply while ponderous trucks crawl under excess tonnage. In a day, Speed Wagon does more work.

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Designed and manufactured in the big Reo Shops,—not assembled!
Chassis $1185 at Lansing, plus tax. Capacity 500 to 2500 pounds.

REO MOTOR CAR COMPANY, Lansing, Mich.

LIVESTOCK AND DAIRY

Ration for Milk Cow

By P. M. BRANDT.

Will you please give me a balanced ration for milk cows from the following? Oat hay, oil meal, bran, wheat and oats.
Perrydale, Ore. T. B.

It is not possible to develop a satisfactory dairy ration without the use of a legume hay and some succulent feed such as kale or roots. Neither is wheat an entirely satisfactory feed for cows, although it can be used successfully when the price is low. This does not mean that I would advise selling the feed and buying some other food, but merely indicates that while a fairly satisfactory ration can be developed with some of the feeds that you have given it will not be as satisfactory as some other rations should be.

I suggest that you mix your grain in the following proportions—oats, five parts by weight; wheat, three parts by weight; bran, one part by weight; oil meal, one-half part by weight. A good way to mix this feed is to have the oats and wheat ground. The oats do not necessarily have to be ground, but can be chopped coarsely or rolled. The wheat, however, should be ground coarsely. Take 500 pounds of oats, 300 of wheat, 100 of bran, 50 pounds of oil meal and mix them all up thoroughly and then feed this mixture at the rate of one pound for each three or three and one-half pounds of milk the cows produce each day. At the same time allow them to eat all the oat hay they will eat up clean and not waste. This will amount to probably not more than 10 or 12 pounds a day for each animal. If you are not planning on feeding all of your wheat or can not economically feed all of it it might be a good thing to have it screened, so that you feed only the wheat of low grade, selling your best grade wheat. The bran is light in body, as will be the ground oats, and the combination will probably be fairly satisfactory with the wheat.

Wheat for the Cow

By E. V. ELLINGTON.
Head, Department of Dairy Husbandry, State College of Washington.

Wheat has practically the same feeding value as corn or barley for milk production. Inasmuch as wheat is the chief cereal used in America for human consumption, it usually is so high-priced that its use for cattle feeding is precluded. However, conditions at this time indicate that there may be wheat available for that purpose. If any of the grain is damaged or discolored so that it will not command the best market price, it may well be sold or marketed through the dairy cow. Wheat that is discolored or damaged differs little in composition from the best marketable product, though it usually contains a slightly larger amount of moisture and protein.

Since wheat, barley and corn have practically the same feeding value, they can be substituted for each other, pound for pound, in the cows' ration. Wheat is slightly higher in protein than either corn or barley, but is slightly lower in fat than corn. Wheat, like corn, should always be cracked or ground before feeding. It is a heavy feed, therefore it should never be fed alone. It is best to mix it with some bulky concentrate, such as mill run, bran or oats. If it is not mixed with a bulky feed it will form a pasty mass of the same consistency as dough in the alimentary tract and may thus cause digestive disturbances.

A Good Ration.

It has been found that the following mixture forms a very satisfactory grain ration for dairy cows: Four parts of mill run, two parts of wheat and one part of oil meal. Another good ration consists of 2 parts of mill run, 1 part of wheat and 1 part of ground oats. These rations should be fed at the rate of one pound of this mixture for every four pounds of milk produced daily.

Because of the phosphorus and potash which wheat contains, it is an excellent feed for the growing animal. A good calf ration would then consist of a grain mixture of equal parts of mill run, whole oats, ground corn and linseed oil meal. This is fed at the rate of two to four pounds daily, depending upon the age of the calf. A calf three weeks old will consume about one pound a day.

Write for free booklets on Farm Sanitation

They contain practical suggestions for the prevention of diseases common to livestock and poultry and describe in detail the many uses of

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Kreso Dip No. 1 is Sold in Original Packages at all Drug Stores.

ANIMAL INDUSTRY DEPARTMENT OF

Parke, Davis & Co.

DETROIT, MICHIGAN

VETERINARY

By DR. S. B. NELSON.

Bloody Milk—I have a cow that gives bloody milk in her right front teat. She was fresh early in the spring. W. H. H.
Coulee, Wash.

Give your cow one teaspoonful of sodium hypo-sulphite in a pint of water night and morning for some time.

Bloody Milk—I have a cow with a calf about 2 months old that began giving bloody milk a few days ago. Is there a cure? E. W. B.
Anatone, Wash.

Give your cow one teaspoonful of hypo-sulphite of soda in a pint of water morning and evening for from 10 days to two weeks.

Boils—I have some hogs about 8 months old. Last winter some boils broke out on them and they have never healed up. They scab over and then break again. What can I do for them? C. A. H.
Dayton, Wash.

I think you ought to have the boils and scabs examined to see what the disease is. Your local veterinarian can do this and offer you treatment.

Hairless Pigs—We had a sow farrow a litter of 10 pigs. They were all dead and without any hair. What is the cause of this? E. H. L.
Okanogan, Wash.

Professor Kalkus of the State College of Washington determined in his research work on this disease affecting your sow that the trouble is caused by a lack of iodine and he recommends a grain of potassum iodine given to the sow daily while she carries the litter. Also sometimes good results are gotten from dropping a few drops on the back of the back of the prospective dam daily for some time.

One Test—Is there any way to tell if a heifer is with calf? L. L. O.

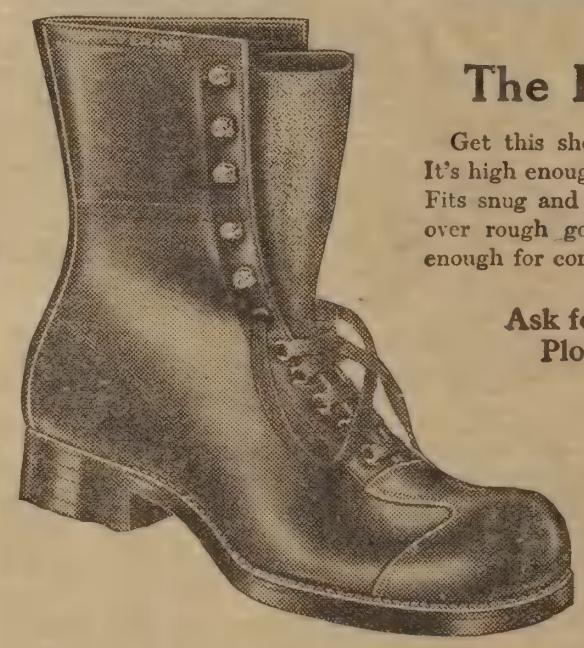
There is only one way to know whether the heifer is with calf and that is to press on the lower edge of the abdomen on the right side, giving a firm, deep pressure, letting go quickly, but not letting the hand leave contact with the outside of the wall of the abdomen. If she is with calf the disturbance of the liquid in the womb will cause the calf to float and hit the hand. That is the way experienced cattlemen frequently determine.

COMING JERSEY SALES.

R. C. Williams, Sherwood, Ore., September 18.
McArthur & Stauff, Rickreall, Ore., September 28.
G. W. Lawson, McMinnville, Ore., October 9.
Owen W. Thompson, Blatchley, Ore., at Eugene, October 5.

WOLVERINE

The 1,000-Mile Shoe
Double-Tanned—Double Wear



The Plowboy

Get this shoe for fall plowing. It's high enough to keep out dirt. Fits snug and protects the ankles over rough going. And it's low enough for comfort.

Ask for Plowboy

1,000 Miles of Wear

Always Dries Out Soft

Here's a double-tanned horsehide work shoe that will never get stiff or hard. Many leathers dry out hard after they get wet. But this horsehide, double-tanned by our own private process in our own tanneries, dries out as soft as velvet. You can soak these shoes in mud, water and slush. They will always dry out soft and pliable.

We are work shoe specialists. Our goal is to make the world's strongest shoes. To get the best leather we do our own tanning. We use horsehide exclusively. For it is the toughest leather known. For centuries the fine saddles of the hard-riding Cossacks were horsehide covered. Big league baseballs are covered with it too—because it is the only leather that withstands such hard knocks.

And our special double tanning makes this leather soft and pliable as buckskin. Note its extra thickness. Feel its flexibility. Even after soaking it dries out soft as velvet. You'll get a new idea of foot comfort from Wolverine horsehide shoes.

You'll also be surprised by their long wear. They usually wear at least 1,000 miles. But customers tell us they wear 3,000 and 4,000 or more. We are frequently told they outwear three ordinary pairs.

If you are naturally hard on shoes, you'll say these are the most economical shoes you ever wore. See how tough and thick this horsehide is—and how soft. Then you'll understand why Wolverines wear like iron and do not tire your feet.

For every job there's a special Wolverine shoe model that fits your need exactly. For farm, mill or mine, for woods, field and camp we make a shoe that suits the conditions. And all are the same tough, pliable double-tanned horsehide.

If your dealer cannot supply you with Wolverines, we'll see that you are supplied from our nearest dealer. Write for catalog

Wolverine Comfort Shoe

Tenderfeet welcome these shoes. They're soft and flexible as a moccasin, yet wear like iron. And so light and easy, you'll never know they're on duty. For tender feet, or where you do not encounter wet weather, wear this comfort shoe.

Wolverine Shoe and Tanning Corp.
FORMERLY MICHIGAN SHOEMAKERS
Dept. 104 Rockford, Mich.

Improvement of Live Stock

(Continued from page three.)

sential elements that the body activities demand. Animals frequently give evidence that they are ill-nourished by licking and chewing bones, metal, leather and any old thing that promises to satisfy their craving.

Man's first act under domestication was to build a fence about them and restrict their natural tendencies. If all the essential body building substances were to be found on every square mile or square acre of land there would be no objection, but without being trained geologists we are aware that small areas do not contain all the elements of a great region. Is it impossible that our animals are denied some of the essential body building substances? We may take it for granted that the elements that their bodies require are to be found in the grains and other foods that are supplied them? We know, however, that crops grown for years on the same soil extract the elements from it until succeeding crops are deficient in certain substances. Animals fed on such forage may actually starve for certain elements that are essential to body development. Too long the ration was determined upon the ratio of carbon and nitrogen in the feed and no thought was given to other essential substances that animal bodies require. It was simply assumed that the feeds contained them in sufficient amounts.

The superior mind of man has successfully improved upon nature's methods in some notable instances, but in selecting feeds for animals and providing a substitute for nature's methods I am not prepared to say that he has been altogether successful so far; certainly there is ample room for improvement. Feeding has another aspect that might well be considered and that is the use of foods of various kinds that are not well cured or contain poisonous substances. The swill feeders frequently have serious trouble caused by certain chemicals that find their way into this class of foods. Lye and strong soaps are particularly bad. Ptomaine poisoning is common in fowls that have been fed on spoiled feeds such as canned goods, etc. The larger animals suffer similarly from eating spoiled hay at times.

As we review the events that have occurred within the time that man has exploited animals for his gain we may logically wonder whether he has done as well by his dumb helpers as he might have done. Are conditions as satisfactory just now as we would like to have them, or do the animals show ill effects of man's artificial handling? Wild animals seem to thrive very splendidly in their natural surroundings, but when they are brought under man's care they often cease to stay healthy.

Foxes are the latest animal to be extensively cultivated and already we hear the cry of troubles from ricketts, worms, distemper and so on. Domestication versus natural conditions!

The program for the future is to continue to improve our live stock by the methods used in the past. We can not turn back now and we never shall retreat and give up the gains already made. The obstacles are plainly before us and we may have to "dig in" to hold what we have gained. Progress of the future is going to be slower than in the past. More extensive preparation will be necessary before future advances are made, and that preparation is going to be in the nature of more carefully guarded animal health. We must learn how to give our animals better protection from the influences of domestication or the stamina will be so reduced that the high speed of present-day production can not be maintained. Then to make advances in the future we must take a better hold of the problem of the living conditions of our animals and we must also supply them abundantly with the essential elements that their bodily activities require.

I believe this is the biggest problem that ever confronted the live stock industry and we need the best brains of this country to take up the work in animal medicine and give their best efforts to the solution of the problems that I have indicated above. Animal disease is like fire —you never know when or where it is going to appear. The losses from it are enormous. It isn't a thing that one can play with with safety. For protection against it we need men who are well trained to combat it, and today the thing that the animal world needs is more scientifically trained veterinarians to protect the animals from inherent troubles of domestication while the animal breeder intensifies their producing qualities. Our high school graduates will do well to consider this great field so full of splendid opportunities.

WENATCHEE FRUIT, 17,000 CARS.

District Horticultural Inspector Frank E. Nielson estimates the fruit crop of the Wenatchee district at over 17,000 cars. He also reports that the earliest season in years and favorable growing conditions have given the apples remarkably fine color and the quality will be high.

CHEVROLET

for Economical Transportation

OF

Farm Products

Transportation is the big problem of today in manufacturing, merchandising and farming.

No matter what you make, grow or stock, it brings no profit until moved to the place of sale.

Modern, progressive farmers, being also business men, now depend on fast economical motor transportation to save time, save products and get the money.

Chevrolet Superior Light Delivery, with four post body was built especially for farm needs. Although not a heavy-duty truck, it has the space and power for a big load, which it moves fast at a very low cost per mile. Its engineering features are modern and complete: powerful motor, electric starter, standard transmission—3 speeds forward and one reverse, demountable rims and extra rim, etc.

For heavy work, Chevrolet Utility Express Truck at only $550, chassis only, offers remarkable value. Fits any standard truck body.

Prices f. o. b. Flint, Michigan

Superior 2-Pass. Roadster $490	Superior 5-Pass. Sedan $795
Superior 5-Pass. Touring.....$495	Superior Light Delivery $495
Superior 2-Pass. Utility Coupe $640	Superior Commercial Chassis...$395

Utility Express Truck Chassis $550

Chevrolet Motor Company, Detroit, Mich.

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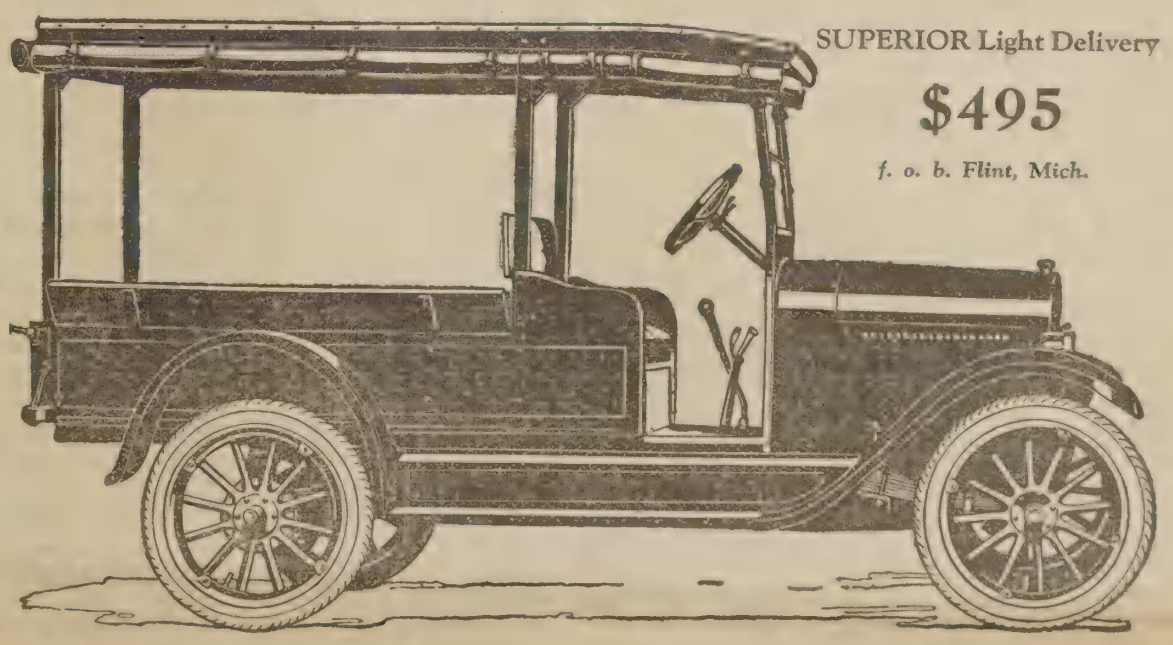


SUPERIOR Light Delivery

$495

f. o. b. Flint, Mich.

POULTRY AND RABBITS

Cockerels

Need Special Care When Young

There is always an abundance of information as to how to feed and care for the laying hen, but many writers seem to overlook the care and feed that is needed to keep the head of the flock in the best of condition, according to Mrs. George R. Shoup, poultry specialist at the western Washington experiment station at Puyallup. The male stamps his characteristics on every chick, and it is important that his vigor be looked after while he is growing up.

With the effort that is put forth to better the health, vigor and production of the flocks, each owner of breeding hens must and will be more interested in the feeding and care of the promising young breeding cockerels.

In room brooder flocks they get along nicely till they are 8 weeks of age if left with the general flock, but when separated from the pullets the care and feeding of these breeding cockerels are in themselves a problem. They fight among themselves, "run" any that will submit to being chased, and successfully starve out a few that are scared to risk coming off the perch. Out of a hundred promising 8-week-old youngsters, one is likely to discard half or more before they reach maturity by either the "survival of the fittest" or the selective culling process. The most disappointing loss is the actual killing of each other. A flock of 100 cockerels seems to require a new "goat" every day for a period, until one wonders if any of them will be saved. After a few weeks the loss from this source is over, whether due to the less vigorous ones having succumbed or to the flock having been reduced to a smaller size with a proportionately less number of the villainously inclined. The loss is always greater in the larger flocks, so it would seem desirable to plan to handle them in as small units as possible.

Cockerels Neglected.

As far as care and equipment are concerned the cockerel is always certain to get the worst of it. He only gets the quarters which have been vacated by some other unit. If yards are available they are quite certain to be worn out and probably infected with internal parasites from the former occupants. If time is lacking the cockerels' quarters go uncleaned. When the milk is scarce the females get all they need first; in fact, it is fortunate that the poultry men raise as many vigorous cockerels as they do.

But there are many cockerels that go into the breeding pen in a weakly and undernourished condition. The result is less fertility of the hatching eggs, weaker chicks, greater mortality among the chicks, and an appalling spread of disease.

The fear is often expressed that modern methods of getting high production will ruin the vigor of all our flocks. Human nature will always demand the utmost return for time and endeavor spent, and poultry men are certain to practice all and every means which will increase production. It seems hopeless to urge against early morning lighting and the feeding of overrich protein feeds.

We are convinced that much of the vigor which is lacking in present day flocks can be returned by intelligent and careful handling of the male and offer the following routine as means to this end:

At 8 to 10 weeks, remove all market cockerels of suitable size to the fattening crates, or sell at once if marketable. Leave the cockerels to be used for breeders and sale purpose in the brooder and move pullets to the pullet developing houses, if such houses are available, placing about 200 birds in each 8x18 house. This relieves the congestion in the roosting quarters and feeding floor and subjects the brooder yards to much less contamination because of much smaller number of users.

In Old Birds' Pens.

One other disposai can be made of the very high grade cockerels at about 12 weeks. These may be taken from the brooder house flock and placed in the old birds' pens, five or six in a pen of 100 birds. Of course the old breeding males have been previously removed, most of them going to market. The old hens should first be dipped for lice, using the one ounce of sodium fluoride to gallon of warm water solution to prevent the lice preying on the tender feathers and skin of the young males and also to make the old birds more comfortable.

These young males may be kept in the breeding house till a few weeks before mating time, when they should be removed to rest up for the breeding season. Under this method these special males certainly thrive. They have the large range of the breeding yards and they are too few in number to seriously injure each other and the warmth generated by the hens keeps the combs of the males from freezing in the early winter cold spells.

The only serious drawback to this plan is the tendency of the precocious young cockerel to keep the moulting hens on the roosts and the danger of the breeding hens not getting enough to eat and of their being retarded in their accumulation of flesh and pigment preparatory to the lay of hatching eggs in February. Occasionally we have had to shut these youngsters out doors part of the time each day so that the more timid of the hens can get down to eat.

Mating the Leghorns.

In mating Leghorn cockerels use one male for each 15 hens or six to each 100. The flock mating of the heavier breeds does not seem to be as successful as with Leghorns. One male to 12 rock hens is the limit with usually better results when only eight or 10 hens are used. Cock birds 18 months old can mate successfully with not over 12 Leghorn hens or six to eight hens of American or other heavy breeds. Always plan to keep a few reserve cockerels to use in place of one which is injured or moulting. Very early hatched cockerels usually go into a partial moult in December and are unfit for January mating. Cockerels should be at least 8 months old before mating them, although adequate fertility can be secured when they are several months younger.

Problem in Caponizing

By B. T. SIMMS,

I would like to know something about caponizing roosters. Ours seem to be all right, only several have what is called wind puffs. Can you tell what causes these and a cure? We were very careful and disinfected our instruments in water containing carbolic acid. We greased the cut edges with clean lard and turpentine before sewing. Would this cause the cut to heal too rapidly and make the puffs?

Dallas, Ore. A. L.

It is quite possible that the trouble which you are having with your birds is the result of sewing the wounds up after the operation was done. We have found that results were probably more satisfactory when no stitches were used than they were when the wounds were stitched up. Another thing which might possibly have some influence is the method of making the incision. If the skin is pulled to one side when the incision is made so that after it is released the incision in the skin is not directly over the muscle incision the results are usually better than when the skin is not pulled to one side in this manner.

As treatment I am suggesting that you prick the skin with a pin or needle and allow the air to escape. Sometimes it is necessary to repeat this three or four times before a bird has completely healed.

Side Hill Poultry Houses

By W. D. BUCHANAN.

I wish to build some poultry houses in a deep canyon sheltered on three sides, opening to the south. Some one suggested that I build them on th eside hill, excavating so that the entire rear wall and half of the end walls will be dirt, and covering the entire roof with straw and dirt. I would like to have your opinion. They claim that root cellars made in this way have remained dry and retained an even temperature throughout the year, and are well ventilated in eastern Washington. Is it practicable? J. A. B.

R. 2, Cashmere, Wash.

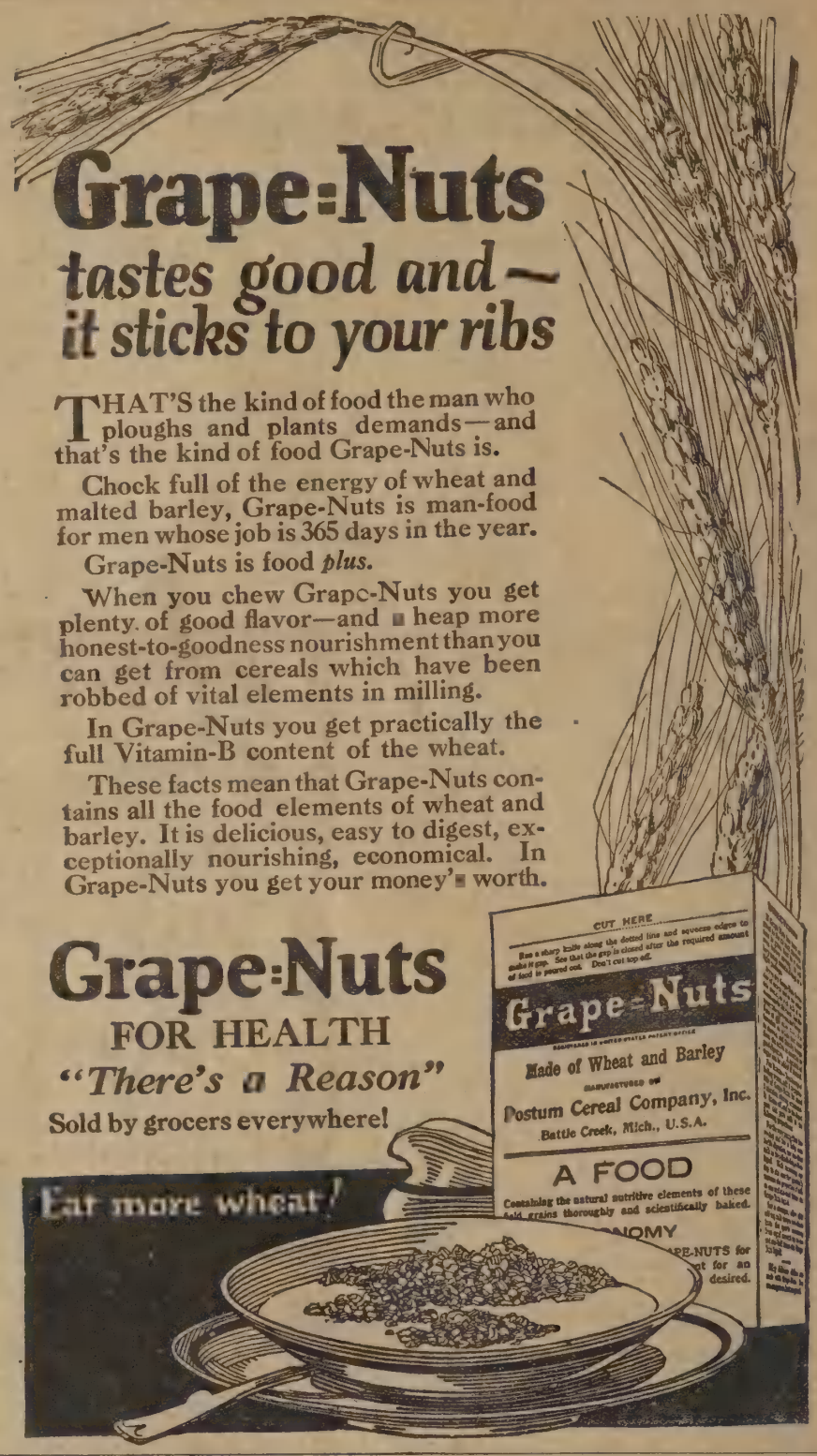
A house built as you suggest would, no doubt, maintain an even temperature; but I doubt the ventilation. A root cellar needs about one twentieth the ventilation of a chicken house. Some houses are built on side hills, but they are usually built two story, each story being a distinct and separate chicken house. One flock runs north and one south. The trouble with any house, built into the side hills, is that one side and both ends are likely to be dark. You are so well protected that a house in the open, facing south, would be ideal.

TO WATER 30,000 ACRES.

Ernest B. Hussey announces that Seattle men with whom he is associated have obtained water rights from Oregon which will permit diversion of water from the Walla Walla river near Milton. This water will be stored and used to irrigate about 30,000 acres in the valley. It is proposed to store flood water in five large storage basins, one on Dry creek and four on Couse creek, in Oregon. The highest dam will be 125 feet and the lowest 70 feet. Aabout 4000 horsepower will be developed and the current will be sold.

A DISEASE PREVENTIVE.

Clean water is insurance against poultry diseases.



THREE big improvements make the 1924 Harley-Davidson even better than ever for the farmer. You have never felt such a surge of smooth power as the new *alloy pistoned* Harley Davidson delivers. And the new side car with its *ful-floteing, semi-elliptic springs*—you won't have to worry about the loss of eggs you're taking to town. Another great improvement is the *Alemite Lubrication* (first on any motorcycle). Use a Harley-Davidson for business errands—50 miles for a dollar (gas, oil, tires and all) and leave your car in the garage. Thousands of farmers save money this way.

Ask your dealer about his Pay-as-You-Ride Plan. Write for free literature.

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HARLEY-DAVIDSON DISTRIBUTORS.
SPOKANE, SEATTLE AND TACOMA.

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30 days' free trial—then, if satisfied, only $7.50 and a few easy payments — AND — the wonderful Belgium Melotte Separator is YOURS.

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Catalog tells all—*write.*

Caution! U. S. Bulletin 201 shows that vibration of bowl causes waste! The Melotte bowl is *self-balancing.* Positively cannot get out of balance therefore cannot vibrate. Can't remix cream with milk. *The Melotte has won 284 Grand and International Prizes.*

Catalog FREE

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Runs so easily, bowl spins 25 minutes after you stop cranking unless you apply brake. No other separator has or needs a brake. Bowl chamber is *porcelain lined.*

The Melotte Separator, *H. B. Babson, U.S. Mgr.*
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Get Prices on Hercules, the fastest, easiest-operating "One-Man" Hand Power Stump Puller made. Simple, double, triple, quadruple power—4 machines in one. Moves like a wheelbarrow. $10 down. Easy payments.

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When answering advertisements don't fail to mentione this paper.

Glance over the bargains on the "Want Ad" page.

ORCHARD AND GARDEN

Pruning Berries

Not to Be Neglected Even a Year

By C. L. VINCENT,
Department of Horticulture, State College of Washington.

If one is to be successful in the production of the various small fruits, the pruning can not be neglected for even a single season. More and better fruit is the reward for the grower who prunes his raspberries, blackberries, etc., regularly and well

Nothing is more simple than the pruning of the small fruits, provided a few principles are kept in mind. In pruning the grower should have two aims in mind: First, to remove the old canes which are of no more value to the plant; and second, to provide a supply of new shoots for bearing the crop the next season.

In order to prune intelligently one ought to know something of the fruiting habit of the plant to be pruned. In common with other brambles, the canes of the red raspberry are biennial in their growth. During the first summer of the life of any cane, its entire energy is devoted to vegetative growth. The fruit buds for subsequent growth are not even set during this summer.

During the second summer of the life of the canes, the fruit is borne. The growth starts from over-winter lateral buds. These shoots attain a length of 9 to 20 inches, with alternate three-leaflet leaves. Fruit clusters are produced in the axil of these leaves along nearly the entire length of the shoot. The clusters contain from one to three or more fruits in the form of a short receme. Of these the terminal flower opens first and the terminal fruit from it is the first to ripen.

This succession of bloom on the fruiting shoot affords a measure of insurance for this crop against late frosts, because, though the tip blossom may be killed, those lower down, being less developed, are likely to survive. The loss of the earlier fruits is, however, serious, as it is just these which are likely to bring the highest price for the season.

The number of bearing shoots on a cane and the number of fruits on the shoots vary with the size of the cane and the stored plant food in the cane. The bearing shoots are distributed from the tip of the cane downward, while the strongest and best bearing shoots are found on the middle half of the cane. Heading back the canes, if done before growth starts in the spring, will induce shoot growth and fruit production from the buds situated lower down on the cane than the normal limit of growth.

It is of interest to note that the cane growth of the red raspberry is indeterminent; that is, no terminal bud is ever produced on the cane, such as is found at the tips of apple, pear or cherry twigs. The cane simply continues to grow from the tip until stopped by cold weather during the late fall. Usually this poorly matured growth at the outer end of the cane will be winter killed.

Three Parts to Pruning.

The work of raspberry pruning is naturally divided into three parts. The first is the pruning given at the time of setting the plant. Pruning at this time may well be considered part of the setting operation. The young plants, if they are good ones which grew the greater part of the preceding summer under favorable conditions, will have a large fibrous root system and one or two canes of varying length. If the plant has two canes, one of them should be cut away close to the crown and the other headed back to a length of about eight inches. A very common error made by unskilled growers at planting time is to allow the long cane or even two or more of them to remain in order to obtain a small crop of fruit the first season. Under normal conditions the plants are so weakened by the shock of transplanting that the production of fruit during their first summer in the field reduces the cane growth, which will be the bearing wood for the next year's crop, to such an extent that a heavy loss is incurred by the grower. However, in case strong plants are set in the fall on good, rich soil and under favorable conditions, the canes may be headed at a height of three feet and some fruit harvested the first year without serious subsequent injury. Even then the practice is questionable.

When to Prune.

Since raspberry canes fruit but once, the second pruning consists in removing these fruited canes. Opinion differs as to whether this should be done immediately following harvest or left till spring. Pruning at either time possesses some advantages. Personally I believe this work should be done as soon after harvest as time may be found and the pruned out canes piled and burned at once. Emphasis should be given the necessity of cutting the canes close to the crown of the plant. Various types of tools are used to do this work. Whatever the type of tool used, care must be taken to avoid unnecessary injury to the growing canes. Burning the canes is one of the most important steps in controlling the crown and cane borers. In this way we are protecting the growing canes for upon their health and vigor depends the next year's crop.

The third step in pruning the red raspberry has to do with the current season's canes or the fruiting wood for next year. This involves two distinct operations. First, surplus new canes must be removed either at the time of cutting out the old canes after harvest or early the next spring. The later time being preferred in most cases, especially in places where winter injury is severe. The necessity for the removal of the surplus canes arises because the crown of the plant will always produce more canes than should be allowed to bear fruit, whether the soil be rich or poor. If the excess is not removed the size and total amount of the fruit is reduced and the plants are materially weakened. It has been found through experimenting that five to eight or 10 canes, depending on moisture supply, vigor of plant and the fertility of the soil, are the best number to leave to get maximum annual yields. The last step in pruning these canes consists in heading them back. The average height of the cut-back canes in western Washington is about seven feet. This is done in the spring immediately before the canes are placed on the trellis. The height at which they should be headed will depend to a certain extent on the system of trellising used.

In a second article Professor Vincent will discuss the pruning of blackberries, and in a third the subject will be pruning currants and gooseberries.

LEGUMES GO DOWN.

One of the benefits from legume cover crops is their tendency to penetrate deeply into the soil.

SMUT
In Wheat Can Be Prevented
by dusting 60 lbs. seed wheat with 2 ounces of our pure
Copper Carbonate
specially prepared as wheat fungicide. Much more effective than formaldehyde. Easy to apply. Saves seed. Write for particulars.
Mountain Copper Co., Ltd.
332 Pine St., San Francisco, Cal.

In writing advertisers, be sure to say you saw their advertisement in The Washington Farmer.

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Big Pay Jobs Open in California

Paul Briggs, Sixth and Madison Sts., Portland, Oregon, who earns $4000 a year in auto work.

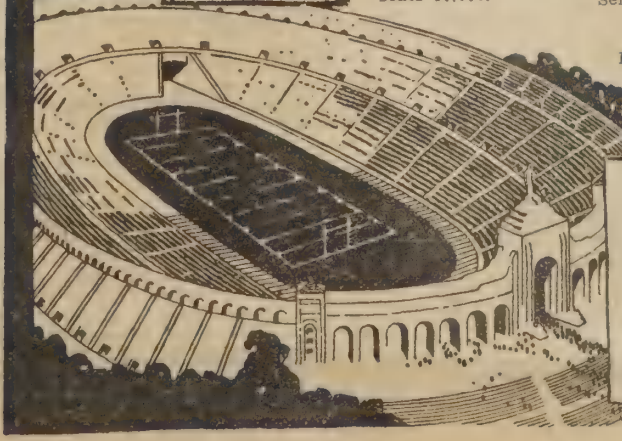
Instructor showing student use of Universal Electric Testing Bench, only one of its kind in any school.

Students overhauling Packard Twin-6 Motor.

Instructor showing student proper handling of big lathe.

Wright De. Fernley, Bountiful, Utah, who increased his earnings 100 per cent in auto work.

World's Largest Stadium—across the street from the National Automotive—seats 80,000.



Trained Men Wanted

Big Pay Jobs Open Everywhere in Auto Work

Don't let another day go by before you find out all about the auto business. A million automobiles in California now. Sales of new cars show tremendous increase. Jobs waiting for men who know work in any branch of auto industry—mechanics, electricians, demonstrator-salesmen, shop foremen, battery experts and service station managers.

Get Ready in Few Weeks to Fill a Big Job

LEARN NOW. Get into this wonderful, interesting, fascinating, money-making business at once. Start building a future that means success and money. A few short weeks' training at National Automotive, then YOU can fill a big-pay job. You can do it. No matter what your age, no matter what your education—National method of practical shop training gives you thorough working knowledge of autos and auto construction. You learn from actual experience. Make tests, repairs and do construction work. Use tools, not books. You KNOW autos when you finish National training.

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Thousands and thousands of dollars have been expended to make National the finest auto school in America. Just like college life at National—located across the street from 130-acre Exposition park. Ball grounds, gymnasium, swimming pool, world's largest stadium, amusements, everything free to you. Right in the heart of a big, busy city—Los Angeles. Special reduced rates now.

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Jobs guaranteed to earn your room and board while learning. Think of it. You can become a big-pay auto expert at practically no expense except small tuition cost; no extras; no tools to buy, no books used. Unlimited FREE employment service.

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Drainage Progress

Campaigns by State College Expert and County Agents

David Strait of Skamokawa plowed land in 1922 which in June, 1921, was under a foot of water, and drained 10 acres more. J. E. Timmen of Ilwaco, though he had completed only his open storm-water ditch, 3000 feet long, plowed land which was a slough 12 months before. Messrs. Sonner, Grunsted and E. M. Whitten drained 80 acres in a community project with one open outlet ditch. F. V. Grimes and G. H. Nechner together drained 35 acres, J. R. Stott 40, John McEvoy 25, Russell Irving 30, H. Peterson and Harry Gill 20 each, Robert Whidby 15 and Weglund Brothers 15.

These remarkable beginnings in drainage are the result of the work of state college drainage specialists A. B. Crane and the county agents. The bog lands are all in Wahkiakum county, mostly in the Skamokawa and Alokomoa valleys.

In Pacific county most of the work was on the peninsula, near Ilwaco, though some was done on the south fork, near Willapa. One hundred acres on Otto Wehtje's farm were affected, and Martin Goisler drained 35, Joe Bianchi 25, A. A. Smith 20 and J. O. Johnson and S. R. Kirsch 10 each.

This summarizes only the first of the work in the district. Of late the affected acreage has increased very rapidly, and Specialist Crane consequently is much pleased.

"Most of those for whom work was laid out followed it up and put in drainage," he said. "This gave good results, and nearly all I worked for wanted more. My first two trips into the district merely served to wake them up, but now they are clamoring for assistance.

And why not? Slough ground is worth about $6 per acre for dairy pasture, but if drained and cultivated it will yield $40 to $60 in hay or grain; and where a farmer formerly ran about eight cows, his land if put in shape will furnish feed just as easily for 25. The expense is comparatively slight. J. G. Wester of South Fork reports that the cost of his drainage, complete, ran $12.40 for each 100 feet of line put in."

JIM WHITE passed Joe Black at the roadside 4 miles from town. Jim's Ford was clipping off its 6000th mile, smoothly and powerfully. He was *timer-wise*, for months ago he had installed a Milwaukee Timer. Joe's car, with but half the mileage was stalled with timer trouble. He tinkered for an hour, then — hot, dirty and tired — he walked a mile to a telephone and had a garage mechanic bring him out a Milwaukee Timer.

Get your "ignition insurance" today. It is the best two-dollars'-worth you can buy for your Ford, for it assures more power and smoother running for many thousands of miles. The Milwaukee also fits the Fordson tractor — gives it more power and makes it start easier.

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Milwaukee, Wis.
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MILWAUKEE TIMER for FORDS

At auto supply and hardware stores, and garages $2.00

WRITE OUR ADVERTISERS
It will pay you to write for free booklets and information offered in the advertising columns; and when you DO write, please mention THE WASHINGTON FARMER.

Bedrock of Cooperation

(Continued from page eight.)

association and the local association, and between the local association and the individual members. The period covered by contract agreements varies with the nature of the commodity handled and in many cases varies with different associations, the time ranging from 1 to 20 years.

Pooling Is Common.

9. Pooling is a common practice. The members' products are shipped to the association, where they are classified according to grade and quality, which serves as a basis on which each individual member is paid. A partial payment, usually representing between 85 and 95 per cent of the actual price which the product will return to the producer, is made when products are delivered to the producer. In many cases this partial payment is a price which is approximately near the market value of the particular product. To determine what the partial payment shall be a "quotation" service has been established, to quote prices as determined by market conditions and representing a price near the actual market value. At the close of the year the difference between the price paid the producer on delivery of the product and the sales price is turned over to the producer.

No Special Legislation.

10. Denmark has no special cooperative legislation, as the Danes have found by experience that real cooperation is not promoted by protectionist methods or government favoritism. They prefer to be treated as any business agency, relying upon their own powers in the business world.

The validity of contracts existing between cooperative associations and their members is recognized by the courts. Practically all cooperative creamery and bacon factories and egg, butter and bacon selling associations are nonstock, unincorporated associations. There are a few share-stock associations incorporated under the Danish corporation laws, such as the Danish Cooperative Bank of Denmark.

11. The necessary capital for equipment and operation is provided by a loan executed by the association and guaranteed jointly by the members of the association on their personal credit. In the local association the members are usually jointly and severally liable for all financial obligations incurred by the association. However, when a local association joins a central association the amount of this guaranty is always limited, the individual members in the local association signing guarantee pledge certificates stating the specific amount for which their association is liable. These certificates are forwarded by the local association to the central association, which in turn delivers them to the bank to secure loans or credit. This method is typically Danish and adapted to their credit system.

CUTTING THE COVER CROP.

To make hay out of a cover crop largely destroys its value to the trees.

Farmers' Want Ads

MONUMENTS F

COMPLETE STOCK. WRITE FOR DESIGNS and prices. Inland Monument Co., N1001 Monroe, Spokane.

PERSONALS R

HEALTH-GIVING CORSETING IN ALL ITS branches. Only exclusive specialist in the west. Write us. National Garment & Corset Co., W925 Riverside, near Review bldg., Spokane.

HELP WANTED—Female 1

GIRLS DESIRING WORK FOR HALF BOARD and room, while attending school, write Gooding College, Gooding, Idaho, today.

HELP WANTED—Male

MEN WANTING FOREST RANGER, RAILWAY mail clerk or carrier positions, write for particulars. Mokane, Dept. A11, Denver, Col.

YOUNG MAN WANTED FOR DAIRY WORK; permanent job. Perfection Dairy, Pendleton, Ore.

AGENTS WANTED

DISTRICT SALESMEN WANTED—ALL OR spare time. Earn $1500 to $3600 yearly. We train the inexperienced. Novelty Cutlery Co., 456 Bar st., Canton, Ohio.

SELL DRY GOODS REMNANTS—GREATEST bargains in fine goods. Agents. Pacific Remnant Co., 169 N. Shaffer, Orange, Calif.

SALESMEN WANTED 12

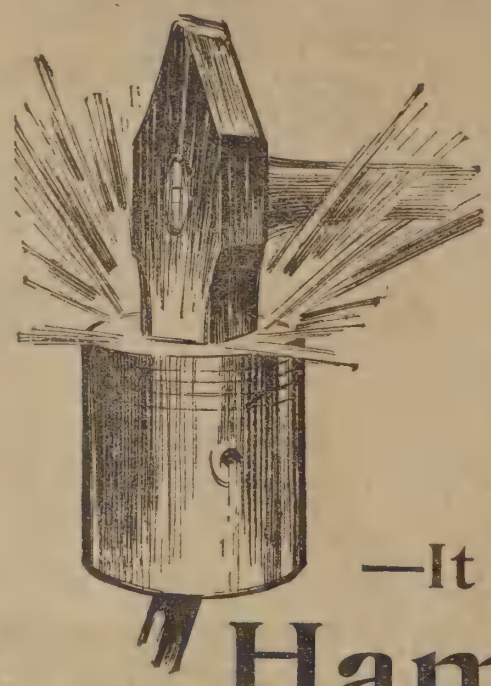
ARE YOU LOOKING FOR A PAYING POSITION? Sell trees and plants for a reliable company. Terms on request. Salem Nursery Company, 428 Oregon bldg., Salem, Ore.

SCHOOLS AND COLLEGES 26

EARN $110 TO $250 MONTHLY; EXPENSES paid as railway traffic inspector; position guaranteed after completion of 3 months' home study course or money refunded. Excellent opportunities. Write for free booklet G-157, Stand. Business Training Inst., Buffalo, N. Y.

LEARN AT HOME—YOU CAN GET A PRACTICAL business college course by correspondence. Tuition, $25 a year. Montana Business Institute, Miles City, Montana.

(Continued on the following page.)



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Hammer Pistons Down

—this non-detonating gasoline

There are two ways in which gasolines explode.

One explodes instantaneously—**detonates.** It hammers the piston down by a single, crashing blow.

It has a tendency to explode **prematurely,** thus reducing compression in your cylinders and delivering less power.

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Union **Non-Detonating** Gasoline explodes in a different way.

The explosion is progressive and prolonged. It **thrusts** pistons down, delivering power throughout the entire stroke.

It permits increased compression because compression is limited by the tendency of a gasoline to **detonate.** All authorities know that.

An increased compression means increased power and efficiency.

Hill-Climbing "Gas"

With Union **Non-Detonating** Gasoline you'll note a new "lift" on hills and no "knocking" due to gasoline.

There's new speed on the level and a swifter rush in the pickup.

Sustained impulse reduces vibration—saves wear and tear.

There's higher efficiency for motor cars, trucks and tractors, therefore, in a gasoline like this.

Union **Non-Detonating** Gasoline is the product of progressive refining methods. Its quality is governed by exhaustive tests.

The research of able chemists, equipped with the finest facilities for studying refining methods, is constantly devoted to its improvement.

Union Oil Company of California

Union Gasoline

FRESH FOOD PRODUCTS 51-3

FISH—4 LBS. SMOKED SALMON, $1; 4 LBS. Alaska salmon bellies, $1; 4 lbs. black cod, $1, 3 lbs. best codfish, $1; delivered by mail. Coffin Fish Co., Seattle, Wash.

BEES AND HONEY 53

ALFALFA-SWEET CLOVER HONEY—2 60-LB. cans, $9.75; one can, $5, f. o. b. Rigby; one 40-lb. can, prepaid to fourth zone, $5.75; quality guaranteed. Heckman & Larsen Honey Co., Rigby, Idaho.

VALLEY BLOSSOM HONEY, QUALITY GUARanteed. 1 60-lb. can, $7.50; 2, $14.40; discounts on large quantities. Ernest Sires, Route 7, Yakima, Wash.

HAPPY HOME HONEY — ALFALFA AND clover; 60-lb. can, $7.50; two cans, $14.50; case six 10-lb. pails, $8.25. H. N. Paul, Mabton, Wash.

PURE, WATER-WHITE SWEET CLOVER honey; 60-lb. can, $5; two, $9.75. H. R. Bowen, Roberts, Idaho.

EXTRACTED HONEY FOR SALE—WELLS D. Rose, Sunnyside, Wash.

MISCELLANEOUS—FOR SALE 60

SASH AND DOORS—O. B. WILLIAMS CO., 1943 First ave. So., Seattle. Chicken house sash, 20" wide by 25" high, 80c; a dozen different sizes in stock for immediate shipment. Skylights for chicken houses, 36"x40"; price, glazed, $2. This is the size recommended by the Western Washington experiment station. We carry them in stock for immediate shipment. Sash and doors for all purposes at lowest prices. All orders receive prompt attention. Our large illustrated catalog No. 35, showing full line of building material and built-in fixtures for the home, free on request. O. B. Williams Co. Established 1899.

PIPE—GET PARTICULARS ON OUR SPEcial flue pipe, 1¼, 1½ and 2 inch. Big saving on it. We also have all sizes second-hand and new standard pipe at low prices. We also save you on roofing, belting, pumps, engines, cables, etc. Alaska Junk Co., S120 Adams, Spokane, Wash.

SPECIAL—ONE-POUND TIN "SATISFACTION tobacco" and pipe for $1. Smoking, chewing tobacco, cigars, cigarettes and complete line of pipes. Wholesale and retail. Peter M. Jacov, 3 Washington st., Spokane.

LEAF TOBACCO—FIVE POUNDS CHEWING, $1.75; ten, $3; five pounds smoking, $1.25; ten, $2; twenty, $3.50. Send no money, pay when received. Pipe and recipe free. Cooperative Farmers, Paducah, Ky.

WALL BOARD—WRITE FOR SAMPLE OF Washington plaster wall board; won't warp, won't burn. Manufactured by Washington Building Products company, 6851 E. Marginal Way, Seattle, Wash.

ALL-WOOL HAND AND MACHINE KNITting yarns for sale from manufacturer, 95c, $1.35, $1.60 per lb. Golf and plain socks, $5 orders postpaid. Free samples. H. A. Bartlett, Harmony, Me.

NATURAL LEAF TOBACCO—CHEWING, 5 lbs., $1.75; 10 lbs., $3. Smoking, 5 lbs., $1.25; 10 lbs., $2. Pay when received; pipe and recipe free. Farmers' Tobacco Union, B19, Paducah, Ky.

POCKET SIZE, 5-IN-ONE TOOL KITS, 45C; safety razors, uses Gillette blades 45c. Agents wanted. Army Blanket Supply Store, 309 Riverside ave., Spokane.

TOBACCO—KENTUCKY'S PRIDE; EXTRA fine chewing; 10 pounds, $3; smoking, 10 pounds, $2; 20 pounds, $3.50. Farmers' Club, Mayfield, Ky.

MISCELLANEOUS. 61

SECRET OF SUCCESSFULLY CANNING vegetables, fruits and meats. Information free. Write F. G. Alexander & Co., Roseville, Calif.

MISCELLANEOUS—Wanted 63

WANTED—TO BUY 2 CARLOADS OF DAIRY cows. Will exchange any one of my 31 farms, located in 6 counties in Idaho, for dairy cows, sheep, city property, notes or securities; crops consist of corn, grain, sugar beets, seed peas, seed potatoes, fruits, alfalfa and clover seed. Price $7 to $150 per acre. O. O. Skalet, St. Anthony, Idaho.

WE HAVE THE FEED, WANT TO MAKE A deal with owner of band of sheep to feed on shares. A 4, Washington Farmer, Spokane.

ELECTRICAL MACHINERY 92

1500 WATT WESTERN ELECTRIC LIGHT plant; never out of crate, $200 cash. J. C. Naylor, 184 10th st., Portland.

AUTOMOBILES—FOR SALE 112

SEE CHEVROLET FIRST—NEW AND USED cars at prices that will surprise you; stop in or write Inland Empire Chevrolet Sales Corp., 916 2d ave., Spokane. Open evenings. Open Sunday.

AUTO TRUCKS—For Sale 115

WHEAT-HAULING AND TRUCK CONTRACTing season is now on. See our Ford ton trucks with the six-speed transmission. Power when needed; speed when you want it. National Motor Co., authorized Ford dealers, 1212 First. Phone Main 460. Spokane.

AUTO ACCESSORIES AND PARTS 119

INVESTIGATE — "THE RING WITH THE Spring" makes a poor engine good; makes a good engine better. Money back guarantee. Wire and disc wheel sales and service. Pacific Gear & Auto Parts Co., W1022 First ave., Spokane, Wash.

NEW AND USED AUTO PARTS—NEARLY all cars. A trial order is all we ask. C. & D. Auto Salvage & Supply Co., 1904 Grand ave., Kansas City, Mo.

STOVE REPAIRING 128

WRITE MYER RUBENS, SPOKANE, ABOUT stove repairs, welding broken parts, nickel plating.

FUR-BEARING ANIMALS 170

SILVER AND CROSS FOXES FOR SALE. William Rambo, 407 Sprague, Spokane.

PETS—Dogs, Birds, Etc. 171

FOR SALE — BOBTAIL SHEPHERDS, $10 each; 2 females, 8 mo. old; good drivers; very snappy. $15 each. Hentges, Valley, Wn.

RABBITS and HARES 173

MAKE MONEY RAISING RABBITS AND geese. Pedigreed New Zealands. Blue Flemish Giants; at right prices. Toulouse geese. Agnes Brenner, R. 4, Box 49, Tacoma, Wash.

PEDIGREED FLEMISH GIANT RABBITS. C. E. Cockerham, Newberg, Ore.

POULTRY 174

WHITE LEGHORN BABY CHIX FROM flocks mated to males having sire's dam record of 240 to 297 eggs per year. Full particulars and interesting literature on request. We are accredited by Sonoma county farm bureau. The Pioneer Hatchery, 422 Sixth street, Petaluma, Cal.

FARMERS' WANT ADS

This is the farmers' "want," "sale" and "exchange" deparment for small advertisements of farmers, including live stock and poultry.

Advertising rates for ads running 1 to 3 times, 10c per word per insertion. with a special rate to Farmer subscribers, as follows: Ads running 4 to 12 times, 9c per word per insertion; ads running 13 times or more, 8c per word per insertion.

All commercial and land advertising, 10 cents per word per insertion. Open also to nonsubscribers.

In using these columns advertisers must observe (1) No advertisement will be accepted for less than $1.00 per insertion. (2) Every word, number and initial, including name and address, must be paid for. (3) New advertisements, changes of copy or cancellations must reach general office, Spokane, Wash., 10 days in advance of publication date. (4) Cash must accompany order.

Above rates include insertion in The Washington Farmer, The Idaho Farmer and The Oregon Farmer, which constitute the Pacific Northwest Farm Trio, 46 Review building, Spokane, Wash.

POULTRY (Continued) 174

IF YOU NEED ANY PULLETS TO FILL OUT your flocks, we can supply February, March, April and May hatched White Leghorn pullets of Hollywood, Tancred or Tancred-Hollywood crossed strains at reasonable prices. We have about 250 very choice R. I. Red pullets. We ship all pullets with a guarantee of satisfaction or they may be returned to us within three days. We have a large assortment of used incubators which we will sell at very attractive prices. Write for quotation on pullets and incubators. Queen Hatchery, 1430 1st ave., Seattle, Wash.

CERTIFIED WHITE LEGHORN QUALITY chicks for summer and fall months, from selected free range, high egg producing breeding flocks, inspected and accredited by the Sonoma county farm bureau. Send for catalog and attractive prices. Safe delivery and full count guaranteed. Must Hatch Incubator Co., Inc., 445 Seventh st., Petaluma, Calif.

BUY SONOMA COUNTY ACCREDITED Hatcheries chicks; electric hatched by the man who put electric incubation where it is today. I am the father of electric incubation. Stock the best. Prices right. Write for booklet. White Hatchery, Petaluma, Cal.

SUMMER SALE "HENACRES" PULLETS; best for fall and winter eggs, $1.25 to $2 each. Hens for breeders, $1 to $1.50 each. High grade stock at reasonable prices. Booking orders now for 1924 baby chicks. Free catalog and price list. "Henacres," Box A, Prosser, Wash.

DOLLARS FOR YOUR EGGS—WE PAY THE top market prices for your eggs and poultry. Daily cash remittances. McClintock-Trunkey Co., produce department, Spokane.

S. C. BUFF LEGHORNS, EGG BRED, WINter laying hens; one and two years old; will make excellent breeders; $10 per dozen. Gustave Feller, Emmett, Idaho.

SPECIAL PRICES ON GUARANTEED DAYold pullets; fall and winter delivery. Write for particulars. Eureka Hatchery, Petaluma, Calif.

FOR SALE—GENUINE PLYMOUTH ROCK homer pigeons, mated pairs and squabs. E. S. Waterman, R3, The Dalles, Ore.

JERSEY BLACK GIANTS—YOUNG STOCK for sale, $2.50 and up. E. M. Chambers, Bovill, Idaho.

LIVE STOCK 177

JERSEY BULL CALF BARGAIN—DROPPED June 14, 1923. Sire, Andrew Hoag, double grandson of Capt. Tristram; granddam half sister to St. Mawes. Dam, Charity's Pogis St. Mawes. She traces 4 times to Rosaire's Olga Lad, four times to St. Mawes, once to Pogis 75th of Hood Farm and once to Octavia's Duke. Very low price, quality considered. S. O. Pool, Malaga, Wash.

WE GUARANTEE TO PAY THE HIGHEST market price for your poultry and live stock. Veal market growing stronger. Owing to the constant changes in the market we are unable to quote prices in this paper from week to week. We will furnish tags and prices when you are ready to ship. Write us what you have to sell. Prompt returns. John Lewis & Co., Spokane, Wn.

FOR SALE—REGISTERED HAMPSHIRES, Romneys and Rambouillets in both ewes and rams. All range raised, strong and healthy. We specialize on stud rams for small flocks. We can also furnish range and farm ewes in small or large lots. Personal attention to all orders. H. Stanley Coffin, Yakima, Wash.

TOP PRICES PAID FOR CREAM, EGGS, poultry, pork, veal, also fruits, berries and vegetables in season. Inland Products company, Second at Cedar, Department E, Spokane, Wash.

YEARLING HAMPSHIRE RAMS, $30. ONE and two year old Rambouillet rams, $25, $50. Essex hogs, $10, $50. These prices include registration papers. Dolph Phipps, Route 3, Medford, Ore.

WE PAY TOP PRICES FOR YOUR LIVE OR dressed veal, hogs, and poultry. Your check by return mail. Shipping tags on request. M. & J. Packing Co., Spokane.

WANTED—BY THE CARLOAD, YOUNG milk cows or heifers, coming fresh this fall; must be good and priced write. Claud Castor, St. Maries, Idaho.

FOR SALE—REGISTERED POLLED SHORThorn bull, calves; herd accredited; inspection invited. Whitla Ranch, Mica, Idaho.

REGISTERED SHROPSHIRE RAMS—FLOCK headers and range rams at reasonable prices. George Armstrong, Corvallis, Ore.

FOR SALE—REGISTERED SHORTHORNS, select herd; will trade for feeder or dairy cattle. Box 642, Grandview, Wash.

REGISTERED HOLSTEINS—BULLS, HEIFers and cows for sale; accredited herd. Oscar Dunlap, Junction City, Oregon.

REGISTERED BERKSHIRE BREEDING pigs, $16; big type, champion blood. Chas. O. Churchill, Shelton, Wash.

FOR SALE—10 HEAD OF REGISTERED Shorthorns, priced for immediate sale. E. W. Haag, Sandpoint, Idaho.

REGISTERED HAMPSHIRE BREEDING bucks and ewe lambs. Far Niente Farm, R2, Bothell, Wash.

THOROUGHBRED CHESTER WHITE PIGS; big type. Shoreacres Ranch, Route 1, Vancouver, Wash.

REGISTERED SHROPSHIRE RAMS AND ewes. Write McK. Edwards, Valley, Wash.

FIVE REGISTERED AYRSHIRE COWS FOR sale. Perfection Dairy, Pendleton, Ore.

OXFORDS—RAM AND EWE LAMBS, J. E. McGoran, Valleyford, Wash.

FINE REGISTERED NUBIAN BUCK, COPEland, Elmo, Mont.

HARNESS and SADDLERY 189

SEND FOR FREE HARNESS AND SADDLE catalog today; cut out the middleman, buy direct from the manufacturer. Lowest prices in the west; satisfaction guaranteed. Established 1881. Write Pierce Harness Co., Dept. T, Spokane, Wash.

MONEY TO LOAN—Real Estate 234

FARM LOANS, 6 PER CENT, ANYWHERE. Box 103, Walla Walla, Wash.

HAY FOR SALE. 200

ALFALFA HAY, GUARANTEED QUALITY; prompt shipment; buy direct and save money. Prices upon application. Richard Nyman, Walla Walla, Wash.

FAIRS 370

HARVEST FESTIVAL, NAMPA, IDAHO, SEPtember 18 to 21. Southwestern Idaho's great fair and livestock show. Premium list free. Write P. W. Duffes, secretary, Nampa, Idaho.

JACKSON COUNTY FAIR—SOUTHERN OREgon's great farm and livestock show. September 12 to 15. Premium list free. Write H. O. Frohbach, secretary, Medford, Ore.

TWIN FALLS COUNTY FAIR—SOUTHERN Idaho's great fair and livestock show, September 11 to 14. Premium list free. Write J. M. Markel, secretary, Filer, Idaho.

WESTERN WASHINGTON FAIR, PUYALLUP, October 1-7, both inclusive. 133,000 in attendance last year. You are invited to participate. W. H. Paulhamus, Manager.

NORTHWEST WASHINGTON FAIR—LYNDen, Sept. 24-29. Don't miss this great farm and livestock exhibition. Premium list free. A. E. Rusco, secretary, Lynden, Wash.

WASHINGTON STATE FAIR—THE GREAT fair and livestock show of Washington, Sept. 17 to 22. Premium list free. Write H. P. Vermilye, secretary, Yakima, Wash.

JOB PRINTING 372

WEDDING ANNOUNCEMENTS AND INVItations, catalogs, booklets, high school annuals, letter heads, envelopes, cards, butter wrappers, etc. Union Printing Co., 412 First ave., Spokane, Wash.

CLEANING, DYEING, Etc. 420

FRENCH DRY CLEANING BY PARCEL post. Ladies' and gents' suits, furs, hats, etc., prompt service. Address City Dye Works (Dept. A), E422 Sprague ave., Spokane, Wash.

TANNING 425

ANY KIND OF HIDE TANNED WITH HAIR on, or for leather. Fur and taxidermy work done to order. M. R. Mohr Co., 321 Sprague, Spokane, Wash.

HIDES, PELTS AND WOOL 430

SHIP YOUR MOLESKINS TO W. E. JOHNSON, Uncas, Wash.

KODAK FILM DEVELOPING 472

FREE ENLARGEMENT WITH 75C ORDER high gloss print. Spokane Film Co.

FILMS DEVELOPED FREE—KODO, THE PICture King, S15 Stevens, Spokane.

MATERNITY HOMES 497

MATERNITY HOSPITAL; STRICTLY PRIvate; doctor in attendance; prices reasonable. Mrs. Elizabeth Peel, matron. W1324 Broadway, Spokane.

BUSINESS OPPORTUNITIES 516

OWNER OFFERS WHOLESALE AND RETail hay, wood, grain, feed, seed and flour business established four live towns, best grain and dairy section eastern Washington. Owns warehouses, trackage each point. One has hundred car apple storage plant, another fully equipped creamery additional above lines. Main point has modern grain elevator, feed mfg. plant, seed warehouse. Also half interest growing creamery, paying good salary and dividends. All operating good profit and growing. Splendid opening for man with sons to establish in business. Sell all or part. Prices run $5000 to $20,000; ¼ cash, balance five-year contract, 6 per cent. A. 3, Washington Farmer, Spokane.

BUILDING MATERIAL 588

TURNS PLASTERING INTO PLAY—PERFECtion plaster wall board can be nailed on just like lumber, and makes a perfect plaster job. Western Wallboard Co., Seattle, Wash.

LUMBER, LATH, SHINGLES, MILLWORK— Direct from mill to you. Free catalog and plan book. Home Builders Supply Company, Leary building, Seattle, Wash.

NURSERY STOCK 621

TREES—NOW BOOKING MAIL ORDERS AT reduced prices for limited time only. Apples, pears, peaches, nut trees, prunes, cherry, small fruits, etc. Live agents wanted. Lafayette Nursery Co., Lafayette, Ore.

NURSERY STOCK—PRUNES, WALNUTS, FILberts, fruit trees of all kinds, gooseberry and small fruits. Buy direct and save 50 per cent. Brooks Nursery, Lafayette, Ore.

PANSY PLANTS, STEELE'S STRAIN, STRONG seedlings, $2.50 per hundred. Catalogue ready. Blair's Pansy Gardens, R. 6, Box 428, Portland, Ore.

FARM LANDS FOR SALE 651

CUTOVER LANDS, EASY TO CLEAR: $8 TO $20 per acre; 25 miles north of Spokane; on hard surfaced highway; Great Northern and Milwaukee railways; excellent opportunity for dairying and stock raising with Spokane markets and creamery near at hand. Will help the man who will live upon this land and agree to clear a part each year by giving lumber to help start his buildings, and a pure-bred Jersey bull to groups of farmers. Interest and payments low. Write Milan Farms Development company, Dept. T, Old National Bank bldg., Spokane, Wash.

POTATO, POULTRY, BERRIES. ALL cleared and in meadow. A few feet from paved highway; located a half mile from railroad station, good store and sawmill; excellent neighbors, fine schools, close to several good towns. Priced at only $100 an acre. Sold in 5, 10 or 20 acre parcels. Small payment down, balance in 10 years at 6 per cent. This is the best land at the price that we know of. Write or call for full information. Carter, MacDonald & Miller, 208 Columbia st., Seattle, Wash.

DO YOU WANT A HOME IN A RICH VALLEY near Spokane, on three transcontinental railroads? Where soil is perfect, rainfall ample. Summers cool, winters moderate? The kind of stump land that pays to clear? Timothy and clover green eight months in year; natural stock country. Land cheap, 10 yearly payments at 6 per cent. Humbird Lumber Company, Box 00, Sandpoint, Idaho.

160-ACRE FARM. FOR PARTICULARS WRITE owner, S. Justis, Addy, Wash.

FARM LANDS FOR SALE (Continued) 651

5000 ACRES, NEWAUKUM RIVER VALLEY; highest type level farming land; all rich, productive soil. No gravel. No floods. No crop failures. Well developed district. Near Chehalis, Washington, 20 acres up, $15 to $50, easiest terms. Settlers can get steady employment years to come; good wages; and live at home. See local representative, St. Helens hotel block, Chehalis, or write Graham Land company, American Bank bldg., Seattle.

132½ ACRES; 42 ACRES CLEARED, BALANCE of farm hill land, timbered pasture; fences in fair condition; watered by 8 springs; 5-room house, barn and other outbuildings; place lies east of Springfield, Ore.; near school and church; daily mail. Price $2250; $1250 cash, balance 5 years at 7 per cent. Dove & Hornback, 529 Willamette st., Eugene, Ore.

BIG OPENING SALE OF YAKIMA VALLEY farm land, under an assessed state and government approved irrigation project; best, deep soil; close to town and good roads. Price $25 per acre and up. Very easy terms. Western Lands, Inc., owners, 918 Green bldg., Seattle.

LTG LUMBER COMPANY LAND SALE—IN Skagit county; 40-acre tracts, $1400; $200 cash, balance easy. Lots work for the settler. Splendid district, roads, schools, towns. Information free. H. C. Peters, 726 3d ave., Seattle.

FORTY-ACRE FRUIT, DAIRY, POULTRY AND garden ranch and buildings; half mile from village; good school and Pacific highway; in beautiful Rogue river valley. Geo. Treichler, Medford, Ore.

SELL YOUR PROPERTY QUICKLY FOR cash; no matter where located. Particulars free. Real Estate Salesman company, 501 Brownell, Lincoln, Neb.

DAIRY RANCH, 174 ACRES; 1½ MILES FROM Enterprise, Ore.; good buildings, fine meadow; an ideal dairy ranch; will rent, sell or trade. Box 1036, Boise, Idaho.

$5 DOWN, $5 MONTHLY BUYS 40 ACRES good fruit and poultry land; near town; southern Missouri. Price $200. Box F1051, Kansas City, Mo.

CUTOVER LANDS, DAIRY RANCHES. $10 acre up; ten years' time. Your own terms. Grosgong Land Co., Deer Park, Wash.

320 ACRES LAND; 25 CLEARED; SPRING house, barn. Particulars, write Box 381, Cashmere, Wash.

FIFTY-FIVE ACRE HOME. WRITE ANNA Lewellyn, 2, Castlerock, Wash.

FARM LANDS—Wanted 654

NO COMMISSION — SELL YOUR FARM through Washington Farm Bureau Exchange, represented in 45 states. Lists of farms for sale by owner mailed free. 312½ Lindelle, Spokane.

I HAVE INQUIRIES FOR FARMS IN NORTHwest. Describe fully and state price. R. A. McNown, 310 Wilkinson bldg., Omaha, Neb.

FARM LANDS FOR RENT 657

RENTER WANTED—162-ACRE IRRIGATED grain and dairy ranch. Take half interest in purebred stock and equipment. Johnson & Shambaugh, Notus, Idaho.

80 ACRES; 55 IN PASTURE, BALANCE IN cultivation; good buildings; with or without stock. Thomas Toomey, Vader, Wash.

IRRIGATED LANDS—For Sale 663

YAKIMA VALLEY BARGAIN—40 ACRES, IRrigated; W. I. and supplementary water right paid up; five-room house, in good repair; garage and other outbuildings; all fenced; this land will grow 5 tons alfalfa, ten tons potatoes, 80 bushels corn and fifty bushels wheat per acre; also suitable all kinds of berries and fruit, as well as melons; two miles to station and store; 4 miles from two good towns; on main road; half mile to school; on rural route. Price $5500. Federal loan $3100; $2000 will handle. The water right alone is worth the price asked for this farm. I. E. Foss, Mabton, Wash.

CORBIN ADDITION TO GREENACRES—IN the beautiful Spokane valley; 30 minutes from Spokane; paved road; 40 inches of water for irrigation; gravity flow. Ask for booklet with all information.

Return coupon—The Fred B. Grinnell company, Spokane, Wash. I am interested in the Spokane valley. **Please send booklet** and all information to

Name .....

Address .....

40-ACRE IRRIGATED RANCH; WELL IMproved; six-room house, barns, well; bargain at $8000; $3000 cash, balance terms. Write E. B. Sisson, Pasco, Wash.

FIFTEEN HUNDRED IN FIVE TO TWENTY acre irrigated tracts, on state highway and railroad; send for particulars. J. W. Lindsay Port Angeles, Wash.

FOR SALE—MY SHARE IN 40 ACRES, UNder ditch; two miles from Pasco; $500 cash Bernard Kassner, Tukwila, Wash.

ACRE TRACTS FOR SALE 669

SELL AT A BARGAIN—ON EASY TERMS; 20-acre tract, Lewiston orchards; water piped over place and in house; electric lights and phone; 20 acres in alfalfa, adjoining, can be leased, with 16 cows, making ideal dairy proposition. Also 3000-acre stock ranch with 100 cattle for sale or lease. O. P. Pring, 204 Eagle bldg., Spokane.

CITY PROPERTY FOR SALE 694

THREE LOTS, SANDPOINT, IDAHO; FIVE blocks from passenger station. Box 262, Harrison, Idaho.

FOR SALE OR EXCHANGE 702

FOR TRADE—160 ACRES, ALL IMPROVED; irrigated ranch; gravity water right; good buildings; valuation $32,000, mortgage $8000; will trade apartment, general merchandise or hardware business of equal value. Box 107, Richland, Wash.

FOR SALE OR EXCHANGE—FOR IMPROVED property, all or part 240 acres, considerably improved; level, productive land; suburban Vancouver; city water; great future value. Owner, Westenhaver, Eburne, British Columbia.

80 ACRES, WELL IMPROVED; NEAR RUpert; sell or trade for stock or grain ranch. Washington or Oregon. Particulars, write Herbert Sartain, Rupert, Idaho.

FOR SALE OR TRADE—WELL IMPROVED 40 acres, 1½ miles from Rupert, for diversified farm in Spokane country or Oregon. Claude Cox, R4, Rupert, Idaho.

FOR INCOME PROPERTY—40 ACRES KENnewick irrigated land; value $12,000; improved. J. Jacot, Finley, Wash.

TO EXCHANGE—Real Estate 705

312 ACRES HILL LAND; 20 CLEARED; plenty of timber, water and range; fair improvements; will trade for town property. F. O. Russell, Chewelah, Wash.

TRADE—UNENCUMBERED TIMBER CLAIM, left fork Grays river, Washington, for timber claim near Lewiston. **Wallace & Co.**, Breier bldg., Lewiston, Idaho.

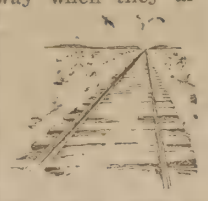
Cattle Ranch To College

By Russell Doubleday Copyright by Doubleday & McClure Co

CHAPTER X.

Battle Royal.

Mr. Worth had built for himself a plank house with shingled roof—the first real house the boys had entered since they left Bismarck.



Their father was away when they arrived, to be gone for some weeks, so the boys had a chance to have some of the fun they had longed for. They expected to have great sport with the miners' sons, but were keenly disappointed to find that their tastes were utterly different. The latter were as a rule eastern boys, and were versed in civilized amusements: baseball, marbles, tops and all the games of skill and strength dear to the town dwellers. Of all these our boys knew nothing; their amusements were akin to their work—to ride well and shoot straight was a matter of business as well as pleasure for them. And so the Worth boys and those of the camp stood aloof from one another, and John and Ben were soon almost as unhappy as they had been on the sheep range.

They still hoped to have an opportunity to show their skill as wrestlers and fighters in the emphatic way that was the custom in that day and place, but for a long time the camp boys gave them no provocation. As time went on, however, the mining boys grew overbearing and insulting and never lost an opportunity to taunt and aggravate the young westerners.

"I'm going to lick that Jake Adams within an inch of his life," said John, wrathfully, one day to his brother. "He's the worst one of the lot."

"All right," said Ben. "I'm with you."

Pretty soon an opportunity came, and John challenged Jake to fight. He accepted at once. A ring was formed on the outskirts of the camp by the boys and some of the men, who guaranteed fair play. The contest that followed was short, sharp and decisive. John kept his head and made every blow tell, while Jake in his anger forgot all he knew and defended himself so poorly that his opponent soon satisfied him he was the better man.

After this such contests, generally not quite so earnest, were frequent. From most of them John came out victorious, and for a time the others ceased to taunt the Worth boys. But the feeling was far from being as friendly as it ought to have been between the two factions. Even the settlement of the arguments in so thorough a manner failed to clear the air entirely.

The miners admired pluck and skill, and John had many friends among them. His father, too, did not disapprove, for he also admired one who could give and take hard knocks. His approval was never outspoken, however; on the contrary he made John's bruises the subject of his chaffing. To John—who, in spite of his apparent indifference, was very sensitive and craved sympathy—this was almost unbearable.

As John predicted, young Watson failed to get the mails in on time. John at once offered to undertake the job, and after some questioning the authorities decided he was capable of accomplishing it. Here was something he could do that would test his intelligence, his strength and his courage. It was work and amusement at the same time, and he accepted it gladly.

Ragged Edge had sprung up in a gulch 14 miles from the coal camp. It was a new camp of the mushroom variety, called suddenly into being by the discovery of some gold-bearing gravel in the creek there. Deep snows on the range nearly cut off communication with the outer world for three months in the year. By following the high, wind-swept ridge, the mountain could be crossed by a venturesome horseman till winter came on and the snows grew too deep, when snowshoes must be resorted to. Even late in the summer snowshoes were necessary to travel over the soft masses of the snow which always crowned the summit.

When John presented himself as a candidate for mail rider, Burns, the boss at Ragged Edge, looked at him in good-natured amusement. "Well, kid, if you think you can do it, go ahead and try. But it means work and p'raps danger." John told of his snowshoeing experiences in Dakota modestly but straightforwardly, and satisfied him by his resolute mien that he had the pluck to do it if any one could.

The boy spent several days in going over the ground, noting the best line to follow and making sure of his landmarks before the snows should cover up everything. He found at the top of the pass an old abandoned cabin and marked its location in his mind in case of future necessity. This bit of precaution served him well before the winter was over.

"You had better get a good, strong horse," said Mr. Worth, as John was mounting Baldy—for the trips had already begun. "Baldy's too old. You'll need a good, young horse."

John said nothing for a minute, but patted his steed as if to express his confidence in him.

"Oh! no, sir. Baldy knows me and I know Baldy, and I think I can get along better with him than I could with any other horse," he said, rather anxiously, for he was afraid that his companion would be denied him. "Besides," he continued, "Baldy can smell a trail through two feet of snow, and isn't he in good condition? You can't see a rib."

"All right," returned his father. "He's yours, and the job's yours. Go ahead and work it out the way you think best."

So boy and horse encountered the perils of the mountain pass together, friends always, but now sole companions.

While there was no sign of snow in the valleys, it was falling steadily in the mountains. John did not carry out his first plan of tethering Baldy at the snow line on the mine side of the mountains and covering the rest of the distance on snowshoes. He found that by following the bare ridges he could go the whole distance on horseback. His route was changed almost every day, for the wind formed drifts in different places and blocked the old way 10 feet deep over night. In certain places cuts in the ridge would become filled with snow, and through this horse and rider had to flounder till a hard trail had been packed. It was in such spots that Baldy's cleverness manifested itself; he rarely missed the narrow, packed path, though it might be buried two feet or more. An incautious step to one side was sure to cause both horse and rider to disappear in the soft mass.

"Well, I must say you have done pretty well so far," said Burns one day, as John dismounted and handed him the packet of mail.

"Yes; haven't missed a trip," he answered rather proudly. "Don't know if I'd have made such a good record if I hadn't the best snow horse going though. Been snowshoeing it two weeks ago if it wasn't for Baldy." He stopped to stroke the animal's nose affectionately. "I vowed this should be his last trip; it's getting harder and harder; but he's such good company I hate to give him up."

Next morning, as Burns handed out the return mail, he warned the boy that bad weather was coming, and suggested that he leave the horse behind, for he would be more of a hindrance than a help. "Those black clouds mean that we're in for a big storm," he said, "and I tell you that you and your horse had better stay here. I can't boss you, kid, but I advise you not to fool with that storm—it's coming sure and you don't know what it means up here." In spite of this John decided to go on Baldy, for he wished to leave him safe at his father's camp.

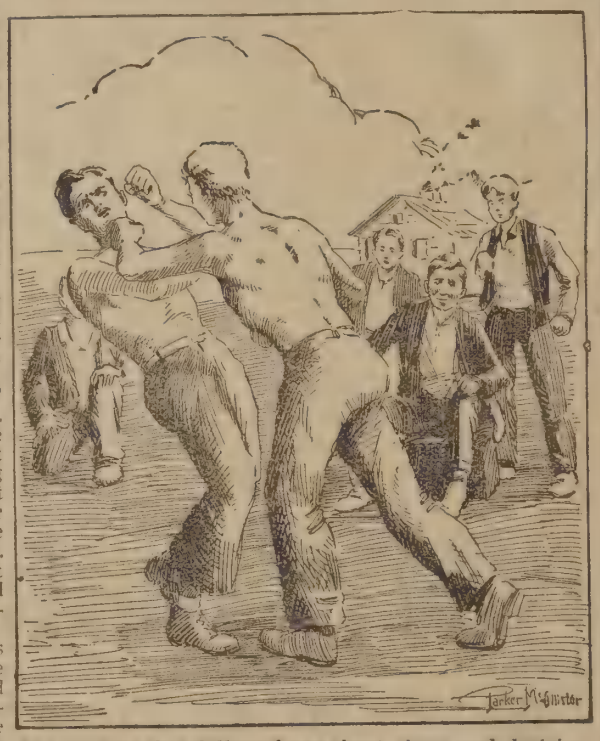
The hard traveling had begun to tell on the sturdy little horse; his body was not so round as formerly, nor his step so springy, but he carried his young rider well for all that and was as knowing and careful as ever.

John tucked the package of precious letters in his saddle-bag, and after calling out a good-by to Burns, he set out. He had barely reached high ground when snow began to fall heavily and with it came a blustering, roaring wind that buffeted the travelers roundly. The horse slackened his speed, and, by signs that John knew well, advised retreat. The boy urged him forward, however, saying aloud—for he always felt as if Baldy could understand everything he told him—"No, old man, if we go back now you'll have to winter in the Ragged Edge gulch and you'll die sure. We can make it all right." The good beast seemed to acquiesce in his master's judgment, for he went along without further hesitation. The trail now was covered almost knee deep, and the blinding mist and whirling flakes blotted out nearly all landmarks. They pushed forward, at one moment right in the teeth of the blast, at the next turning a sharp corner and running before it, heads down, eyes almost closed, the rider depending on the keen senses of his steed to find the way.

At length Baldy stopped, and John felt, with a thrill of real alarm, that he had lost the trail. To go forward seemed impossible, to go back almost as bad. To and fro they went, in vain efforts to find the way. Baldy still floundered along, his hoofs covered with gunny sacks to prevent their sharp edges from cutting through the crust; but his sides began to heave and his legs to shake under him, for the exertion of breaking through the drifts from one wind-swept ridge to another was most exhausting. John could stand it no longer; he slipped off his back and caught his head in both arms: "Why did I bring you out here?" he said, in bitter self-reproach. It was evident that if he did not find shelter soon his old friend would freeze to death.

There was one chance for himself; he was light and might be able to make his way over the snow to Ragged Edge camp, perhaps; but what would then become of his faithful friend? Could he leave him to such a fate after he had so spent himself for his master's sake? Baldy stood knee deep in the cruel, treacherous, white snow, his head down, quick, spasmodic puffs coming from his nostrils, his body steaming, and his flanks all in a tremble. There was only one chance for the lives of both. John remembered the abandoned hut at the top of the pass—if they could possibly reach that, they might be able to weather the storm together. He determined to try. Fastening Baldy's bridle rein to his fore leg, so that he could not follow, and giving him an affectionate pat on the nose, he started off, his teeth set determinedly. A few yards away the driving snow shut Baldy off from his sight entirely, but a gentle whinny reached him and brought a lump into his throat.

"That's all right, old boy," he called aloud; "I'm not going to leave you. I'll be back." He turned in the direction he thought the cabin should be and fought his way on. The wind seemed like a howling fiend; it tore at his clothing, blew the particles of snow into his eyes, and raised such a veil of mist and frost that he could not see 10 yards ahead of him. On the high, bare ridges the blast nearly took him off his feet and in the hollows the snow banks engulfed him. Still he stuggled on, straining his eyes forward into the gray chaos that confronted him, determined to find the shelter. A vision of Baldy standing dejectedly alone, his rough brown coat turned white by the sleet, his faithful old eyes half closed, drove the boy on irresistibly, for, next to his brother, he loved his horse better than anything else in the world.



The contest that followed was short, sharp and decisive.

He ploughed through drift after drift, following one ridge, for only by keeping one such landmark in sight was it possible to go in any given direction. Would that haven of rest ever come into view? Even his stout heart began to despair; he was weary, his body bathed in sweat, yet his face, feet and hands numb with cold; the elements seemed to conspire against him. He was only a boy, and it seemed hard that he should give up his life. He stood still and looked drearily down the hillside. Nothing, nothing but the deadly snow. He began to wonder if it was worth while to fight against such odds any longer.

And then in his abjectness he suddenly gave a cry of delight. For the wind rent the snow apart for an instant and he caught a glimpse through the driving flakes of a dead tree and near it a peculiarly shaped, great gray rock. They seemed positively human, like old friends, for the shelter he sought stood just to the left of them.

He began at once to look for a place where Baldy might be led down in safety. This was impossible where he stood—it was far too steep and rocky. A detour made with infinite pains and exertion brought him to the cabin by a path that he thought the sure-footed beast might follow.

How John found his way to the half-frozen beast and then slowly got him back to the cabin he never knew. Only his indomitable pluck and his training pulled him through. But at last the terrible journey was safely accomplished, and boy and steed stood before the low door.

John took off the saddle, and the intelligent animal, bending his knees a little, squeezed through. The boy followed, throwing the saddle blanket over the horse's shivering flanks and wondering if they were safe, even now. At best it was a poor shelter; the wind blew the sharp, powdery snow through the chinks in the logs and kept the temperature almost as low within as without, but at least there was a roof and a wind break.

After a short rest John scrambled up the slope to the dead tree and broke off some branches. The wood was still dry, except on the very outside, and made good kindling. Soon a fire was blazing, and boy and beast absorbed the heat gratefully. Only those who have suffered great and deadly cold can realize the delight of sitting before a blaze once more. The very sight of the flames puts life into the veins and makes a mere nightmare of what was just now a grim and awful reality.

Thoroughly warmed, and with new courage and strength, John went outside again and began to stop up the chinks with snow and to scrape banks of it up against the walls. The heat from within melted the inner surface, which afterwards froze and prevented the wind from blowing it away.

All day John was kept busy gathering wood and patching the walls. By nightfall a good supply of fuel had been collected and the little cabin was by comparison comfortable. There was little sleep for the boy that night, however. The fury of the storm did not abate, the wind howled round their little refuge, shaking it so it seemed as if it would be impossible for it to withstand the blast.

All night long he listened to the roaring of the wind, taking "cat naps" during the short lulls that came at intervals. The fire required constant replenishment, and Baldy, unaccustomed to confinement in such a small space, was so restless that continual watchfulness was necessary to keep from under his feet, though the good horse would never have harmed his young master except by accident. Both boy and beast began also to suffer greatly from hunger.

At dawn the gale subsided somewhat, and John realized that he must get food at once if his life and that of his horse were to be saved. Breaking through the snow bank which had piled up against the rude door, he made his way to a creek half a mile down the mountain and cut with his knife an armful of poplar saplings and carried them back to the hut. Baldy tore off the bark from these and munched it contentedly; another armful was added to the store, and then John bade his equine friend good-by and started off to find food and shelter for himself.

The six miles that separated the lonely cabin from the mining camp were the longest and most trying that John had ever traveled, he thought. Great drifts barred his way, the wind, still strong, blew in his face and seemed bent on his destruction, his empty stomach weakened him, and lack of sleep undermined his resolution.

From dawn till noonday he battled with the snow, and when at last he reached his father's house he was hardly able to answer the questions which his overjoyed family put to him.

A man was sent back to look after Baldy. He found that good horse chewing poplar bark as calmly as if he was in his own stable, though the cabin was so small and the horse so large in comparison that it appeared to be resting on his back, like the howdah on an elephant. For several days Baldy was kept in the cabin and fed on hay, which had to be carried to him on foot; then, after considerable trouble, for a trail had to be stamped down much of the way, he was led back in triumph to the camp, where John, rather weak in the knees, greeted him joyfully.

For a week Ragged Edge camp did not receive any mail. Late one afternoon John appeared on snowshoes, bearing the precious packet. He had to repeat his story many times, and Burns had the satisfaction of qualifying his admiration of the boy's pluck with an emphatic "I told you so."

John continued to carry the mail between Ragged Edge camp and the railroad every three or four days; at first on foot, then, as the snow melted, on his faithful Baldy once more.

Though his work took him away from camp much of the time, John was continually running foul of the boys who belonged to the other faction, and Ben was the object of their unceasing abuse. A crowd of these fellows would stop their games and yell at them those taunts which are so exasperating to a boy:

"There go those western jays."

"Look at the kids that don't know the difference between a baseball and a lump of mud.

It was true that our boys were not up on the national game or any other game

played simply for amusement; their sports were merely another form of some kind of work.

Then the camp boys began to taunt John on his fighting abilities, their object being to get him to stand up against some one who would be sure to beat him. This was one of John's weak points; he was immensely proud of his prowess as a fighter; so when one of the boys said in his presence: "Worth said today that he could lick Casey," he did not correct the falsehood there and then, but put on an air of superiority that had the effect desired. Casey, though not a big fellow, was out of his 'teens, and had the reputation of being a "scrapper from 'way back," as the boys said. He also heard the young mischief-maker's statement. "Jab him, Casey; he's only a blufter," said several of his companions. He could not ignore the challenge which was plainly indicated, and, according to boy customs, not to be avoided. Few boys know how much bravery it takes to dare an unjust imputation of cowardice. John and Casey were soon talking hotly—not that they had anything against each other, but they were being egged on and neither could withstand the pressure. The result was a fight, the consequences of which had great influence, on one of the principals at least.

Casey was really a grown man, and John had never fought in earnest with one old enough to wear a mustache, but his blood was up now and he would not back down.

The two retired behind a large stable and a crowd of men and boys formed a ring.

"Keep him at arm's length," whispered Ben, as he took off his brother's coat and cinched up his belt firmly round his waist. "Don't let him hug you and you'll lick him, sure." Ben spoke confidently, but he was in reality consumed with anxiety. John said nothing, but the look of reckless determination on his face spoke volumes.

The two antagonists now stood face to face, but neither had yet struck a blow. "How do you want to fight?" Casey asked.

"You fight your way and I'll fight my way," John answered; and at the word struck out. The crowd yelled "Foul," but neither took any notice. The blow was not a hard one, but it served its purpose, for it stopped the talk and began open hostilities.

Casey came at John, his arms jerking back and forth, but hitting nothing. John drew his lead and then, as his guard was lowered, threw in his own left with staggering effect. This angered Casey greatly, and he rushed his opponent in a vain effort to get in a deciding blow at once; but his rushes were avoided nimbly, and as his defence was careless many blows were rained on his head and body. Evidently the boy knew more about boxing than he did, Casey thought, and as the method of fighting was left undecided he determined to change his tactics. In a rough-and-tumble fight he knew his age and strength would tell. To close in and grapple with John was his purpose now. So far the battle was in the boy's favor, and a number of the wavering ones came over to his side. "He's getting low now, Worth. Swing on him," said one of them, and John, acting on the advice, quickly landed a stiff one on the jaw. Casey fell, but John stood to one side and waited till he got up. He was angry clear through. Again and again he rushed, but was beaten off each time. He aimed a savage blow, which John almost succeeded in dodging. It landed lightly, but gave Casey the opportunity he sought and they clinched, the miner hugging with all his might.

"Oh, John!" muttered Ben.

"Good work," yelled the crowd, who had suddenly deserted to Casey's side.

It was the greatest squeeze that John had ever had. The blood rushed to his head, his breathing became more and more difficult, but still he struggled, twisted and strained, and at last both fell and the man's terrible grip was loosened. He did not let go, however, and in a couple of seconds both were on their feet and struggling with might and main to gain the mastery. Again they went down, this time John underneath and on his back. The crowd paused an instant before pulling Casey off, but during that pause he made good use of his time, raining blow after blow on John's upturned face. John was licked.

Make Their Own Hats

The farm women of King county have been doing much work with millinery projects with the assistance of Miss Edna E. Walker, county home demonstration agent. Early in the spring of 1923 Miss Belle Algier helped Miss Walker put on a training school at the chamber of commerce at Seattle with twenty of the community leaders of the county. These women were given as many details in hat-making as possible in a short time in order that they might continue work in their community and help the women make new hats or remodel old ones, as the case demanded.

"While there have been a number of made-over hats finished this spring, we found that the women were making more new hats since they are finding it is not a hard job to do," said Miss Walker. "Many of them bought better material and made better hats than they have ever done before. Some of them found that they could make two home-made hats for the price of one purchased at the store. As a general rule they have turned out good work with but very little practice in millinery and the women find that hat-making is a great help to them in getting their spring clothes ready.

"As a further step in hat-making the women are being taught to make the proper selection of material before starting their hats. The right color has much to do whether or not the hat will suit the wearer and whether it will be becoming to her. Before she starts to make a hat she takes the material and pins it on a frame in order to get an idea how in will look. Many hats are being made with the same material, or material that will go with the new dress."

Picked Americans

Thirty-five hundred close-crammed pages, revised every two years, keep track for busy Americans of the deeds and addresses of yet busier Americans, 25,000 of them of the celebrities and the semi-celebrities of the land. No one has to be told the title of that volumn. "Who's Who in America" can knock down more interrogation points to every play than almost anything else in print compressed within the same space. Age and educational career, social and religious affiliations of the subject, as well as environment and achievements, are skeletonized for the busy man and the limited bookshelf, within its covers. "What has he done?" If he is an American, and if he has done anything differently than, better than or more noisily than somebody else, the answer is in "Who's Who in America."

The new edition, we have just received notice, is on the market. A. N. Marquis & Co., publishers, Chicago.

State College Chips

Every weed means a leak in the soil moisture supply.

There are two things to swat—flies and roosters.

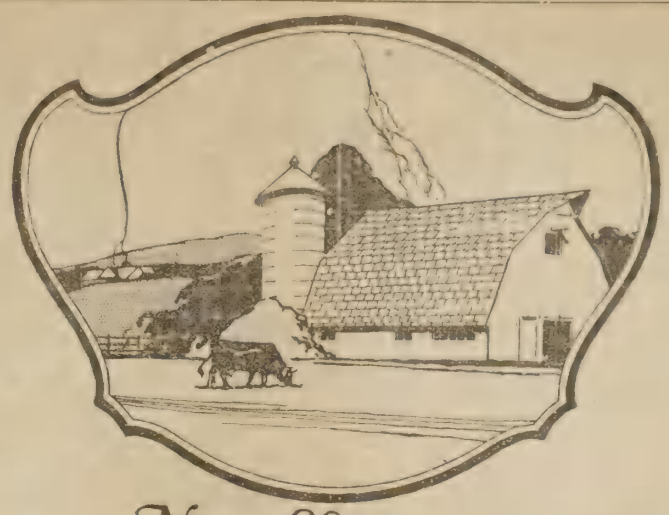
Plug up the leaks in the farm or home by keeping records.

Saving an old can rubber may mean losing a can of fruit or vegetables.

If you win at the fair, don't crow; if you lose, don't grouch. Find why you did either.

This is the vegetable season, make the best if it for they contain many essential elements of food.

Roadside markets have helped more than one family, living on a much-traveled state highway, to add a neat little sum to its bank account.



New Life for shingled roofs

Oronite Shingle Oil assures maximum preservation of shingles—penetrates the pores of the wood and holds in the natural oils. Shingle roofs and side walls treated in this way are safeguarded against splitting, warping, leaks and moss growths.

If you mix a little color paste with the oil you can beautify your farm buildings as well as check the costly damage of warm sun and soaking rain. The expense is slight.

Ask our agent to give you tested color formulas for Oronite Shingle Oil.

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ORONITE
Shingle Oil

The department editors of this paper are anxious to be of service to you. Do not fail to write to us if they can be of help to you.

You Can Make $5,000 a Year
as an Expert Auto Mechanic

It is easy to be an auto expert, the Adcox way. The Adcox way is approved by the leading auto-repair men of Portland and the Northwest, and they snap up my graduates as fast as they finish their courses. 1924 will be the biggest year of the auto industry. There are big positions in store for those who prepare now.

The monkey-wrench mechanics who experiment with high-priced cars and charge full price for their work can't get jobs any more. The public is tired of them. A lot of them have come to me to really learn their business. And I have made experts of them, taught them things they never knew existed. After my training they have gone right out and landed fine jobs.

A real auto mechanic knows a car from top to bottom. I teach you on Packards, Cadillacs and all other makes, the costly as well as the cheaper cars.

When they get to running automobiles and tractors by wireless I will add a course in radio, but right now I am doing nothing but make real, honest-to-goodness auto experts.

If you are tired of mucking around at thank-you-mam jobs, working long hours for short pay, learn to be an auto expert. My graduates make $400 a month with less sweat than you make $80 a month, and they are working all the year around when you are laid up for months on account of the weather.

Quit thinking it over. You've been doing that long enough without getting anywhere. Do something about it and do it now.

Grab the nearest pencil that comes handy, fill in the coupon below, tear it off and mail it to me. Within a couple of days you will get back my big 112-page book that explains the secret of making $5000 a year, how to become an auto expert and my guarantee. It will cost you nothing to get this book and you won't be tied up to anything if you are not interested.

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FAMILY CIRCLE

ALICE W. BARLAND
EDITORIAL CONTRIBUTOR

WHY NOT TODAY?

There's a happy time a-coming when your worries will be over,
When your blues will all be golden and your frowns all smoothed away,
When your soul will be in merriment, your fortune be in clover;
Why not today?

There's a happy time a-coming when you'll count the gold of heaven
As you balance up your ledger—what you get and what you pay;
When you'll raise your human spirits with the angel's happy leaven;
Why not today?

—AMOS R. WELLS.

Experience Letters

Dear Mrs. Barland: It has been some time since I wrote to the Circle, but I have enjoyed it immensely. I am very glad to know that there are so many girls and boys who do not approve of smoking. Whenever I know of a girl doing this I class her among the lowest society.

I wonder what the Circle thinks about swearing? I hear so many girls swear and even mothers of young children. Is it not for the parents to set the example if they expect to raise their children to be good, moral citizens?

I think parents should take more interest in their children's amusements, should go with them to the theaters, dances, church, picnics and parties. They would then know what forms of amusement the young people were indulging in. If they went with them more frequently it would do away with their choosing improper company and going on late night rides.

Too many fathers stay home and read all about who won the fight and the mothers sit and crochet all evening while their young girls and boys are seeking any sort of company, unsupervised and uncontrolled. Very few girls ever realize before they are married that their mother is really the best friend and chum a girl can have. And this is usually the mother's fault.

I want to thank the Circle for the good recipe for canning corn, and will some one tell me why fruit shrinks one-third when cooked in the old-fashioned jars? I fill the sterilized jars, pour over the sirup, which is just warm, put on rubbers and caps and screw down till about one more turn is needed to make air tight. I put them in the boiler with lukewarm water and have them covered and after boiling the desired time and I remove from the boiler, the water is colored and the juice seems to escape. I always take out of the water and seal immediately, but when cold the fruit has shrunk about one-third. I should be thankful for information as to what makes it do so.

(I think you do not pack enough fruit into the jars before you add the sirup. All fruit like strawberries and raspberries should have all packed in that you can get without crushing.—Editor.)

Greetings to Mrs. C. D. of Washington: I am glad that others are as interested in rabbits as I am. I have three does, two are Belgian. One has 12 bunnies. I have one pink eye, which I am planning to use as a start in a fur-bearing variety. I breed my does to a big blue Flemish Giant; they grow quickly and make fine meat. BILL'S WIFE.

Oregon.

Dear Mrs. Barland: What an interesting little paper THE FARMER is and we all enjoy the Family page. I have always been content to be just a reader, but think now I shall write something.

We are trying to "prove up" on a grazing claim in Montana. We have a fine start of children, and I mean just that, too, as they are a strong, healthy lot, and we hope to realize enough from this claim to get a little home some place where all the family may be on a somewhat self-supporting basis, not entirely dependent upon husband's daily wage.

We believe in the Golden Rule and try to practice it at our house. Our purse, though a flat, little thing, is a sort of family affair and whoever goes to town takes it along. If it is I who goes my husband never asks me how much I've spent or what I've used it for. When the children and I want to go he always looks the car over to see that all is O. K. with it before we start. And I, for my part, if I expect to be gone from home for a day or two, always see that there is plenty of bread and fresh cookies or cake for him and I put out clean towels and socks, etc.

Life is too short to be fussing over the expenditure of a few cents and to lay down laws of thou shall or thou shalt not, between husband and wife. Wishing all the Family Circle success and happiness, I will close. HOMESTEADER.

Montana.

Dear Mrs. Barland: Please tell M. D. that if she will grease the loaves of bread when she puts them in the pans, then, when she takes them out of the oven, place them flat on the table with nothing over them till they get cool, I think she will be satisfied with the crust. J. F. B.

(Never turn hot bread out onto a table without a cloth under or you will grease the table if unpainted or will cause the bread to taste if varnished.—Editor.)

Family Circle Girls

Dear Mrs. Barland: I have read the Circle for a long time with pleasure.

Like M. D., I had begun to think I was about the only girl who didn't believe in "cutting up" after the manner that has caused the recent discussions. But since I have been reading the Family Circle I have changed my mind and have learned that there are many boys who know how to conduct themselves like gentlemen.

I live on a farm several miles from town and wouldn't exchange country life for the city, for I have lived all my 19 years on a farm.

Sewing, crocheting and reading are my pastimes and, though there are not many young people in our neighborhood, we get together and have some fine times just the same. A COUNTRY GIRL.

Oregon.

Dear Mrs. Barland: I have been a silent reader of THE FARMER for over two years. I am only 15, but am nearly through high school and I am going to college for two or three years, anyway.

You asked what we liked best to do. I like to roam through the woods and sit by the lake or river and read. I have tamed about 20 chipmunks and squirrels so that they will eat from a pail or pan. The birds are not afraid of me, either.

I like to have some fun once in a while, but I can't see where young people get fun out of being so wild. I have a better time at a public dance. I have attended two public dances and thought them really horrid.

I don't believe in smoking or drinking and I belong to a girls' club and we all do what we can to stop that sort of things. L. W. W.

Washington.

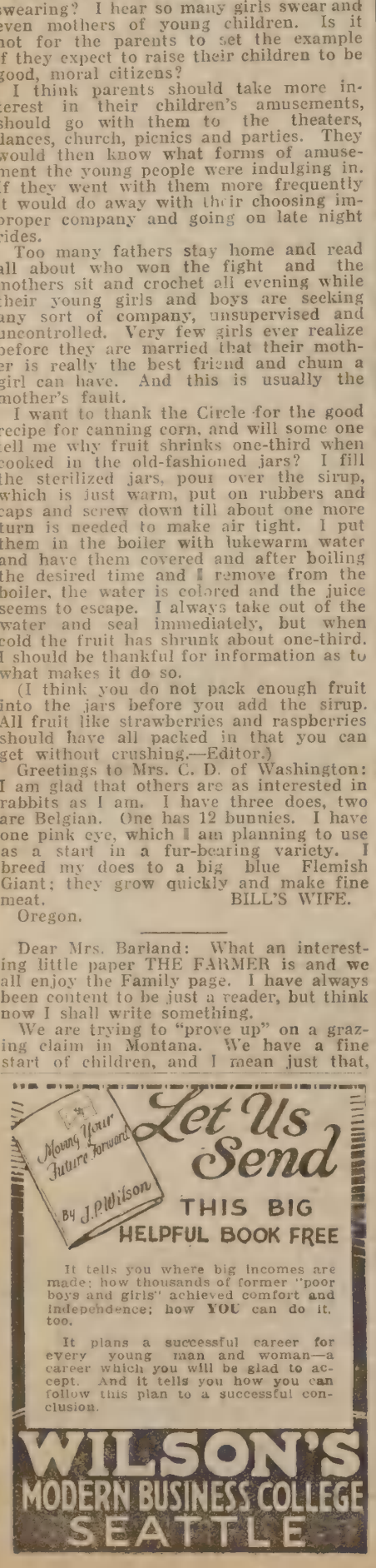
Dear Mrs. Barland: Have long read and enjoyed your department in silence. After reading M. S. P.'s, I thought that I might be able to help some one by giving my formula for finding happiness. There are so many interesting and worthwhile things to do that I never have time to think of or to regret that I do not care about dances or "petting parties."

I enjoy life so much that it is sometimes a question of where work ends and pleasure begins. It is, I believe, one of the main secrets of life, to be able to receive most of our pleasure from the little things.

We can always read good books and I get a great deal of enjoyment from that source. Sewing is my main pastime, and while my results are usually a bit unusual and more than a trifle weird, that does not detract from my pleasure. Mother and I are the greatest and best of pals and we enjoy many a musicale, show or walk together. Just at present we are planning a long hike for this summer and if it never becomes more than a plan we will have enjoyed it immensely.

Will not some one write and give me the benefit of their experience? For those of us who are athletically inclined there are an endless variety of interesting sports, particularly in the summer.

Hoping that this will help some of you, I am, sincerely, "TOMBOY."



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LOST If you can't locate a thing, it might as well be lost. Maybe the very thing you want is offered on our "Want Ad" page in this issue.

In writing advertisers, be sure to say you saw their advertisement in The Washington Farmer.

The Sheet Writer's Busy Season

It gives The Washington Farmer real pleasure to know that most of the fair managers throughout this state are awake to the menace of bogus farm paper solicitors, fraudulent carnival features and other fakes and fakers of similar character. This magazine, as our readers know, has been conducting a campaign of education for a long time with a view to protecting its readers from unscrupulous solicitors. We have had in mind the person who represents himself as the agent for a farm paper, frequently though falsely as the agent of The Washington Farmer, when he is in fact the representative of no bona fide farm paper, but is merely using the paper's name to separate the farmer from his cash. Solicitors of this class are commonly called sheet writers. They usually carry cheap premiums of some kind, such as a pocketbook, shiny pencil, wall map or pair of glasses, telling their intended victims that they are giving these supposedly valuable articles away merely to introduce the paper. By one fraudulent means or another, they frequently secure anywhere from half a dollar to two or three dollars, give the subscriber a bogus receipt, leave the community and are heard from no more. The subscriber discovers that he has been victimized when the paper which he expected to get does not come.

Some time ago we wrote to fair managers throughout the state, urging upon them the desirability of strictly prohibiting this class of faker on their fairgrounds this year. Among the many favorable replies received, A. E. Rusco, secretary of the Whatcom county fair, says: "I wish to state that we are heartily in favor of your plan, also that we do not allow that class of salesmen on our ground, requiring all salesmen to purchase booths the same as any other dealer." W. G. Hannam of the Spokane Interstate fair says: "Subscriptions can not be solicited by itinerant sheet writers. We have invariably forbidden any premiums being offered by sheet writers to secure subscriptions." Other fair officials have expressed similar sentiments, some even going stronger.

While the exclusion of these tricksters from fairgrounds is a great protection to those who attend the fair, let no one feel that the fight against them is won. They will be just outside the fair gates or on the street corners of fair towns during fair week plying their trade. Not only that but there are still a few fair managements that are not excluding them from the grounds.

The Washington Farmer has no fault to find with the bona fide solicitor of any bona fide farm paper. It merely wishes to warn its readers against the faker. Representatives of The Washington Farmer offer no premiums with the paper. They sell nothing but the paper itself, and that at the regular price of $1 for five years. If any one claiming to represent The Washington Farmer makes any other offer he is not to be trusted. Neither will our bona fide representative offer to send the magazine if a subscriber will merely pay the postage.

WheatGrowersUnite

Announcement was made last week that the activities of the Northwest Wheat Growers, Associated, will from this time on be taken over by the American Wheat Growers, Associated.

The northwestern organization is the selling organization for the cooperative associations of the four states of Washington, Oregon, Idaho and Montana. These associations have been pioneers in the cooperative marketing of wheat, and have been largely instrumental in the creation and development of the American Wheat Growers. Their amalgamation with the latter is said to mean the broadening out rather than the cessation of the cooperative endeavors of this territory.

Hereafter the cooperative wheat of the northwest will be sold by the American Growers in common with that of half a dozen middlewestern and southwestern states. Northwestern wheat, however, will be handled through the present office in Portland, with no change, it is said, in the manner of handling in so far as the individual grower is concerned. The activities of the larger organization are expected to increase the influence of cooperation on the ger[illegible] grain market.

Fair at Elma Makes Good

(Continued from page six.)

the champion sow, in Liberator's Girl 2d, a granddaughter of Liberator. Robert Eaton, Cosmopolis, showed two pigs; Warren Brown, Montesano, two pigs, and Ernest Bargmeyer, Melbourne, one.

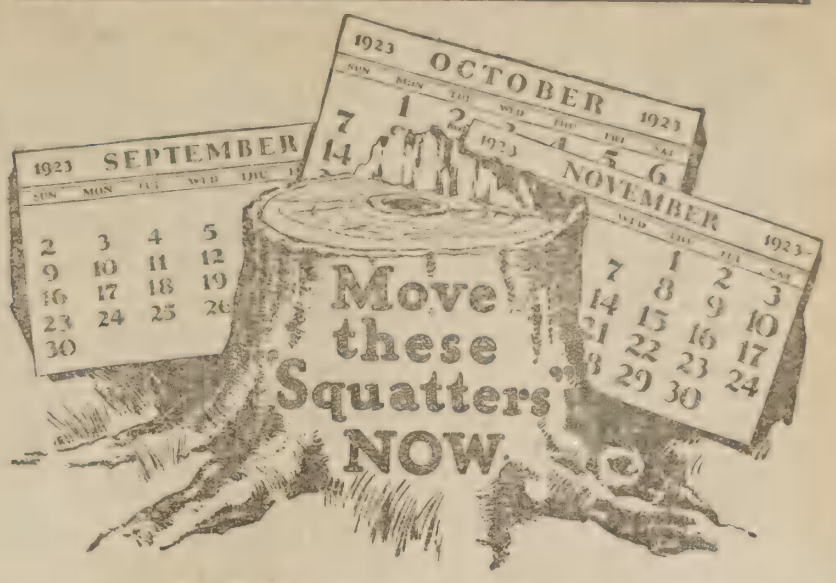
F. Von Derheyden, Wapato, had two excellent Chester Whites, and Howard Norris, of Goldendale, one. Von Derheyden had both champions in Wapato Boy and White Lady.

Two breeds of sheep were represented. Howard Norris, of Goldendale, showed six head of Hampshires and Norris & Kenneth Hinshaw of Goldendale, five Southdowns. They were awarded firsts and championships.

The entire horse show was made by J. D. Norton of Elma with the good black Percheron stallion Modeler, although three standard bred were judged at the race barns.

THE CUD-CHEWER.

The animal that chews the cud is called a ruminant.



THEY use your good land and pay no rent—*you* pay the taxes. Get them out *now*—after your crops are harvested and stored or sold—now's the time to make more land ready for bigger crops next year.

Use Pacific Stumping, the new du Pont explosive, for this work. It has approximately the same strength, stick for stick, as any standard stumping powder, yet leaves no larger hole in the ground than a 20%. Then, you get one-half more sticks for your dollar. It's non-freezing, too.

Let us send you the free booklet "Clearing Logged-off Lands," which gives complete information on land-clearing, ditching and tree-planting.

E. I. DU PONT DE NEMOURS & CO., Inc.
Spokane Seattle Portland

1/2 More per Dollar

NON-HEADACHE DU PONT NON-FREEZING

PACIFIC

STUMPING POWDER

A Pacific Northwest Product

Watch What Happens!

Lubricate your automobile with Zerolene, which costs about half what you pay for many other oils, and watch what happens.

First, you find that your gasoline bills are lower. Repeated tests have demonstrated that, other factors being equal, the car lubricated with Zerolene makes about 5% better gasoline mileage than cars lubricated with other oils.

Second, your car goes from 25% to 50% farther before you need to grind valves or remove carbon. This fact, too, is fully substantiated by numerous tests.

Insist on Zerolene—even if it does cost less.

STANDARD OIL COMPANY
(California)

30% less CARBON

5% more gasoline mileage

The Standard Oil ZEROLENE For Motor Cars

for less than 1 cent a cake

A little water, 5½ lbs. of meat-scraps or grease and a can of RED SEAL Lye make as good a kitchen and laundry soap as you ever used. No trouble at all, anyone can do it. Follow directions carefully.

Buy a can today. Full directions with each can.

Write us for suggestion booklet. Be sure and buy only the genuine RED SEAL Lye.

P. C. Tomson & Co.
PHILADELPHIA, PA.

High Points in News of the Week

The fourth regular meeting of the league of nations opened at Geneva, Switzerland, this week. The league faces questions this session which may go far toward determining whether or not it can function as an effective agency in maintaining world harmony. In all probability it will be called upon to act between Italy and Greece in the solution of a problem which at this writing is of such magnitude as to lead inevitably to war unless some such authority as the league prevents.

Recently the Italian members of a boundary commission were assassinated on the Albanian frontier presumably by Greek subjects or at least, supposedly under the protection of Greek authority. The Italian government immediately called upon Greece for certain formal acts in apology and the payment in addition of 50,000,000 Italian lire as indemnity. Greece agreed to certain parts of the requirements but refused to accept others on the ground that to do so was to humble unduly her national dignity. This resulted in the seizure by the Italian military authorities of three Greek islands near the mouth of the Adriatic sea.

In the meantime, Greece has made formal application to the league of nations to intervene with a view to preventing war which otherwise is imminent. Italy is expected to oppose this intervention on the ground that world peace is not jeopardized by action which may result between the two nations.

The ability of the league to handle this problem may do much to determine its efficiency as a permanent world agency.

A report is current that both Germany and Turkey will apply at this meeting for membership in the league of nations. The Irish Free State is also expected to apply.

* * *

A severe earthquake, followed by fires, last Saturday and Sunday devastated several of the leading cities of Japan, including the capital city, Tokyo, and the noted seaport, Yokohama. At this writing it is estimated that 100,000 persons have perished, though nothing like accurate figures are yet available. The two cities mentioned, together with neighboring towns and villages, are reported to be practically laid waste. In addition to the dead, thousands are reported to be without food and shelter. The earthquake wrought havoc over a territory nearly 100 miles wide, centering about Tokyo. A resultant tidal wave did immeasurable damage to shipping, with probably considerable loss of life at sea.

* * *

The predicted strike in the anthracite coal fields of Pennsylvania has taken place, though it is called a "work suspension" rather than a strike. About 153,000 miners are idle, leaving only enough on duty to protect the mines. Pending settlement of the controversy under the leadership of Governor Gifford Pinchot of Pennsylvania, no attempt will be made by the mine owners to produce coal.

* * *

Great progress is being made in the movement to establish the eight-hour day in the steel industry. Several thousand employees are now working only eight hours, the number being increased regularly. It is now believed that by December the entire industry will be on an eight-hour basis.

* * *

United States government officials have reached a definite decision to extend recognition to the Mexican government under President Obregon.

* * *

Russia is on the road to recovery from the effects of bolshevism and communism, according to the report of Colonel William Haskell, who has been in charge of the American relief work there under the supervision of Herbert Hoover. American aid during the last two years has amounted to about $60,000,000, he says. A little less than 1,000,000 tons of food, seed, clothing and medical supplies has been bought in America by the relief administration, making about 250 shiploads to Russia.

* * *

The American Bar association last week at its convention adopted a resolution favoring the joining of the international court of justice by the United States. This is the action so vigorously urged by the late President Harding. The court of justice operates in connection with but largely independent of the league of nations.

* * *

As a result of the Irish election last week the dail eireann, the house of the Irish parliament, is now made up of 53 Free State representatives, 37 republicans, 16 independents, 14 labor representatives and 12 farmers.

* * *

E. E. Calvin, vice president of the Union Pacific railroad system, stated in a recent interview that if this season's transportation is normal there will be no serious car shortage. He says the Union Pacific system has a surplus of 13,000 box cars at present, to be used on its lines in western and northwestern territory.

See the A-M-F SICKLE Exhibit at the Fairs

Yakima, Wash., Sept. 17-22.
Spokane, Wash., Sept. 3-8.
Salem, Oregon, Sept. 24-29.
Portland, Oregon, Nov. 3-10.
Helena, Montana, Sept. 25-29.
Billings, Montana, Sept. 18-21.
Sacramento, Cal., Sept. 1-9.
Fresno, Cal., Sept. 24-29.
Orland, Cal., Sept. 17-22.
Salt Lake City, Utah, Oct. 1-6.

American Machine & Foundry Co.
511 Fifth Ave., New York

Farm Business and Markets Outlook

(Continued from page five.)

and Club, 86c; northern spring and Turkey red, 83c.

RITZVILLE, Wash., Sept. 1.—Bart, 88c; red, 84c; Fife, $2c.

WALLA WALLA, Sept. 1.—Bluestem, 95c; Club, 93c; Turkey red, 88c and 89c.

Hay and Feed Grain.

SPOKANE, Sept. 1.—Wheat—Feed wheat, $38 ton; oats, $40 per ton; rolled, $42; corn, $44 per ton; cracked corn, $46 per ton; barley, $36 per ton; rolled, $38; bran, $23 ton; bran and shorts, $34 ton; shorts, $26 ton.

Hay—Alfalfa, $20 ton in ton lots, $16@18 carload lots; new timothy, $21@22 in ton lots, delivered; $19 a ton in car lots f. o. b. Spokane.

PORTLAND, Ore., Sept. 1.—Millfeed—City delivery prices: Millrun, $27 per ton; middlings, $39; scrotch feed, $47; rolled barley, $39@41; cracked corn, $48; rolled oats, $39.

Hay—Buying prices, f. o. b. Portland: Alfalfa, $15.50@16 ton; cheat, $13@14; valley timothy, $18@19; eastern Oregon timothy, $20@22; clover, $13@14; oat, $14@15; oat and vetch, $15@16; straw, $8 per ton.

General Produce.

Fresh butter—92-score, 44¾c; 91-score, 43½c; 90-score, 42c; 89-score, 40½c; 88-score, 39c; 87-score, 38c; 86-score, 37½c.

Centralized carlots—90-score, 43c; 89-score, 40½c; 88-score, 39c.

Butter—Unsettled. Creamery extras, 44½c; standards, 43c; extra firsts, 41½@43c; firsts, 39@40½c; seconds, 37½@38c.

Eggs—Higher. Receipts, 11,545 cases: firsts, 28@30c; ordinary firsts, 26@27c; storage pack firsts, 31c.

NEW YORK, Aug. 31.—Butter, barely steady. Eggs, firm; fresh gathered, extra firsts, 32@35c; fresh gathered firsts, 28½@31c; fresh gathered seconds and poorer, 25@28c; nearby hennery whites, locally selected extras, 53@55c; state, nearby and nearby western hennery whites, firsts to extras, 39@52c; nearby hennery browns, extras, 40@47c.

PORTLAND, Ore., Sept. 1.—Butter—Cubes, extras, 45c lb; prices, parchment wrapped, box lots, 49c; cartons, 50c; butterfat, 49c, delivered Portland; average station buying price, 45c lb. Eggs—Buying price: White hennery standards, 32c per dozen; mixed color standards, 28@29c dozen. Selling price, Front street, selects, 39c; candled ranch, 36c. Association selling prices, cash at store, extras, 37c; standards, 35c; bakers', 30c; pullets, 30c. Cheese—Price to jobbers, f. o. b. Tillamook: Triplets, 28c; longhorns, 29c; loaf, 30c per lb. Poultry—Hens, 14@23c; broilers, 25@27c; ducks, nominal; geese, nominal; turkeys, nominal. Pork—Fancy, 13c per lb. Veal—Fancy, 16c per lb.

Onions—Walla Walla Globes, $1.75@2.25 per hundred. Potatoes—New Oregon, $1.25@1.75 per hundred; sweet potatoes, 15c per pound. Cabbage, Oregon, bulk, 2@3c lb; lettuce, $1.25@1.50 crate; garlic, 17¾@20c lb; tomatoes, 50c@$1 per box; celery, 50c@$1 dozen; peppers, green, 6@8c lb; cucumbers, 40@60c box; corn, 75c@90c sack; bunched beets, 35c dozen; bunched carrots, 35c dozen; radishes, 35@40c dozen; green onions, 35@40c dozen; beets, $2@2.50 sack; carrots, $2@2.50 sack; rutabagas, $2 sack; eggplant, 7@10c pound; summer squash, 50c@$1 crate.

SEATTLE, Aug. 31.—Eggs—Select local ranch, white shells, cases included, 35c per doz f. o. b. Seattle; mixed colors, 34c per doz; cases returned to shippers, 1c less; do to country stores, f. o. b., 30c per doz; loss off; eastern Washington, case count, 28c per doz f. o. b. Seattle.

Butterfat—F. o. b. Seattle: A grade, 49c per lb; raw milk, $2.30 per cwt.

Poultry—Hens, 4½ lbs and up, 24c per lb; do 3½ and under 4½ lbs, 16c per lb; broilers, 1½ lbs and heavier, 24c per lb; do heavy breeds, 1 to 1½ lbs, 23@24c per lb; do 1½ lbs and up, 23c per lb; hens, 3 to 3½ lbs, 12c per lb; do dry picked, 3c above live; capons, live, fat, 6 to 10 lbs, 35c per lb; do dry picked, fancy, dressed, 38c per lb; do roosters, 11c per lb; Belgian hares, 3½ lbs and heavier, 12c per lb; geese, fat, live, 15c per lb; ducklings, live, 3½ lbs and up, 16c per lb; ducks, old, over 3 lbs, 15c per lb; turkeys, fat, dry picked, 8 to 10 lbs, 30c per lb; do live, 25c per lb; squabs, large, dressed, $4 per doz; pigeons, $2; guineas, $8 per doz.

Beef—Steers, fancy, 7c per lb; cows, fat, 5c per lb.

Veal—Fancy light, 14@16c per lb; medium light, 12@14c per lb; heavy, 7@13c per lb.

Mutton—Fat, 9c per lb; spring lambs, fat, 15@16c per lb.

Hogs—Good block, 90 to 150 lbs, 10@11c per lb; do heavy, 6@12c per lb.

SPOKANE, Sept. 1.—Poultry, live weight—Hens, 4 lbs and over, 18c; light hens, under 4 lbs, 12c; springs, 18c to 20c; old roosters, 8c. Fresh ranch eggs, $7.50 to $8.50 case; fancy poultry farm, $8.50 to $9 case. Butterfat—46c lb.

Hides, Pelts, Wool.

PORTLAND, Sept. 1.—Hides—Salted hides, all weights, 5c; green hides, all weights, 4c; salted bulls, 4c; green bulls, 5c; salted or green calf, 10c; salted or green kip, 7c; hairslipped hides and skins, half price; flint dry hides, 11c; dry salted hides, 7c; culls and damaged, half price. Horse hides, green or salted, each $1@1.50; colt skins, each, 25c; dry horse with tail and mane on, 50c.

Pelts—Flint dry sheep pelts, long, 20c; flint dry sheep pelts, short, 10c; flint dry sheep pelts, pieces, 10c; flint dry shearings, each, 5@20c; dry salted pelts, 15c; salted pelts, long, each, $1@1.50; salted pelts, short, each, 50c@$1; salted pelts, shearings, each, 10@30c; salted goats, long, each, $1@2; salted goats, short, each, 50c@$1; dry goats, long, per lb, 15c; dry goats, short, each, 25@50c; goat shearings, each, 5@15c.

Mohair—Long staple, 40c per lb; short staple, 30c lb; burry, 19c lb.

Wool—Eastern Oregon, average to choice, 35@40c; valley wool, fine, 39c; medium, 30c; coarse, 25c; Cotswold and braid, 10c; matted, 15c.

Range of Live Stock Prices for Week Ending August 29

	Chicago.	Spokane.	Portland.	N. Salt Lake.
CATTLE.				
Choice and prime heavy steers (1100 lb. up)	11.65@13.10			
Good heavy steers	9.85@11.85			
Medium heavy steers	8.25@10.50			
Common heavy steers	6.50@ 8.60			
Choice and prime light steers (1100 lb. down)	11.40@12.75			
Good light steers	9.65@11.60			
Medium light steers	8.00@10.25	6.25@ 7.25	6.50@ 8.00	6.50@ 7.25
Common light steers	5.65@ 8.50	4.25@ 6.25	4.75@ 6.50	5.00@ 6.50
Common to choice butcher heifers	4.25@10.75	3.50@ 5.50	3.00@ 5.75	3.75@ 5.00
Common to choice butcher cows	3.40@ 9.35	2.75@ 5.00	2.00@ 5.50	3.50@ 5.00
Bologna and beef bulls	3.25@ 5.10	3.25@ 4.00	3.60@ 4.00	2.00@ 3.50
Canners and cutters, cows and heifers	2.50@ 3.50	2.00@ 2.50	1.50@ 2.00	1.50@ 3.00
Canner steers	3.25@ 5.65	2.50@ 4.00	2.50@ 4.00	
Medium to choice light veals	8.25@13.50	8.00@ 9.00	8.00@10.50	7.00@ 8.00
Common to choice heavy veals	3.00@13.25	6.00@ 8.00	5.00@ 8.00	
Common to choice feeders (750 lb. up)	5.75@ 9.00			
Common to choice feeders (750 lb. down)	4.50@ 8.50	4.00@ 5.25		
Common to choice stocker cows and heifers	3.25@ 5.75			
HOGS.				
Top of market	9.50	9.85	10.00	8.25
Bulk of sales	7.30@ 8.25	7.75@ 9.75	7.75@ 9.50	7.25@ 8.00
Heavy (250 lb. up)	7.80@ 9.25	8.25@ 8.75	8.25@ 8.75	
Medium (200-250 lb.)	8.40@ 9.45	9.00@ 9.75	8.50@ 9.50	7.65@ 8.25
Light (150-200 lb.)	7.50@ 9.50	8.75@ 9.75	9.50@10.00	
Light lights (130-150 lb.)	7.30@ 9.40	8.00@ 9.25	8.25@ 9.00	
Smooth packing sows (250 lb. up)	6.50@ 7.75	7.00@ 7.75	7.00@ 7.75	5.75@ 6.50
Rough packing sows (200 lb. up)	6.25@ 7.20	6.25@ 7.00	5.00@ 7.00	5.25@ 5.75
Medium to choice pigs (130 lb. down)	7.00@ 9.00	9.00@ 9.25	8.75@ 9.25	
Stock pigs		8.75@ 9.00	8.50@ 8.80	
SHEEP AND LAMBS.				
Medium to prime lambs (84 lb. down)	11.25@14.00	9.00@10.00	9.50@10.50	10.00@11.15
Culls and common lambs	8.50@11.50	7.50@ 9.00	7.00@ 9.50	8.00@10.00
Medium to prime yearling wethers	8.75@11.75	7.00@ 8.00	6.00@ 8.00	6.00@ 7.00
Medium to prime wethers	5.50@ 9.75	5.50@ 7.00	5.50@ 6.50	4.75@ 5.75
Medium to choice ewes	4.50@ 8.50	3.00@ 5.50	3.50@ 5.50	3.50@ 4.50
Culls and common ewes	1.00@ 4.75		1.50@ 3.50	1.50@ 3.50
Feeder lambs	11.50@14.10			

What's the Farmer's Test of a Tire

Simply this: Tires that do a farmer's work at the least ultimate cost; tires that meet the road conditions he must meet; tires that will take him back and forth between his farm and town.

Silvertowns meet his test.

Stop, and think it over. The first tire had to meet road conditions now found in the country. Goodrich, the pioneer tire maker, couldn't choose the roads for its tires any more than a farmer can choose his. So Goodrich built tires to meet them.

Your dealer sells Silvertowns, Goodrich "55" Clincher Fabrics, and Goodrich inner tubes.

THE B. F. GOODRICH RUBBER CO.
ESTABLISHED 1870

Goodrich
Silvertown Cord
"Best in the Long Run"
IN ALL SIZES FROM 30X3½ UP

Your Health

By Royal S. Copeland, M. D., F. A. C. S.

Civilization is doing many proud things. To my mind, the finest of these is what she is giving the baby. The improved health of the little ones and their constantly increasing chance of living are the accomplishments of civilization.

Dr. Copeland.

It is natural to assume and it is the popular belief that the pioneer days were safer from a health standpoint. But this is not the fact.

Within a period of half a century 11 years have been added to the expectancy of life. This statistical fact is founded to a great extent upon the improved conditions in the early age groups—the babies and the children under 5. Civilization owes this labor of love to the children, because many of the conditions of modern life are very trying to little folks. For instance, a baby's chance of living is three times greater if he is born in a house of six rooms than if he arrives in a house of two rooms.

One of the diseases which may be counted among those civilization has brought to children is rickets.

Rickets is a disease due to a deprivation of lime, or to the failure of the system to assimilate the lime offered by the food. Just exactly what is wrong is not fully understood, but certain clinical facts have been well established.

Without material change in the feeding, continuous exposure of the child to the sunshine will overcome rickets. This indicates that sunlight has some mysterious effect upon the system to cause it to function in such a manner as to absorb the minerals needed.

The administration of cod-liver oil several times a day will correct the rickety condition. A teaspoonful or more may be given three times a day.

Needless to say, the child should have the bathing, regular feeding and the daily

Latest High Class Patterns for the Home

Please order the patterns you desire at least two or three weeks before you wish to use them. Desiring to obtain the latest high-class patterns for its readers, THE FARMER has made arrangements to have them sent direct from the east, and under present mailing conditions it takes about that time for them to reach you

4456. Lady's Dress. Cut in 7 sizes: 36, 38, 40, 42, 44, 46 and 48 inches bust measure. A 38-inch size requires 5 yards of 40-inch material. The width at the foot of the dress is 2 1-2 yards. Price 10c.

4207. Girl's Dress. Cut in 4 sizes: 6, 8, 10 and 12 years. A 10 year size requires 3 1-2 yards of 32-inch material. Price 10c.

4478. Girl's Dress. Cut in 4 sizes: 8, 10, 12 and 14 years. A 12 year size requires 3 3-4 yards of one material, 36 inches wide. Price 10c.

4464-4482. Lady's Costume. Blouse 4464 cut in 7 sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. Skirt 4482 cut in 7 sizes: 25, 27, 29, 31, 33, 35 and 37 inches waist measure. To make the suit as illustrated requires 5 1-4 yards of 40-inch material. To face with contrasting material will require 7-8 yard of 40-inch material cut crosswise, or 1 1-8 yards cut lengthwise. The width of the skirt at the foot is 2 yards. Two separate patterns, 10c for each pattern.

4163. Lady's Apron. Cut in 3 sizes: Small, 34-36; medium, 38-40; large, 42-44; extra large, 46-48 inches bust measure. A medium size requires 1 3-4 yards of 27-inch material. Price 10c.

4212. Misses' Dress. Cut in 3 sizes: 16, 18 and 20 years. A 16 year size requires 4 3-8 yards of 40-inch material. The width at the foot is 2 3-8 yards. Price 10c.

4474. Child's Dress. Cut in 4 sizes: 4, 6, 8 and 10 years. A 6 year size requires 2 3-8 yards of 27-inch material. Price 10c.

4126. Lady's House Frock with Knickers. Cut in 7 sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. A 38-inch size requires 6 1-8 yards of 32-inch material for the dress, and 2 3-8 yards for the bloomers. Collar and cuffs of contrasting material as in large view, will require 5-8 yard. The width of skirt at the foot is about 2 1-4 yards. Price 10c.

3676. Boy's Shirt. Cut in 5 sizes: 6, 8, 10, 12 and 14 years. A 12 year size requires 3 3-4 yards of 27-inch material. Price 10c.

4171. Child's Dress. Cut in 4 sizes: 1, 3, 4 and 5 years. A 2 year size requires 2 1-4 yards of 32-inch material. Price 10c.

4479. A Neat Apron. Cut in one size, medium, and requires 1-2 yards of 36-inch material. Price 10c.

4462. Lady's Combination. Cut in 4 sizes: Small, 34-36; medium, 38-40; large, 42-44; extra large, 46-48 inches bust measure. A medium size requires 2 5-8 yards of 36-inch material. Price 10c.

Send 12c in silver or stamps for our up-to-date fall and winter 1923-1924 book of fashions.

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Enclosed find ..... cents for which send me the following:

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Name .....

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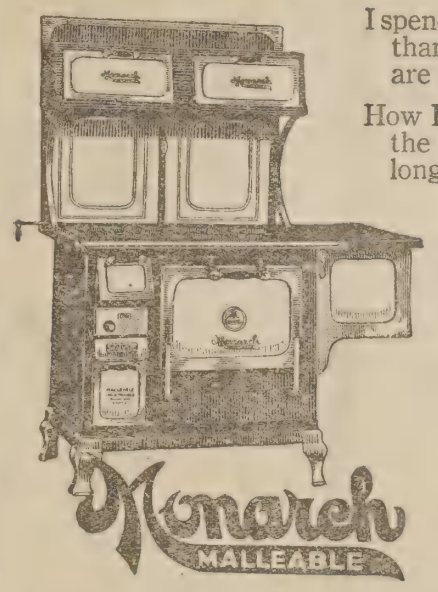
Be sure to give the pattern number and the correct size.

Cooking Is REAL Pleasure Now!

Everything I bake is perfect.

I spend fewer hours in the kitchen than ever before. My fuel bills are much lower.

How I do wish I had discovered the Monarch Malleable Range long, long ago.



DON'T YOU waste precious years before making this discovery.

Choose a Monarch for your kitchen NOW. Experience the joy that thousands of others have found in the use of this perfect range.

You will find it a lasting joy for years and years to come—

Because underneath the Monarch's handsome exterior is that permanent leak-proof construction that only a range built of malleable iron can have.

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We'll send you facts that will open your eyes to possible savings in your cooking expense and kitchen work.

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☐ Coal and Wood Range ☐ Gas-Coal Combination ☐ Gas Range ☐ Electric Range

Name .....

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ST. LOUIS MAN DISCOVERS A NEW KIND OF HEAT

Mr. B. M. Oliver, of St. Louis, has invented an amazing device, which ends forever the days of woman's slavery to dirty, mussy coal and wood fires. It sets into the firebox of any kind of heating-stove, cookstove or furnace without changes, and just turning a valve, it gives any degree of heat—3 times the heat of coal.

Mr. Oliver calls his invention the Oliver Oil-Gas Burner, because it burns 95 per cent air and 5 per cent oil (kerosene). Over 100,000 Oliver Burners are being used by American housewives. Mr. Oliver wants every woman to have the use of his invention if you will write to him at 2121-I Oliver Bldg., St. Louis, Mo., you will receive an attractive booklet FREE that tells all about it. Mr. Oliver is now making a special low price offer, including a 30-day free trial. He is also looking for live distributors, and will tell you how to earn $500 a month in full or spare time if you will request his sales plan.—Adv.

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DAZZELITE Gasoline Mantle

Creates the most dazzlingly white light known. 50% more light. 50% longer life. Lower cost. Guaranteed

SAMPLE FREE

Fits any gasoline lamp or lantern. Only $1.00 per doz. postpaid. Send dealer's name when asking for sample. Mfd. only by THE BLOCK GAS MANTLE CO.

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Stump Puller only $10 down

Easy to own the famous KIRSTIN One-Man Stump Puller. Pays for itself as you use it. You, alone, without extra help can pull big stumps—easier, quicker, cheaper!

Kirstin Stump Puller

Weighs less, costs less! Greater power, more speed, stronger—cheapest and easiest to use. Made in both One-Man and Horse Power styles, all sizes.

Make Money in Spare Time

Clear your land, then pull stumps for others. Frank Cook, Dewey, Illinois, made $1028.00 last year. Write for his story.

FREE 80 page Land Clearing Book. Send for low demonstrator prices, easy terms, and free book today.

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FORDS run 34 Miles (on Gallon of Gasoline)

Low Gear Seldom Used

With Air-Friction Carburetor

Guaranteed to reduce gasoline bills on any car from one-half to one-third and increase power of motors from 30 to 50%. Makes old cars better than new.

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Fits any car. Attach yourself. Start easy in cold weather. No shifting of gears in slow moving traffic. Send make of car and take advantage of special 30 day trial offer. Agents Wanted.

AIR-FRICTION CARBURETOR CO.

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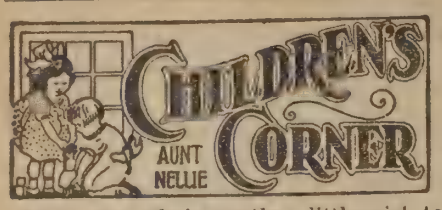
Just What You Want

may be offered in this week's want ads at a bargain. It's a good idea to look them over every week

Glance over the bargains on the "Want Ad" page.



"Will you admit another little girl to your group of happy cousins?" inquires Marie Jensen, living on Puget sound, Washington. (Yes, Marie, we are very glad to have you with us.) Marie's home is in the city now, but she has lived on a farm where she could have pets. She says they hope to be on a farm again soon. Marie attends Sunday school where there are 600 children. She is 9 years old. Her birthday is January 11. She has three sisters and ■ brother.

Lillian Ward is another new cousin who will be 10 October 7, 1923. She lives neighbor to Helen Owens of southern Washington, who writes to the Corner. Lillian has promised us a picture before long, which we shall be happy to receive.

Jimmy Engle writes his first letter to us. He says: "I live on a large wheat farm not far from town in Grant county, Washington. We have a number of horses, five cows and two calves. I have eight brothers. The youngest one is just ■ months old and his name is Harvey. I go to Sunday school at the schoolhouse almost every Sunday and teacher gives me a card. My birthday is January 24. I am 5."

We are glad to hear from Ellen Sanger, who writes that she with her mother and sister picked strawberries for a week at Green Bluff. Ellen's home is in Spokane county, Wash. This is her first letter for a long time. (Thank you for the poem, Ellen.)

Evelyn Olsen, whose home is on the Coast, is spending her vacation on a farm with her cousin. She says she likes to live on the farm very much and nearly every day she rides her cousin's pony. This new cousin is 9. Next year, February 21, she will be 10.

Esther Simila, a graduate this September, says she has been too busy to write many letters this summer. Recently she spent a whole day at ■ park, where she went swimming. "Swimming is great sport," says Esther, and we agree with her. She is a Lewis county(Wash.) girl.

Birthday Greetings

THURSDAY, September 6—Wilma Grace Cross, 10 years old.

FRIDAY, September 7—Helen Pendell, 10 years old.

SATURDAY, September 8—Mildred Medley, 11 years old.

SUNDAY, September 9 — Elizabeth Schmauder, 9 years old; Elsie Cramer, 8.

MONDAY, September 10—Marie Albin, 9 years old; Thelma Amon, 11; Thelma Engbretson, 11; Dolly Gifford, 11.

TUESDAY, September 11—Donna Farmer, 11 years old; Vilno Hanki, 10; Esther Schorzman, 9.

WEDNESDAY, September 12 — Eugene Kanta, 11 years old; Arthur Olsen, 7; Billy Watson, 10.

LETTERS WELCOMED BY AUNT NELLIE.

Among recent letters received by Aunt Nellie are those from cousins whose names follow. A few of these will be published each week in the regular edition of THE FARMER and others will appear from time to time in The Junior Farmer:

Vallborg Carlson, Mabel Bear, Frances Flanik, Edna McCash, Norene Rinehart, Clementine Deary, Margaret Peters, Esther Bonnet, Jimmy Lew Woodyard, Muriel Briggs, Margaret Liebing, Marguerite Duffy, Eleanor Brandt, Dorothy Haverill, Edna Garrison, Violet Dingerson, Annie and Violet Anderson, Arthur G. Chess, Anna Olson, Ethel Lucille Boawn, Dorothy Alice Hutson, Selma Peterson, Margaret Matthews, Cynthia Harlow, Doris Schy, Iva Ida Schrag, Lavern Nichols, Peter Kragt Jr., Della Haines, Dorothy Lowe, Lucille Hardung.

BEDTIME STORIES

By THORNTON W. BURGESS.

HELPING FARMER BROWN'S BOY.

The time was when every single one of the little birds and animals had looked on Farmer Brown's boy as the chief of all their enemies and had hated him just in proportion as they feared him. That was in the days when he had delighted to chase them and throw stones at them and hunt them with ■ terrible gun. That was before he had begun to get acquainted with them and had learned that the little people of the green meadows and the green forest have feelings just as he has and know love and joy and fear and suffering just as human people do.

But since he learned all this Farmer Brown's boy has been the very best friend the little people have. It took them a long time to find this out, because, you see, they had been afraid of him so long that they were suspicious of everything he did, and when he tried to make friends with them they thought it was a trick to catch them. But patience accomplishes a great deal in this world, and Farmer Brown's boy was very patient. He began to understand just how they felt, and he didn't blame them a bit, not ■ bit. He knew that if he had been in their place he would have felt just the same way. So when they ran or flew away from him or hid the moment he came in sight he just sighed to think that he should ever have done things to make them feel that way, and then tried to do something to show them how his heart had changed and that he no longer wanted to harm or frighten them. In the winter when food was scarce he put good things to eat where they could find them. When he found any of them in trouble he helped them out of it.

Little by little they began to understand that he wanted to be their friend. Tommy Tit the Chickadee was one of the first to realize this, and Tommy met him half way. It was not long before Farmer Brown's boy and Tommy were chums and Tommy's bright little eyes twinkled with pleasure every time he saw Farmer Brown's boy. Then Chatterer the Red Squirrel and Happy Jack the Gray Squirrel and Peter Rabbit and Striped Chipmunk and Johnny Chuck and Mrs. Grouse discovered that he was doing his best to make life easier and happier for them, and little by little they lost their fear of him. They began to look on him as a friend. He was forever trying to do something for them and for the other people. After a while some of them began to want to do something for him. They talked it over among themselves, but they couldn't think of a thing that they could do.

Old Mr. Toad listened gravely to all that was said, but with a twinkle in his beautiful eyes. When everybody else had confessed that they could think of nothing to do for Farmer Brown's boy he spoke:

"Catch bugs," said he, gruffly.

"What have bugs got to do with Farmer Brown's boy?" demanded Peter Rabbit.

"Everything," retorted old Mr. Toad. "They eat up the things that he is trying to grow. I know because I work in his garden. I've been helping him for a long time and he knows it. But I can take care of the bugs in only a small part of his garden. He needs a lot of help there. And he needs a lot more in the old orchard and in the berry patch. The worms and bugs are just spoiling the trees and bushes. If all who like bugs and worms to eat would get busy in the old orchard and the berry patch and the garden they would do more for Farmer Brown's boy than they can do in any other way. I know."

"Then let's do it!" cried Jenny Wren excitedly. "That little house is the nicest home I've ever had, and I'd like to do something in return. I catch bugs to eat, but I never supposed that doing that would help Farmer Brown's boy. I'll hurry right around and get all the other birds and we'll clean the old orchard of every bug and worm."

(Copyright.)

The Washington Farmer is welcomed just ■■ much by the wives and daughters on the farm as it is by those who hold the plow handles or who drive the big reaper. It devotes articles, pages and departments in every issue to the special field of women. It aims to lighten the work of those who must perform the endless tasks of the farm home, and to carry a word of inspiration and cheer to those who keep the wheels in the farm household turning smoothly.

The "Family Circle," with its constant interchange of experiences, ideas, opinions and methods, becomes more and more popular as the weeks pass.

The friendly interest of our women readers makes them warm adherents of our cooperative plan for securing and renewing subscriptions. Here is the idea. Many publications charge a high subscription price because it costs so much to gather the subscription orders. We eliminate the expensive system of having a force of agents go from town to town and from farm to farm to secure and renew subscriptions. Instead, we ask our friends to send in their own orders at least sixty days in advance of the expiration date stamped on the wrapper of your paper, and to include the orders of friends and neighbors with your own.

You get the benefit of the money saved by this economical plan. You receive this big, entertaining farm and family magazine for five years for only $1.

Continued cooperation is necessary. We hope to make 1923 even more successful for cooperation than the past years have been. Please do your part.

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Sept. 6, 1923.
The WASHINGTON FARMER,
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"MAN alive, those horses are used to hard work and they like it. I've kept them sound ever since they were colts with Gombault's Caustic Balsam.

"Got the idea from a neighbor who has been using Gombault's for forty years. It's a wonderful external remedy for most horse ailments. I've even cut out firing. Gombault's does the work better and doesn't scar or discolor the hair."

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A million successful treatments each year. Full directions with every bottle.

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An excellent remedy for sprains, bruises, cuts, burns, sore throat, muscular and inflammatory rheumatism, sciatica and lumbago. The Lawrence-Williams Company Cleveland, Ohio. *Sole Distributors for the United States and Canada.*

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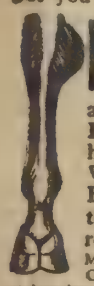

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It will pay you to write for free booklets and information offered in the advertising columns; and when you DO write, please mention THE WASHINGTON FARMER.

Honor Roll

Holstein-Friesians for 1922-23

Analysis of the Holstein-Friesian honor roll for 1922-3 shows that several northwest bulls are among the leaders on the list of 624 whose daughters appear on the roll, and that a cow bred in the northwest, Hollywood Lilith Palmyra Abbekirk, now owned in California, was the second highest prize-winning female of the year. She appears six times for 77 points, while the leader scored 82 points. The standings of various sires are computed on the basis of combined milk and butterfat production by their daughters.

The place of honor goes to a California bull, with 250 points, and all of the next 11 places are taken by eastern bulls. In 13th place, however, and leading for the northwest, appears Judge Segis, formerly herd sire at Hollywood farm, with 87 points. In 16th is Segis Walker Matador, one of Carnation Stock farms' sires, with 80 points, and further down the list appears Matador Segis Walker, Carnation's senior sire, with 48. Their combined score puts them in third place for the year among combinations of full brothers. One group of four scored 260 points, and one of three 198.

Sir Korndyke Ormsby Piebe, formerly a Todd & Sons herd sire, but now in the east, ranks next to Judge Segis, and at least two other bulls used by the Todds, including Sir Johanna Ruth Fayne, are in the list. Two bulls bred at Hollywood appear among those scoring 50 or more points, and there is a third in the list. Chimacum Spring Farm King Pontiac, another good northwest bull that was sold back east, ranks 45th, with 58 points, and there are three others bearing the trademark of "Chimacum." One of these is in the "Bang" herd at Steilacoom, but he has sired some of the highest producers in the state. At least two well-known "Bessie" bulls appear, one of them being the sire that rose to fame in the Yakima valley herds of Marks & Davis, the other the Tillamook bull that sired last fall's outstanding show cow of the breed and 32,000-pound 4-year-old. With 37 points, Sir Bessie Fayne De Kol Fobes is well toward the top of the list. Still another good bull in the first division whose service the northwest has lost is Mutual Fobes Longfield De Kol, with 28 points. King Segis 10th, sire of Segis Pietertje Prospect and many other good producers; his son, Paul Segis Fayne, head of the Bergsma herd at Ferndale, Wash.; Dutchland Governor Sir Colantha, the old bull being used by Ralph Tuttle of Walla Walla; three bulls bearing the "Hazelwood" trademark of John L. Smith; two bearing that of J. Luscher & Sons, Fairview, Ore., and several others obviously of northwest breeding are to be found in the list.

THE "BANG" HERD.

During 11 years' operation on the "bang" herd at the Western State hospital at Ft. Steilacoom, Wash., only one of the progeny of the tubercular females confined there has reacted, and 113 head of pure-bred Holstein cattle have thus been saved. The members of this herd pasture by themselves and are never allowed in contact with healthy cattle. Attendants of the healthy herd do not visit the bang herd without changing their clothes before and after, and any visitors to the enclosure where the tubercular cattle are kept enters and leaves over a mat soaked with disinfectant. Calves born to tubercular females are taken immediately in a sterilized blanket to the other barn, and there are raised exclusively on milk from healthy cows.

AYRSHIRE LEADERS.

Wenatchee Ayrshire farm of Wenatchee, Wash., has eight animals in the Ayrshire "50-pound list" for April, and two of them are leaders of their respective classes, while two others stand second in theirs. This is a remarkable showing, for Ayrshires from every section of the United States compete for the honor of being included in this list.

HOLSTEIN HERD NAMES.

One Idaho and two Oregon Holstein breeders have had reserved recently prefixes or herd names for their particular use. They are John Kaeser of Filer, Idaho, who will use "Filervale" in his breeding operations, and Jesse J. Gilbert of New Lebanon and M. E. Guenther of Gaston, Ore. Gilbert has reserved "Gilcrest" and Guenther "Chehalem."

DELAY FATTENING PROCESS.

Shoats should not be fed for fattening until a few weeks before marketing or butchering time.

BETTER PRICES For Your CATTLE, HOGS and SHEEP when sold on the open competitive market. We handle consignments for you on a commission basis only. Community shipments our specialty. Put your name on our mailing list for weekly quotations.

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Breeders' Department

COMPLETE DISPERSAL
WILLIAMS' JERSEYS
Sherwood, Oregon, Tuesday, September 18, 1923

Twenty-six head gold and silver medal cows, show prospects, young stock and the great herd bulls. Entire herd, including five daughters of Rosaire Olga Lad, four daughters of Captain Tristram and others close up to the world's heaviest producers. Among the cows are St. Mawes Boise Rosaire, gold medal cow, record 891.54 lbs. fat at 3 years 7 mo., she also has been a winner in the show ring and sold at auction in 1919 for $5100. Ediths Oxford Rosie, St. Mawes Boise Queen, etc. Be sure and be there. Catalogs now being prepared. If your name is not on my 1923 catalog list, send name to sales manager and one will be mailed as soon as published.

E. A. RHOTEN, SALE MANAGER, Salem, Ore.
R. C. WILLIAMS, Sherwood, Ore., Owner.

Hollywood Holsteins

Our show herd will be exhibited at Chehalis, Spokane, Lewiston (Idaho), Yakima and Salem (Oregon.)

Remember that none of these animals were purchased for show purposes, have all been in the herd three years or over, and with only two exceptions, the whole herd was bred at Hollywood Farm.

Hollywood Farm Hollywood, Wash.

4 Gold Medals
5 Silver Medals

PLEASE LOOK.

The Tiddledywink Noble family have made both gold and silver medals in two years testing. During test period they traveled across the continent, were exhibited in 3 shows, winning premier honors each time shown. They have won junior championships, grand championships, and, still better, have never been defeated as a dairy herd (5 cows in milk). They have show ring quality, along with producing ability.

May we quote you prices on better quality sires. We have two for sale.

Meadow View Jersey Farm
TURNER, ORE.

Jerseys for Sale or Trade
Pool Farm Offers 10 Cows

Besides these, 3 yearling heifers; 1 heifer calf, 3 bulls ready for service and 3 bull calves. All are richly bred, with register of merit and show records behind them.

S. O. POOL, Malaga, Wash.

Registered Jerseys

Cows and heifers of true Jersey type and proven production by register of merit records for generations back. These with some serviceable young bulls, we will be glad to show and price to you at Oregon state fair. St. Mawes-Oxford Lad-Majesty blood lines.

STANLEY A. RICHES, Turner, Ore.
RICH LEA FARM.

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Blood lines of phenomenal production and most perfect Jersey type.

CRANDALL & LYNN, Salem, Ore.

Maple Ridge Jersey Farm

offers strongly bred St. Mawes bull calf; bred for production and type. Reasonable.

J. C. BROWN & SONS, Shedd, Ore.

Richly Bred Young Jersey Bulls

Sired by Gertie's St. Mawes and out of tested dams with good records.

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Heifers and bulls, offspring of the great gold and silver medal bull, Silver Chimes of S. B.

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Graymere Jersey Heifers Bred and open, from 6 to 18 months old. Myra's Missionary, Plymouth Lad and Oxford Majesty breeding.

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Silver Medal Jersey Dams First four two year-old daughters of Susie's St. Mawes Poppy, average 575 lbs. fat, with first calf. Young bulls at attractive prices.

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A few registered bull calves, suitable to head any herd; also baby and heifer calves. Federal accredited herd No. 19073.

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Fitted show rams for good registered flock headers; range rams in lots to suit.

20 Shropshire ewes, sired by imp. Brewin 92; 20 Oxford breeding ewes, 40 Dorset breeding ewes and ewe lambs. All priced according to value.

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Range or stud rams and ewes, from one to a carload. Angora bucks and does. Priced for quick sale.

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Oxford Downs I have 21 registered yearling rams for sale, well kept and large for their age. Can also spare a few choice ewes.

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Modern type and good blood lines. Poland Chinas, Duroc Jerseys, Berkshires. Bred to farrow in September.

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Lookout and Cherokee breeding. Nonrelated stock at all times. Twelve years a breeder and exhibitor of Hampshire swine. I will attend the fairs at Spokane, Salem and Yakima. See me if attending any of these fairs.

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Best blood lines, well grown, good individuals. Booking orders for fall weanlings. Would sell few good sows.

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Big Buster and Giant Liberator are recognized as outstanding individuals and sires of real merit. Spring pigs sired by them for sale at very reasonable prices. Write at once for information.

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Polands 100 fine Clansman bred fall pigs must go at a bargain. My pigs and prices please from California to Alaska.

H. J. STILLINGS, Hermiston, Ore.

Berkshires An exceptional lot young boars. Breeding unsurpassed. Offered on a year's time. Write for sale plan. Cedar Canyon Farms.

F. M. CURTISS, Prop., Fruitland, Wash.

O. I. C. Pigs

Spring pigs, boars and sows. 3 young bred sows, one service boar. Farmer's prices.

O. O. PHELPS & SONS, Dryad, Wash.

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All Wool Serge $3.98

AGES—7 to 14 years. **State age size.** Shpg. wt., 1½ lbs.
17N42400C—Navy blue.
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Shipped from our SEATTLE store.

Famous Army Last Shoes for Boys

15N5259C—Boys'. Sizes, 1 to 5½. **$3.25**
15N5503C—Small Boys'. Sizes, 9 to 13½. **$2.49**
Shipped from our SEATTLE store.

Uppers are made from full grain chrome tanned leather. Heavy drill lining and first quality heavy oak tanned leather sole securely fastened to the upper. Color: Tan.

State size. Wide widths only.

Shipping wt.: Boys', 2⅞ lbs.; Small Boys', 2 lbs.

All Wool Sweater $2.98

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Girls' School Shoes

A shoe that is made right, of good quality leather and linings—stands long wear.

Brown or black leather, with sewed sole and rubber heel. [illegible] size. **Wide widths only.**

Shipping wt.: Young Women's, 2 lbs.; Girls', 1¾ lbs.; Small Girls', 1¼ lbs.

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15N7206C—Brown.
15N7205C—Black. **$2.49**

Girls'. **Sizes, 11½ to 2.**
15N7105C—Brown.
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Medium Weight **All Wool** Pullover Sweater for boys 7 to 13 years. Contrasting colored cuffs, bottom and collar stripe. Designed to withstand the hard knocks a healthy boy gives his clothes. A roomy sweater is more comfortable. Be sure to order a size large enough.

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$2.98
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Girls' Middy Blouse

This Middy, of iron wearing jean cloth, is especially attractive, and is made on the celebrated Admiral specifications with non-rip placket cuffs, braid trimming and double strength seams. This is one of our outstanding values and would cost you twice this price in most stores.

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17N26622C—White with blue trimming.
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Middy Blouse $1.19

Boys' and Girls' Guaranteed Hosiery

3 Pairs GUARANTEED to Wear 3 Months

16N40252C—Black.
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Medium Weight, Fine Gauge Combed Cotton Stockings. They are exceptionally neat and fine appearing. Fine gauge. Seamless flat knit feet. Double tops add to the wearing qualities of the stockings. Reinforced heels and toes. Sizes, 6, 6½, 7, 7½, 8, 8½, 9, 9½ and 10. **State size.** Shipping weight, three pairs, 10 ounces. **Three pairs guaranteed to wear 3 months.**

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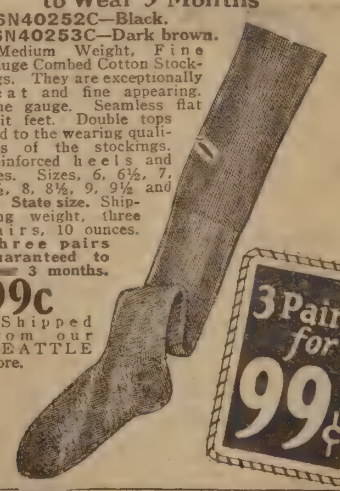
3 Pairs for 99¢



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All Wool Dark Brown Cassimere Suit

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Everybody knows our quality is right—and look at these prices. Honestly, you cannot duplicate these values and prices anywhere. Made from a strongly woven ALL WOOL dark brown mixed cassimere in the plain neat style shown above. Good strong lining in coat. **Full lined** knickerbocker pants. Remember, two pairs of pants mean almost double wear. You'll get real satisfaction from one of these suits. **Sizes, 7 to 17 years. State age size.** Shipping weight, suit with one pair pants, 3¼ pounds; with two pairs pants, 4¾ pounds.

40N3249C—With One Pair Pants. **$6.65**
40N3247C—With Two Pairs Pants. **8.65**
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Red Cross to Direct $5,000,000 Relief

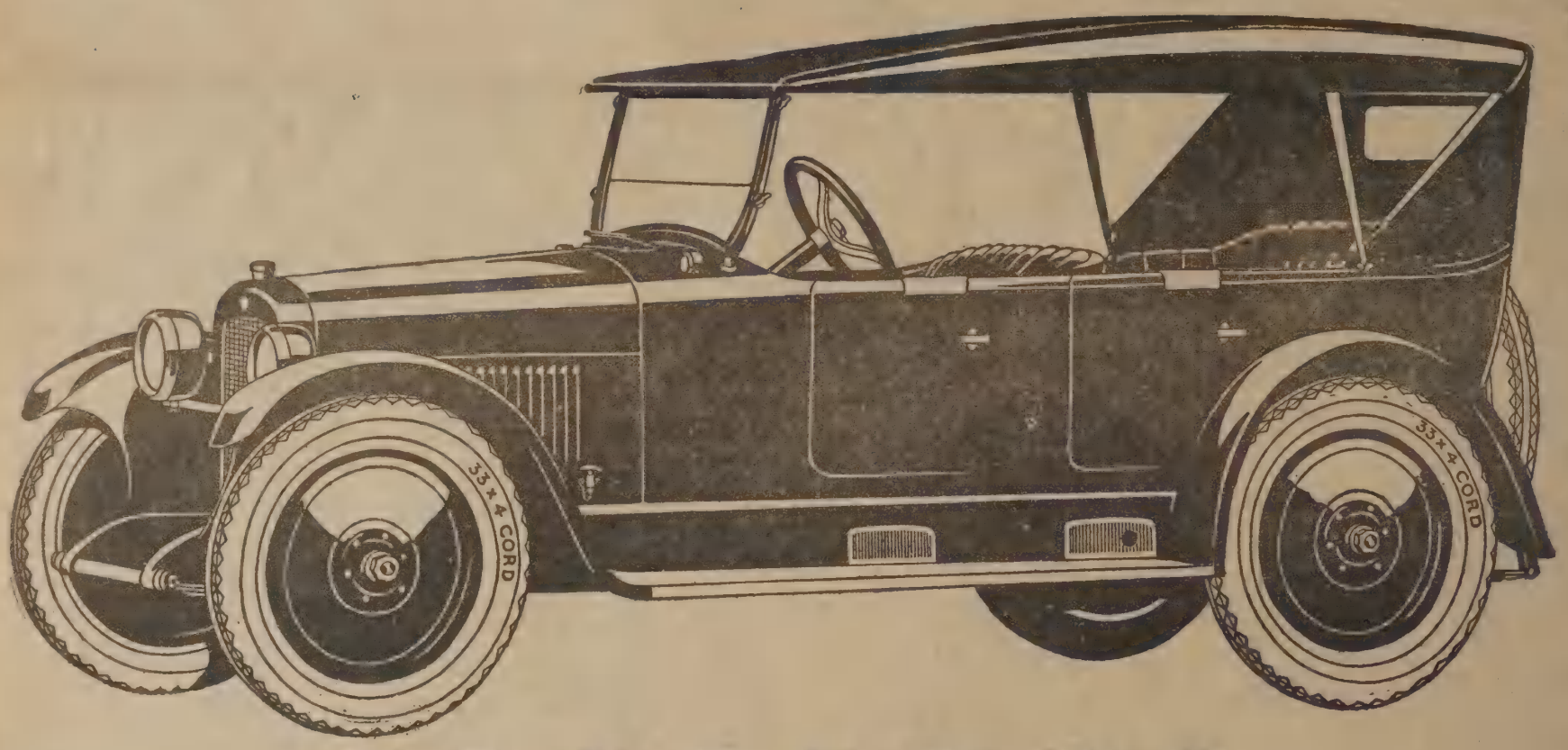
Japan's Appalling Disaster Centers World Thought on the Pacific

PRESIDENT COOLIDGE has been early at his desk announcing that the business of first importance before the executive branch of the government is the Japanese relief effort put forth by the American nation. The president personally has directed the state, war and navy departments to go the limit in extending aid, emphasizing that nothing that is possible to do should be left undone.

The Red Cross already is well under way in its appeal for a relief fund of $5,000,000, having taken over the entire purchasing and shipping department of the American relief administration. The shipping board also has placed at the disposal of the Red Cross approximately 320,000 tons of shipping. Continued on page eight

Do You Know How to Drive Safely on a City Street?---Page 18

NASH



PRESENTS

The New Four-Cylinder Touring Car

In the development of this new Four touring car Nash focused engineering effort directly upon those elements of performance of most vital importance to the farmer.

So you find in this car a structural ruggedness and solidity well calculated to accept the sternest kind of employment without faltering or weakening.

And so aptly and scientifically is the car sprung and balanced; so ably has the motor and carburetor been refined; that upkeep figures kept from week to week will show clearly that Nash Four economy in gas and oil is a very considerable saving.

The braking system has been given even greater sureness, power, and efficiency by reason of a special Nash application of time-tried and positively proved braking principles.

In addition, Nash has included in the extensive equipment a number of new and practical features that serve to give the car even broader value as an investment.

The Nash Motors Company, Kenosha, Wis.

Spokane Interstate Fair Educates and Entertains

Perfect Weather and Good Programs Make It a Financial Success, Also

Perfect weather prevailed every hour, day and night, for the Interstate fair. The exhibits and the entertainment were well above those often found at similar fairs. As a result, President T. S. Griffith and Manager W. G. Hannam were able at the close to announce a total attendance of over 98,000 and proceeds sufficient to cover all expenses and take up part of the outstanding indebtedness growing out of less favorable years in the past.

Two hundred and fifty hens that lay 120 eggs each per year pay their owner nothing for the work he does caring for them. If they lay 180 eggs a year they give him a labor income of $304, and if they lay 200 each they pay for their raising, board and lodging and give the owner $375, or about $1 a day, for his work. And then here's another figure. Read it and weep. The average hen in the state of Washington lays—how many eggs do you guess? Ninety-five! Therefore, the average hen in Washington is not paying for her keep, much less paying for the trouble she is.

Did somebody ask what that has to do with a report of the Spokane Interstate fair? Beg your pardon. Maybe we got started on the wrong foot. We'll try it again in the good, old-fashioned way.

The 30th annual Spokane Interstate fair was held all of last week and was bigger 'n better 'n ever, which is saying a lot. Good horses, big watermelons, the merry-go-round and all the trimmings were there. But the fact lingers in the writer's mind that if you're going to keep hens you should keep the kind that will keep you. If it is just company you want, get a friend to come and live with you. Don't board hens.

Yes, the fair at Spokane was a little better than ever this year. The entertainment before the grandstand was worth the money that it cost. The lemonade and soda pop seemed to give general satisfaction and the toy balloons did not burst for quite a while. There was a nice little scrap on the race track just after the running of the derby on Thursday that would have doubled the day's attendance if the management had forecast it and advertised it properly. And in addition to all that, the agricultural show, the live stock show, the poultry show, the art exhibit, the state college extension service booths, the automobile display, the tractor and machinery field, the department of agriculture section, the boys and girls' department and several others that just at this moment escape from memory provided enough information, stimulus and courage to make life interesting for the 12 months between now and next year's fair. It was in one of the extension service booths that we learned about the hens. If we tried to tell all that was in these booths worth remembering we would run out of paper before we got half way around. But we must tell one more thing about eggs right now. W. D. Buchanan, poultry extension specialist, has figured out that the people of the United States eat just a little more than half an egg a day each, on an average. If the average production per hen were increased five eggs a year (which the poultrymen are undertaking to do) it would mean that still the average consumption would be less than three-quarters of an egg. Hence the conclusion that the poultrymen should organize and advertise and not be afraid to increase production. Mr. Buchanan had a toy train in operation in his booth carrying eggs from Washington to New York. It bore evidence that a five-egg increase per hen in Washington would mean 110 carloads this year, with a value of $450,000.

Better Seed Urged.

In George L. Zundel's booth in the extension service exhibit was a real argument for better seed. It applied directly to potatoes, but the principle holds for anything from cabbage to cattle. Mr. Zundel showed how potato diseases could be controlled by hill selection and how failure to reduce these diseases through the production and use of good seed reduces the value of Washington's potato crop nearly $1,475,000 a year.

There was a milk goat at the fair that gives about a gallon of milk a day. Her feed bill for the entire week, the owner said, was 21 cents.

In the Holstein cattle barn W. E. Meyer, field man for this breed, had on exhibition a model bull. He was a model in more ways than one. He was made by a sculptor and he represented the ideal type of the breed as worked out by experts in the Holstein-Friesian association Meyer explained the points of that bull to a host of folks during the week who never knew before that the bull was half the herd, whether he was a good one or a scrub.

Down by the hog sheds one day four or five club boys or former club boys proved the value of club work when they sent a whole flock of veteran breeders of Duroc Jerseys away talking to themselves. The boys knew how to raise hogs and fit them for show. They won most of the first prizes and all but one championship in that breed.

Over in the club department proper a 14-year-old boy demonstrated, as few girls or grownups could do, what foods a baby of 2 years or so requires and how they should be prepared and administered.

Education Everywhere.

And so on the story might go with illustration after illustration of the strictly educational features of the Spokane Interstate fair. The excellent program of entertainment before the grandstand had nothing on the entertainment that the inquisitive visitor could find in any department on the grounds.

Notwithstanding that harvest was still on, the farm attendance was fairly good and the exhibits of agricultural products and live stock were above the ordinary. Competition in the agricultural pavilion was keen in many departments. Crops of all kinds were on display, from the honey crop to the grains and grasses. Incidently, the honey and bee display across the east end of the building was something sweet to look upon.

In the agricultural displays the booth winning first place was of the Camden grange No. 687, which won a total of 729 points. Second place went to an individual, J. H. Pennick of Valleyford, with a score of 629 points. The Espanola grange took third place, with 615 points. The 13 competitions divided premiums totaling about $700. In the individual competition $150 was divided among the following: First, J. H. Pennick, 629; second, Mrs. G. G. Lawson, 575; third, J. R. Orrock, 570; fourth, Mrs. A. Janny, 253.

In the county competition a total of $912.50 was divided among the following:

For the best exhibit of grain: Kootenai (Idaho), $100; Nez Perce (Idaho), second, $75; Lewis (Idaho), third, $50; Asotin, fourth, $25.

For the best exhibit of grasses and forage crops: First, Kootenai (Idaho), $100; second, Lewis (Idaho), $75; third, Asotin, $50; fourth, Ferry and Okanogan, $25.

Vegetables and root crops: First, Ferry and Okanogan, $100; second, Grant, $75; third, Kootenai (Idaho), $50; fourth, Asotin, $25.

For the most artistic display: First, Ferry and Okanogan, $75; second, Asotin, $50; third, Kootenai (Idaho), $25; fourth, Grant, $12.50.

Among the individual winners in the apple show were the following: W. R. Sanders, Mead; C. W. Scott, Neppel; C. W. Bennett, Opportunity; L. B. Nelson, Colbert; Hans Piterson, Colbert; Pettigrew Brothers, Neppel; Moses Lake Horticultural company, Neppel; William Kaysen, Trinidad; Mrs. M. Lamotte, Opporunity; F. D. Timm, Opportunity; Gerald Boyle, Opportunity; Bert Porter, Opportunity; Mrs. G. Dhaenens, Vera; G. A. Schleier, Opportunity; J. L. Gillispie, Veradale; Mrs. Sara Gatten, Colbert; W. M. Wilkins, Neppel; B. Van Zyverden, Greenacres; Walter R. Hanson, Colbert; Rudolph George, Neppel; Charles Cahill, Sharon; George Stevenson, Colbert; C. and O. orchards, Neppel, and John G. Mihm, Colbert.

Good Poultry Shown.

An excellent poultry show was held, with most of the leading breeds well represented. The award for the best display by one exhibitor was won by Mrs. J. N. Critzer of Opportunity, second going to Jacobson Poultry Yards, Tacoma, and A. Greener, Spokane. For the best display ane one breed, the awards were Jacobson Poultry Yards, first; Greener, second, and Mrs. Critzer, third. For the best five male birds, any breed, the three won as last above.

Among the winners in the poultry show were the following:

S. C. Buff Orpingtons—L. M. Varney, Spokane; Mrs. J. N. Critzer, Opportunity.

White Wyandottes—Frank Thompson, Spokane; Mrs. N. Sabadin, Spokane; University of Idaho and V. C. Rae, Spokane.

Partridge Wyandottes—John P. Coffeen, Spokane; Bruce B. Burke, Spokane.

S. C. White Leghorns—A. Greener, Spokane; L. M. Patterson, Spokane; University of Idaho; White Poultry Yards, Oak Grove, Ore.

S. C. Black Orpington—R. H. Finley, Opportunity; R. C. Black Orpington, R. H. Finley.

S. C. Buff Leghorns—Boone Avenue Poultry Yards, Spokane; John Flemming, Spokane; J. G. Wilder, Everett.

R. C. Brown Leghorns—Boone Avenue Poultry Yards. S. C. Brown Leghorns—W. G. Salmon, Spokane; Boone Avenue Poultry Yards.

S. C. Black Leghorns—C. I. Doll, Hillyard.

Blue Andalusians—Boone Avenue Poultry Yards.

Silver Campines—F. W. Hoffman, Spokane.

Silver Spangled Hamburgs—E. E. Enos, Spokane.

Black Minorcas—Rendle & O'Brien, Spokane; University of Idaho; Boone Avenue Poultry Yards; W. H. Wooster, Opportunity.

Buff Minorcas—Mrs. B. Sammons.

White Plymouth Rocks—University of Idaho.

Light Brahmas—Adam Schaffer, Hillyard; Mrs. Agnes Masser, Spokane.

S. C. Anconas—Brainard Electric Hatchery, Seattle; Owen & Partridge, Spokane; Mrs. L. A. Thuma, Spokane; Frank Scarpelli, Spokane.

R. I. White—Mrs. J. W. Ince, Spokane; John S. Ovey, Spokane.

Red Cuban Games—Melwin Porter, Hillyard. Old Family Pit Games—H. L. Needham, Greenacres.

Black Tail Japanese Bantams—Forest Sammons, Spokane; H. C. Grimes, Spokane.

Australian Kiwis—Mrs. Ethel Ellithrope, Lamont, Wash.

Australian turkeys—Boone Avenue Poultry Yards, Spokane.

Golden Seabright bantams—Frank Thompson, Spokane; Forest Amsden, Spokane.

White Pekin ducks—Mills brothers, Spokane.

White Pekin ducks—Mills Brothers, Spokane.

White African guineas—Mills Brothers.

Bronze turkeys—J. Demsey, Sharon; Mrs. B. F. Watson, Chester.

Rouen ducks—F. W. Ferrell, Chattaroy.

Toulouse geese—Mills Brothers.

White Emden geese—Mills Brothers.

THE LIVE STOCK SHOW.

The live stock show was unusual. In many breeds there was little competition, yet throughout unusual high quality prevailed. In the horse barn, for instance, R. C. McCroskey of Garfield had it all his own way in the Clydesdales, except for one animal shown by H. T. Whitman of Spangle, that was made senior and grand champion stallion. McCroskey's herd made up an excellent Clydesdale division. Similarly, in the Shire breed, H. W. Merritt and his father, M. W. Merritt, showed their great string, taking most of the first premiums, but dividing honors with a few other breeders exhibiting from one to three or four head. In the Percheron classes there was a little more competition, though the greater part of the show was made up by animals belonging to C. K. Thayer of Waverly and H. C. Doepke of Fairfield. Here also the quality was high class.

One of the leading features in the horse department was the competition in draft teams. McCroskey's Clydesdales won first for two-horse, four-horse and six-horse teams in harness. W. A. Clark showed the second two-horse team. H. W. Merritt won second in four-horse and six-horse teams, with Doepke taking third in both these lots.

Another interesting feature was the boy's colt show, in which Max Merritt, age 7, won first place with Henry-Retta, a Shire; Orville Clark, second with Tandridge Lad, a Shire, and Doris Thayer, third, with Belmont, a Percheron. In ad-

(Continued on page sixteen.)

Three Ambitious Club Boys

Take Carload of Good Live Stock Out on Show Circuit

When three club boys can scrape up enough animals and courage to take a carload of stock out on the show circuit all of their own accord, it proves what kind of stuff the boys' and girls' clubs are made of. It shows that they have initiative and want to get wider experience in the showing of farm animals.

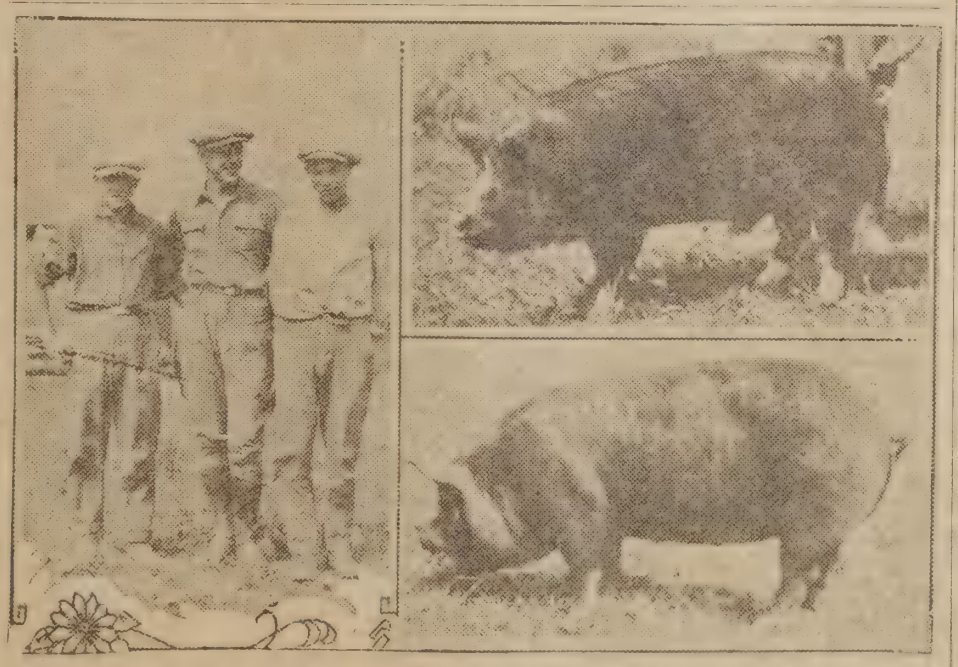
It was early in the season when Kenneth Hinshaw, Howard Norris and Earl Selle, all from Goldendale, appeared at the Skagit County fair at Burlington with a carload of Berkshire and Duroc Jersey hogs, together with seven sheep and a Jersey calf. Although they made no effort to conceal the fact that they were club boys, they entered all animals in the open classes, prepared to take their chances against all comers.

The 18 head of Berkshires included in this shipment were owned jointly by Kenneth and Earl, who are in partnerships and are raising what they call "Earlken Berkshires." A junior yearling boar, River Bank's Laurel Epoch, heads the herd. He comes originally from the River Banks' farm at Grants Pass, Ore., and is a grandson of Epochal, and also a grandson of Laurel Champion. A sow of the same age, Quasti's Royal Lady's 2d, is one of their main show animals, sired by Champion Type the 2d. This is the sow which Kenneth picked out at one of the California fairs last fall after asking her owner if he would let him have his pick out of the pen for $50. He never dreamed that Kenneth knew pigs as well as he did and of course had no idea that he would pick the sow that would be made the champion of the show.

The other sows in the Berkshire herd are practically all of Grape Wild breeding, while two others were purchased from the Italian Vineyard company, also of California. One sow from the latter herd was junior champion at the California state fair last year.

The Duroc Jersey hogs were shown by Norris, who brought along five head, including two boars of the Pathfinder and Sensation strains. He also has one Chester White, having both these breeds at his home at Goldendale. To complete the variety, he entered seven of his purebred Hampshire sheep, including an aged ram, two ram lambs and one aged ewe. He obtained his start of the purebred Hampshire breeding from the Foothills farm at Carleton, Ore. In addition to his hogs and sheep, he brought along a junior Jersey bull calf, which is owned by Will Horneybrook, one of the other club boys at Goldendale, who could not make the trip. This animal is of Mountain View breeding, and at six months of age weighed 550 pounds.

Earl Selle is the oldest one of the boys and he is only 20. While Kenneth Hinshaw is only 17, his size, however, puts him officially in charge of the trio, while Howard Norris is the youngest of the three, being only 16. All three of the boys show that they have had excellent training in caring and feeding of live stock, and their appearance at the show has caused no little comment among other club boys, as well as some of the grown-up breeders of the state.



Below, Guasti's Royal Lady, a junior yearling sow owned by Kenneth Hinshaw and Earl Selle of Goldendale. She placed grand champion of the show at the Skagit county fair at Burlington, this year.

Above, River Bank Laurel Epoch, the junior yearling boar owned by Hinshaw and Selle. The boar is sired by one of the River Bank boars at Grants Pass, Ore., and was made champion at Burlington. The three boys are Howard Norris, Kenneth Hinshaw and Earl Selle, all of Goldendale. The boys are showing a carload of club animals on the northwest fair circuit.

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Value of Testing

With a clear increase in the production of both butter fat and milk in every herd in the Thurston County Cow Testing association, with one exception, for the 1922 period over that of 1921, the value of the association seems proved beyond cavil. County Agricultural Agent E. B. Stookey has worked out the figures to his own satisfaction and to the satisfaction of all who have seen them. In fact, the increase of production is so large as to be sensational. And the increase in profit above feed cost, amounting to about 50 per cent, is even more remarkable.

It is true that several of the low herds dropped out at the end of the first year, but in going over the figures, Mr. Stookey found that the average increase of profit for the entire association was less than the average increase for the eight herds that were in the association both years. There were 189 cows completing the test for 1921-22, and 163 for 1922-23. The first year the average fat production was 262.7 pounds, while for the second year it was 346.2, or an increase of 83.5 pounds. The average milk yield for the two years was 6418 pounds and 8140 pounds, an increase of 1722 pounds. The average profit above feed cost was $68.67 per cow and $99.52, or an increase of $30.85 per cow. Taking the eight herds referred to, that were in the association both years, Mr. Stookey found there were 11 cows on test the first year and 108 the second year. The average fat production for these herds the first year was 284.8 pounds and the second year it was 332.5, showing a gain of 47.7 pounds per cow. The average milk yield rose from 7229 to 8122 pounds, an increase of 895 pounds. The average profit per cow went from $68.43 to $105.06, or a gain of $36.63 per cow. This is a gain of $5.78 greater in profit per cow for these eight herds than the increase shown for the whole association, showing that the members in the association two years profited more than did those in only one year.

Another fact worthy of notice is that for these eight herds the feed cost per cow was $90.88 the first year and $104.78 the second year, or $13.90 more per cow. The fact that the profit per cow was $36.63 more the second year than the first not only indicates that the more feed used the greater should be the profit, if fed judiciously, but that the extra cost was not due to a higher price for feed. During the year 27 cows were sent to the butcher. This undoubtedly helped to raise the production records and the profit above cost of feed. The herd making the greatest percentage of increase was that of T. A. Rutledge, of Little Rock. With ten cows in the herd both years it showed an increase of 104.3 pounds of butter fat per cow and the profit above feed cost rose from $43.58 to $86.33 per cow.

The highest production of any herd for the past year was made by 14 Jerseys belonging to E. Munn & Son. They averaged 421.7 pounds of fat and 7791 of milk. The high cow of the association was St. Mawes of Glen Thelma, a four-year-old pure bred Jersey, belonging to A. E. Lundeen of Rochester. She produced 574.3 pounds of fat from 11,335 pounds of milk. Six cows in the association each made over 500 pounds of fat.

Women's Clubs Help Dairymen

J. A. Scollard, president of the United Dairy associations of Washington, says that the women's clubs of the state were the largest single factor in putting over the anti-margarine bill in the last legislature. He gives full credit to all the friends of the bill and of the dairy interests in the legislature, and recognizes the influence of the organization which he heads, but when all is said, he believes the women exerted more power over the legislators than any individual or body of people. And Mr. Scollard is just as confident that, when the time comes that an active campaign is begun, these same women's clubs will be found standing shoulder to shoulder with the dairymen to banish imitation butter from the state.

Supplements Summer Feeds

The idea is prevalent that silage is a feed for winter only. It is true that the original purpose in putting up silage is to provide a succulent feed through the months of the year when the natural green feed is not available. On this principle there is a period every summer when silage may be fed as appropriately as in the winter time. In almost all localities the native grasses dry up in the summer, resulting in a marked decrease in production of milk unless a succulent feed, such as silage, is used. Hence many good dairymen are making it a regular feature of their system to have a silo full of silage for summer use.

An Educational Feature

While the regular fall fairs furnish much education along a wide variety of lines, the winter show devoted exclusively to a single subject is of special value to those interested in that subject. For instance, there is a wealth of information in the potato show for the potato-grower or for the farmer who merely produces a small acreage for home consumption or local markets. The same is true of the poultry show, of the hay and grain show and of the live stock show.

Such events as this are held in a large number of localities throughout the northwest each winter. They should be enthusiastically patronized by the people of such communities.

Early Apple Harvest

Wenatchee reports that the apple crop is fully ten days earlier this year than last. September 20 has been officially set as the date of the opening of the 1923 apple harvest by the growers and shippers, acting in connection with the Wenatchee employment office. This means that upon that day thousands of outside men and women will be given work in the orchards and the warehouses of the district. Usually the opening of the apple harvest occurs about October 3. Of course many cars of apples will be picked and shipped before September 20, but the great rush of harvesting will begin on that date and will continue until the end of November.

Walla Walla Fruit Shipments

Last year, 1922, was a record year for the fruit growers of Walla Walla, the shipments totaling 2112 cars. This year the fruit growers of that valley expect to ship a total of 2400 cars. Prunes contribute largely to this total. Already 896 cars of prunes have been sent out, and about 300 cars more will be added to the shipment.

Washington State Gleanings

The best authentic oat yield of the season is that obtained by Robert Lyle, eight miles west of Pullman, who reports an average of 103 bushels an acre from eight and three-fourths acres. Oats in the Pullman region are yielding better than for several years.

FUR SALE AT TACOMA.

The fourth sale of Alaskan and Siberian furs held in Tacoma this year resulted in 31,557 pelts bringing approximately $100,000. One lot of 27 white fox skins brought $1170, and a lot of 56 marten sold for $1950. Among the furs sold were red fox, muskrat, white fox, ermine, mink, lynx, beaver and black, grizzly and brown bear. Another shipment of Alaska and northern furs will be out before the cold weather and the fifth sale of the year will be held in November.

SUNNYSIDE CANNERY OPERATING.

About 100 persons are employed canning pears in the Younglove cannery in Sunnyside, which has begun operations under management of F. C. Armstrong. New equipment, including two large cooking retorts, a new boiler and filling and capping machines, have been added. The cannery makes a specialty of salad pears, canned whole with the stems on. Last fall the plant canned 10,000 cases of solid pack tomatoes.

OATS YIELD 75 BUSHELS PER ACRE.

Thirty acres of oats threshed on the farm of Charles H. Greely, about 16 miles north of Vancouver, Clarke county, returned 2240 bushels of oats, averaging about 75 bushels to the acre.

Many farmers throughout the county, who have completed harvesting their grain crops, report that most of the wheat and oat crops have not been threshing up to pre-harvest predictions. More straw than usual is being found.

PLAN FOR PACKING SCHOOL.

Fruit warehouse owners in Wenatchee are seeking to open a packing school to train workers for packing season, which opens there about September 15. One concern offered its buildings and all of their equipment, including two instructors, to the county agent if he would arrange a school session. Under present plans instruction will be given at several points in the Yakima valley also to insure plenty of help when the peak of the apple season is reached.

CABBAGE SEED SHIPPED EAST.

Cabbage seed valued at more than $7000 has been shipped east from Skagit county. The shipment, which totaled 5623 pounds, was made through the Skagit Valley Seed Growers' association for distribution in Illinois and Wisconsin. J. C. Walker, seed expert for the Kraut Manufacturers' association in these two states, and who made the selections, accompanied the shipment.

The seed for this shipment was selected from the farms of O. T. Atfelt, Ed Dahlstadt, Elmer Johnson, W. E. Jennings, Francis Johnson, Morris Jensen, H. M. Karison, Nels Larson, J. T. Ovenell and R. F. Smith.

MORE COLD STORAGE FACILITIES.

The Wenatchee district has materially increased its cold storage space this year. Available facilities will accommodate about 7500 cars in common and cold storage, as against 5748 common and 633 cold storage last year.

Since the first of the year the Pacific Fruit and Storage company has completed its warehouse in Wenatchee with a capacity of 150 cars. Sgobel & Day have taken a new warehouse, Crenshaw & Bloxom will have additional space in their new building, R. A. Tedford & Co. will have several floors in the Eagle Transfer warehouse and the Columbia Ice and Cold Storage company has added to its space. It is said that this district is in better shape than it has ever been, so far as storage is concerned.

LIKES OIL WRAP FOR FRUIT.

"The oil wrap for fruit has absolutely solved the storage problem," said L. A. Day, federal fruit inspector at Wenatchee recently.

"I am convinced," said Mr. Day, "that our troubles with scald will be over for all time as soon as the oil wrap comes into general use. Last year I took special note of fruit with and without oil wraps coming into Wenatchee. I found that fruit shipped without the oil wrappers came in with from 16 per cent to 40 per cent scald, while that shipped oil wrapped showed not a sign of this blemish."

"I am not alone in my belief that the new wrapper has solved the scald problem. Such men as Earl Barnhill of the American Fruit Growers and many others have adopted this method of wrapping this year and every one of them is an enthusiastic booster."

REPORT ON HAY TONNAGE.

The general organization committee of the Northwest Hay Growers' association met in Yakima August 25 and reported nearly total figures of the hay tonnage of the four counties where virtually all the alfalfa hay is grown, Kittitas, Yakima, Benton and Walla Walla, which is placed at about 160,000 tons. This tentative organization has had the indorsement of bankers, who believe its method of operation will, under capable officers, be of great value to hay growers of the state.

Members of the general committee are Herbert Adams, Ellensburg; Everett S. Dam, Seattle; W. S. Hedger, Walla Walla; H. L. Hull, Yakima; Charles Huston, Prosser; Lee Lampson, Kennewick; W. F. Medaris, Parker; J. F. Schreiner, Yakima; J. O. Sorenson, Ellensburg; L. L. Todd, Benton City, and W. R. Wilson, Sunnyside.

CANNING TONS OF BEANS.

Ferndale's berry crop was a winner and the bean crop will be as good and possibly better than in 1922, according to John McCush, manager of the Ferndale Canning company.

The strawberry and raspberry packs of the local institution were three times as large as last year, while gooseberries and loganberries were also packed in excess of 1922. Only in cherries was there a decrease in the pack and the untimely rains caused a shortage that could not be avoided.

Beans are coming to the cannery by the ton loads.

One day recently receipts totaled more than 100 tons. The cannery contained beans from the front door of the receiving room to the shipping doors on the spur track. A hundred or more women and girls are employed preparing beans for the cans, while a score of men and women handle the cans through the processing.

Reassuring Wheat Figures

Tends to Offset Vast Volume of Price-Knocking Propaganda

As an offset to the price-demoralizing propaganda on the world's wheat crops and markets, it is encouraging to turn to the August 15 review of the Continental and Commercial bank of Chicago, the largest bank in the west. As this calm review says, "'For many weeks there has been much agitation as to crops, particularly the wheat crop. There has been a vast expenditure of emotion."

What are the facts as they are gathered and stated by this authoritative review?

The United States department of agriculture says that the crop in this country this year will be 793,000,000 bushels. The Chicago bank authority says "It will be, in the final summing up, less, rather than more."

The same authority puts domestic consumption of wheat, including seed wheat, at 633,000,000 bushels. That would leave only 160,000,000 bushels for export, of this year's crop, which is considerably less than we have been exporting in recent years. In the fiscal year which ended June 30, 1923, the country's exports of wheat, including wheat flour, were 221,923,184 bushels. In the previous fiscal year they were 279,251,776 bushels.

If the Chicago authority is right, and we have an exportable surplus from this year's crop of only 160,000,000 bushels, it will be nearly 100,000,000 bushels less than the average exports of the preceding two years.

The Chicago bank authority reminds us that "in considering the export question it must be remembered that Europeans are accustomed to buying wheat in the American market. Tales of the stopping of export sales of wheat, long current, are refuted by the figures. Since January 1 last, wheat in the form of wheat and wheat flour has been exported to the amount of 88,752,000 bushels."

And here is another reassuring fact that the market-demoralizers are not quoting: "In September and October the American wheat growers have the world market to themselves. Argentina and Australia have no crops until January, and Canada's spring wheat is not yet ready. Reports of crop conditions in the wheat-growing countries of the southern hemisphere are entirely speculative, and their influence on the market is now insignificant. Reports from Russia, once a country having wheat for export, are at least conflicting.

"If Russia has wheat for export its transportation facilities are worse than inadequate. Moving a wheat crop or part of one requires financial resources and machinery. Russia has neither. In Australia and Argentina they are deficient, and even Canada is not well equipped."

"But," say the calamity howlers, "foreign demand is going to fall off. The European people are eating less wheat." To that the Chicago authority says: "There is nothing in the situation to indicate that Europe's demands for American wheat will be smaller in the next 12 months, or that her buying will not continue at the rate maintained in the past year. There is probability of good demand for export in September and October for the reason given. European buyers are familiar with American markets and methods, and there is precision in grades, quality and in certainty of transportation which makes the American market attractive."

The same authority notes other phases of the situation which indicate larger demand and therefore higher prices for wheat. Millers in the Atlantic coast states, it says, are searching the markets for supplies. Their home product is short of their need.

THE FARMER is not attempting to forecast the future prices of wheat, but is glad to give the foregoing reassuring facts, which are badly needed now to offset the vast volume of price-knocking propaganda which, if it should be traced to its source, would be found to come from foreign buyers who are trying to throw our wheat growers into a panic and get their surplus at a sacrifice.

Wine Is a Mocker

"Unintoxicating" Delusion Exposed by Visit to England and France

Wine is a mocker, strong drink is raging, and whosoever is deceived thereby is not wise.—Proverbs, 20:1.

Charles J. Brand, former chief of the United States bureau of markets, is back from a tour of Europe with a conviction "that the United States, by sticking to prohibition, even though it may not be thoroughly enforced, will outdistance the world in the sharp economic competition of the next 25 years." Mr. Brand admits that he went to Europe more or less impressed with the statement, so often asserted in America, that "light wines and beer" are unintoxicating. But sights in England and France cured him of that delusion. "One need not visit more than two Parisian cafes to have the opposite fully proven," he now declares.

Mr. Brand adds that "the unsteady steps, the red faces and redder noses that one sees everywhere leave no doubt that alcohol is one of the most threatening dangers in all Europe. "England is spending more than $2,000,000,000 a year in drink; France about $1,500,000,000.

But that is the smallest part of the price that the European countries pay for alcoholic beverages. It is but the small change passed over in the settlement. The bigger price is paid in social degradation, crime, increased disease, insanity and mortality; in the impaired condition of the workers, in the reduced production of the drink-cursed countries.

All this easy talk about the harmlessness of "light wines and beer" is intended to deceive the public. If congress should violate the Constitution and pass a law legalizing the manufacture and sale of wine and beer, the old saloon evil would come back upon the country. That is proved by the present experience of British Columbia, where the distribution of beer is under government operation. Conditions have sprung up in Vancouver, B. C., and other cities of the province that are a disgrace and a scandal.

FARM BUSINESS AND MARKETS OUTLOOK

ANOTHER wave of southwestern grassers and western rangers struck the leading cattle markets last week, raising the beef supply indicator another 10 per cent to the highest point of the season and about 50 per cent above the May and June level even after allowing for larger purchases of stockers and feeders. Only in a minor degree is the heavy movement a result of forced selling because of drouth or tight money.

The increased burden fell on the intermediate and lower grades which declined about 25 cents in price. Volume of receipts considered, the decline was small and the general average of values remained high, indicating that the dressed beef trade has not developed hardening of the arteries. The dearth of choice steers continues and a top of $13.10 was repeated on the Chicago market with further advances probable.

Cows and heifers have been relatively scarcer than steers and made moderate gains for the week. The veal calf market developed an unsteady gait and declined 75 cents to $1.25 at Chicago.

Shipments of feeder cattle in the last two weeks were larger than during the corresponding period in either of the last three years. It begins to appear that feedlots will be filled as full as last year in spite of higher feed costs. The supply of suitable steers has been steadily increasing and price changes were in favor of buyers last week.

Hog Prices Higher Than Year Ago.

Receipts of hogs have expanded as a result of the recent upturn, but not enough as yet to cause much of a setback from the high point. The total supply is far in excess of normal for this season, but the market is performing exceptionally well. Last week, for example, receipts were about 20 per cent larger than in the same week a year ago, when they were larger than ever before at that time, but the Chicago top was $9.75 and the average reached $8.70, compared with $9.45 and $7.75, respectively, a year ago. Evidently, consumptive demand is better than last year. A feature of last week was an advance of 3 to 4 cents a pound on pork loins in eastern markets.

During the rest of the year it is probable that the supply will not run a great deal higher than last year and if domestic per capita consumption is maintained at the rate which has prevailed for 12 months, as there is reason to believe it will be, prices should average but little lower than last year.

Setback in Lamb Market.

Lambs have been coming a little too fast in the last two weeks, as the movement has expanded nearly 50 per cent and prices lost about half of recent gains. The supply is beginning to run larger than last year, but is considerably below normal for the season. Further increases in receipts can be expected in the next month, by which time the peak usually is reached, but this increase will be offset partly by larger purchases of feeding lambs, so that the price edifice is not in great danger. Thus far the number of thin lambs which feeders have been able to obtain does not indicate that the fed lamb market will be overloaded later on. Thin lambs outsold fat lambs about 25 cents last week.

British Wool Market Strong.

The wool market is beginning to show more life. The London auction, which buyers have been awaiting, opened with prices 5 per cent higher on all grades in spite of the absence of Japanese operators. The rate of mill operations has been declining, although it is still fairly high. Stocks of goods are being distributed and mills have bought such a small amount of wool recently that they are expected to enter the market on a larger scale before long, although they still report that new orders for goods are coming in slowly.

The new clip in Australia is estimated at 1,918,000 bales and in New Zealand at 583,000 bales, compared with 1,941,000 bales and 533,000 bales, respectively, last year.

Steady Tone in Wheat.

Wheat prices have been covering a narrow range in the last two weeks, but have made some progress upward. The market appears to be adjusted to such bearish influences as exist, so that changes in the situation are likely to favor higher values.

Primary receipts in the last two months have been about the same as in that period a year ago. Sales from farms have been reduced, according to reliable estimates, as a result of the holding movement and the smaller crop, but the absence of any car shortage has permitted more prompt shipment from country elevators to terminals than was possible last year. Mills have ground about as much wheat as last year, but there has been a notable lag in clearances for export. As a result, wheat has piled up in the visible supply, which has gained 33,000,000 bushels in the last seven weeks, compared with an increase of 12,000,000 bushels in the same period a year ago. The total is already practically the largest on record at this time of year.

The peak of the winter wheat movement has been passed, but spring wheat is taking its place, so that heavy receipts and a further accumulation at terminals can be expected for six or eight weeks. The Canadian wheat movement usually reaches its pinnacle in October and November, so that there will be no scarcity of wheat in commercial channels for some months.

While such conditions will be a drag on any upward trend in prices for a while, worldwide conditions appear to be changing in favor of higher values.

The range of cash grain prices for the week ended September 5 was as follows:

Chicago—Wheat—No. 2 red, $1.03@1.05 1-4; No. 3, $1.00 3-4@1.04; No. 4, $0.96 1-2@1.00; No. 1 hard, $1.03 1-2@1.11; No. 2, $1.02@1.10; No. 3, $1.00@1.05 1-2; No. 4, $0.96 1-2@1. Corn—No. 2 mixed, 86@88 1-2c; No. 2 yellow, 87 1-2@90 1-2c; No. 3, 87 1-4@ 88 1-2c; No. 2 white, 86@88 3-4c. Oats—No. 2 white, 38 1-4@41 1-2c; No. 3, 37@40c; No. 4, 35 1-2@38 1-4c. Rye—64 3-4@70c. Barley—53@70c.

Seed and Feed.

A sharp advance in timothy seed prices featured the seed markets last week.

The sharp advance in byproduct feeds dulled the demand from retailers and consumers to some extent.

Further Advances in Hay Markets.

Hay prices made additional gains last week. Demand for good timothy exceeds the supply at nearly all markets and prices of low grades have been boosted. The south and southwest states are buying alfalfa actively.

Prices per ton in carlots: Chicago—No. 1 timothy, $26@28; No. 2, $23@25; No. 3, $21; No. 1 light clover mixed, $24@26; No. 1 clover, $22@23; No. 2 clover, $15@17; No. 1 and choice alfalfa, $18@28; upland prairie, $17@20; packing and feeding, $12@16; rye straw, $11@12; oat and wheat straw, $9.50@10.50.

Egg Prices Continue Upward.

Egg prices continued their upward trend last week as an active demand for the light receipts of select quality eggs developed. Receipts of fresh eggs continue far ahead of last year, but withdrawals from cold storage are light, as compared with a year ago, when larger supplies were moved out to supplement current receipts. This situation is responsible for the general belief that storage egg prices are in line for a decline.

Latest Quotations.

Chicago—Eggs—Miscellaneous, 28@29c; dirties, 21@22c; fresh firsts, 28@29c; ordinary firsts, 26@27c. Live poultry—Hens, 23c; broilers, 23c; springers, 23c; roosters, 14c; ducks, 23c; geese, 18c; turkeys, 20c.

Butter and Cheese.

Light receipts of fancy butter was the price sustaining

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Only Unified Effort Can Rid Locality of Weeds

"It is difficult to eradicate weeds that have an underground stem, such as the Canadian thistle, quack grass and others, but one of the most effective methods is that of smothering," according to M. E. McCollam, agronomist of the Western Washington Experiment station at Puyallup. "Tar paper has been used by many with good results. It is spread over the infested spot from May until September in the case of quack grass, as explained in Farmer's Bulletin 1307, which says in part:

"The tar paper should be of a heavy grade and laid so as to overlap about three inches, and the laps should be weighted with earth to make a tight joint and prevent the paper from blowing away."

Hand digging is another very effective method of eradicating small areas of these weeds. It should be done carefully, however, so that all pieces of rootstock will be removed.

Eradication in extensively infested fields is an extremely doubtful accomplishment, but there are a few cropping practices which will tend to control the weeds. Seeding a smother crop of wheat and vetch early in the fall to be cut in late spring for silage or green feed, followed by fallow during July and August or a late sown cultivated crop, is one method. Another excellent control measure is a short rotation of crops on the infested land, such as fall grain seeded down to clover and grass one year, and a cultivated crop one year. One should always have in mind the control of the weed. The utilization of the crop becomes a secondary consideration.

For working badly infested land there is no better type of harrow than the disc, especially in the case of quack grass. The disc harrow when sharp is, in fact, the only harrow which will make much of an impression on an infestation of quack grass. Harrows which tear out only part of the rootstock and drag many away to infest other portions of the field should be avoided.

In berry fields the orchards weed control will have to depend upon the thoroughness and frequency of cultivation.

A Community Problem.

Doubtless the spread of these weeds is being facilitated by patches in waste places and along roadsides which are allowed to mature seed. Many weed seeds are light enough to be carried some distance by the wind. This is especially true of thistles. Preventing noxious weeds from seeding is a consideration for the whole community and the man who tries to control his weeds should have some recourse against his neighbor who makes no attempt whatever.

The state of Washington has a noxious weed law which requires owners, lessees or occupants of lands, improved or otherwise, to take steps to control such weeds if he knows his land to be infested with them. If this is neglected and the weeds allowed to ripen seed such landowner is, under the law, guilty of a misdemeanor The law excludes logged-off or cut-over lands.

The road supervisors under the direction of county commissioners are given responsibility in enforcing part of the law. Although it is also one of the duties of all officials of the state department of agriculture to observe and report the existence of noxious weeds, the enforcement of the law still rests with the road supervisor of the district, and it should be possible to get immediate action through this official.

In his description of three weeds that are particularly troublesome in western Washington, Mr. McCollam says that every one should become familiar with these weeds in order that they may be recognized at first sight.

Quack Grass.

Quack grass has one of the worst records in the kingdom of weeds, and as we come to get better acquainted with it there seems to be hardly a chance of doing ought but add to its already adequate denunciation. Quack grass is also called couch grass, witch grass, wire grass and wild wheat. It is found most abundantly on land that has been brought under cultivation. It is a typical grasslike plant growing from 40 to 60 inches high under favorable conditions. The seed head resembles somewhat a slender head of wheat. The plant propagates by means of seed and creeping, underground rootstocks. These rootstocks are pointed, quite fleshy, white in color and capable of spreading extensively, but do not go very deep. Together with the feeding roots they tend to form a dense mat in the surface soil. If the rootstocks are broken into small pieces each bearing a joint is quite capable of propagating a new plant.

The seed produced by the plant is ripened during July and August. Fully half the seeds will germinate and will propagate new plants if they come in contact with the soil. Very commonly unripe quack grass seed will sprout well and it becomes necessary to cut the grass as soon as the seed heads have formed if one wishes to be sure of destroying the seed.

The surest way to identify quack grass is by its seed head, which is long, slender and wheatlike, and by its relatively large, white, fleshy underground rootstocks. Kentucky bluegrass and red top also have underground rootstocks, but they are smaller and the seed heads of these grasses are of the spreading, feathery type, much different from the seed head of quack grass.

The Canadian Thistle.

Canadian thistle is an erect thistle, usually from two to four feet in height. The leaves have deeply cut edges, waved and curled, and are armed with many hard, slender, very sharp spines. The most troublesome feature of this thistle is its persistent underground rootstocks, which have a creeping habit and send up new shoots at close intervals. Some of the plants may have perfect flowers and produce seed, while others may have imperfect flowers and not produce seed. Canadian thistle is not regular in its seed production and its seeding habits are affected also by locality. There may be years when no seed at all is produced. Seed is produced most abundantly in the northern states. In this state seed production appears to be fairly regular, and is one of the principal means of propagation which should be guarded against at all times. As is characteristic of thistles, the seed has a fringe of hairs and is readily transported by the wind. Distribution of the weed is also effectively accomplished by its underground, creeping rootstocks. One root may produce many shoots, which may appear throughout the entire growing season. The possibilities of distributing pieces of these roots to all portions of a field by carrying them on plows, harrows and other implements is evident.

Other Kinds of Thistle.

Canadian thistle is best identified by its relatively small and numerous purplish colored flowers, by its extremely curly and prickly foliage, and by its underground, creeping rootstocks. Bull thistle is often mistaken for the Canadian thistle, but the two are quite unlike upon close examination. The bull thistle has no rootstocks, has large and less numerous flowers of a blue color, and usually occurs isolated, while the Canadian occurs in patches.

Perennial sow thistle is a worthy running mate of each of the aforementioned and has caused enormous losses in land values and in crop yields because of its exceptional ability to propagate by both rootstocks and seed.

The plants have a dense mat of smooth leaves at the base. The flowering stems have few leaves and are usually four to six feet, growing erect and bearing numerous yellow blossoms, resembling a dandelion in size and shape. The whole plant contains a milky juice which will exude if a leaf or stem is broken. The underground rootstocks are fleshy and tender. A piece of this rootstock will produce a new shoot with remarkable rapidity and from considerable depth in the soil. The seed produced by the sow thistle is quite viable, and easily spread by the wind.

Act Now to Get Lower Taxes!

Readers of The Washington Farmer will remember the articles we have published from time to time by Lester M. Livengood, vice president of the State Federation of Taxpayers' Associations, dealing with fundamentals in the problem of bringing about lower taxes. We are glad to give space just at this crucial time to another, in which Mr. Livengood urges immediate action on the part of taxpayers if they wish the burden of taxes lowered, or even kept within its present excessive limit.—Editor.

A year ago at this time farmers all over the state, aroused by crop failures, excessive taxation and prospects of even greater taxation through the possible enactment of the 30-10 initiative, were keenly alive to the necessity of reducing public expenditures, and some mighty good work was done in the various counties. This year the farmer is still in a serious position and his tax burden is still excessive. To reduce his taxes requires constant pressure. Merely protesting during the days of adversity and forgetting the tax problem when conditions are a little better is what has permitted the tax burden to reach its present unreasonable rate.

This Is the Day!

The month of September is the time of year when the sun shines for the haymaker in tax reduction work. Therefore, the farmers must not overlook the fact that if they want lower taxes for next year or even taxes kept down to the present rate, they must exert themselves with their public officials during this month or it will be too late. The public officials all over the state are making up their budgets now which will determine next year's tax burden. Everything unnecessary that goes into their budgets means more taxes for the farmer. The urgency of even a keener scrutiny this year of public expenditures is evidenced by occasional press dispatches over the state that here and there public officials are padding their budget estimates from 10 to 15 per cent, claiming that the new budget law is so strict that they must have some leeway. If the farmers and other taxpayers let this sort of proceedings go by, they need blame only themselves if their tax burden is increased for next year.

The Taxpayers' Own Law.

It is human nature to chafe under any additional restraint and it can not be but expected there will be officials who resent the additional restrictions of the budget laws, however beneficial they may be, and their only way to strike back at the taxpayer is to pad their estimates and thereby discredit the law. Since the budget law is merely a tool to provide information for the taxpayer, it requires that the taxpayer make use of it; otherwise it will be as useless as an automobile without a driver. These budget laws do not impose unreasonable restrictions on public officials and where the taxpayer is on the job there is no evidence of intention to estimate more than is really needed. For the farmer who does not have in mind the provisions of the budget law it may be said briefly that they require the setting up of the estimates in a tabular and comparative form, which has been difficult for taxpayers to get heretofore, and that once the estimates are adopted the public officials can't spend more than the limits of the various items except for real emergencies. Among expense items free transfer is permitted under certain regulations, so that if an officer overestimates one class of his expenses and underestimates another, he can get the commissioners to transfer the surplus to the place needed. Where exceptional things happen demanding expenditures not in the budget—and these things will always happen—the commissioners can make the necessary expenditures by issuing emergency warrants which will have to be replaced in next year's tax levy. These warrants will draw interest only in case the fund on which they are drawn has no cash on hand, which is a rare condition with the current expense fund covering most of the county's expenses. The taxpayers and farmers should study each item of expense in the budget and compare with this year's appropriations and last year's expenditures to see if anything has been added on the theory of not having enough for unforeseen items. The theory of the law is that an official should estimate his exact needs and take up the slack for unforeseen demands through the emergency clause, which concentrates all contingent items into one place and puts a damper on using the emergency method except for real emergencies. The preliminary budget will have been adopted probably by the time this is public, but the taxpayers have until the first Monday in October, that is to say, October 1, to study these estimates and to prepare for the public hearing on October 1, whereat the estimates can be reduced, but not increased.

Kalkus in Charge

The resignation of H. E. McNatt, dairyman of the Western Washington experiment station, took effect September 1, and his place will be filled by Dr. J. W. Kalkus, who will take charge of the dairy barns and herd. This department will be handled as a demonstration herd for the experimentation with such diseases as are prevalent in western Washington. From 20 to 25 cows will be milked and any abortion that shows up will be isolated in order to show that such diseases can be controlled by isolation and blood tests.

Ninety Thousand Dollars!

Live stock breeders and students competing in the various contests at the Pacific International Live Stock exposition in November this year have opportunities to take home with them a good many thousand dollars in the form of premium money won. The total money offered at this great western show this season is over $90,000. It is divided as follows:

Beef Cattle Division.

Shorthorns—By the exposition, $2500; by the American Shorthorn Breeders' association, $2085; total, $4585.

Herefords—By the exposition, $2500; by the American Hereford Breeders' association, $1665; total, $4165.

Aberdeen-Angus — By the exposition, $2500; by Congdon & Battles, Yakima, Wash., $500; by the American Aberdeen-Angus Breeders' association, $400; total, $3400.

Dual Purpose Cattle.

Milking Shorthorns—By the exposition, $2500; by the American Shorthorn Breeders' association, $500; total, $3000.

Red Polled—By the exposition, $1000.

Dairy Cattle Division.

Holsteins—By the exposition, $3250; by the Holstein-Friesian Association of America, $2750; total, $6000. (This includes the $1500 offered for the special extension service state Holstein-Friesian herd competition.)

Jerseys—By the exposition, $2500.

Guernseys—By the exposition, $2500.

Ayrshires—By the exposition, $2500.

Brown Swiss—By the exposition, $1000; by the Brown Swiss Cattle Breeders' association, $500; total, $1500.

Sheep and Goat Division.

Rambouillets—By the exposition, $500; by the American Rambouillet Sheep Breeders' association, $300; total, $800.

Southdowns—By the exposition, $500.

Shropshires—By the exposition, $500; by the American Shropshire Registry association, $250; total, $750.

Hampshires—By the exposition, $500; by the American Hampshire Sheep association, $320; total, $820.

Oxfords—By the exposition, $500; by the American Oxford Down Record association, $200; total, $700.

Dorsets—By the exposition, $500.

Cheviots—By the exposition, $500.

Corriedales—By the exposition, $500.

Romneys—By the exposition, $500; by the American Romney Breeders' association, $100; total, $600.

Cotswolds—By the exposition, $500; by the American Cotswold Registry association, $100; total, $600.

Lincolns—By the exposition, $500.

Suffolks—By the exposition, $500.

Leicesters—By the exposition, $500.

Angora goats—By the exposition, $1000.

Milk goats—By the exposition, $500.

The Hog Division.

Poland Chinas—By the exposition, $750.

Poland China futurity—$1000 guaranteed by the Poland China breed promotion committee and by the exposition management.

Duroc Jerseys—By the exposition, $750.

Duroc Jersey futurity — $1000 guaranteed by the National Duroc Jersey Record association and the exposition management.

Chester Whites—By the exposition, $750; by the Chester White Swine Record association, $100; total, $850.

Berkshires—By the exposition, $750.

Hampshires—By the exposition, $750.

The Horse Division.

Percherons—By the exposition, $1500.

Belgians—By the exposition, $1500.

Shires—By the exposition, $1500.

Clydesdales—By the exposition, $1500.

Jacks—By the exposition, $350.

In addition to the above there will be awarded $23,000 to winners in the fancy horse show which is given each evening of the Pacific International. This is appropriately divided between the draft, roadster and saddle breeds.

The Fat Stock Division.

Fat Shorthorn cattle—By the exposition, $500; by the Shorthorn Breeders' association, $415; total, $915.

Fat Hereford cattle—By the exposition, $500; by the Hereford Cattle Breeders' association, $335; total, $835.

Fat Aberdeen-Angus cattle—By the exposition, $500.

Beef cattle car lots—By the exposition, $1075.

Feeder cattle car lots—By the exposition, $575.

(The American Shorthorn Breeders' association offers $250 for the grand champion steer if a Shorthorn and $500 for the champion car lot of fat steers if Shorthorns.)

Fat Sheep—By the exposition, $1100.

Fat hogs—By the exposition, $1935.

The Stock Judging Department.

Boys' and girls' clubs—By the exposition, $2135; by the Portland Union stockyards, $1000; by the exposition management, $750; miscellaneous prize contributions, $475; total, $4330.

Students' judging contests—By the exposition, $2000.

In addition to the foregoing premiums numerous special premiums in the form of silver trophies, ribbons and so forth will be awarded by various individuals and institutions.

After Grain Crop

What to Do to Harvested Fields

"After removing the grain crop the farmer may do one of several things to his field," reads a U. S. D. A. bulletin on "Experiments in Wheat Production on Dry Land of the Western United States."

"He may:

1. Disk the stubble land in the fall.
2. Burn the stubble in the fall or spring.
3. Plow the land in the fall.
4. Leave the stubble standing and disk the land in the spring.
5. Leave the land uncultivated until it is plowed in the spring.

"Each of these practices is followed by farmers in the states of Oregon, Washington, Idaho and Utah.

"Plowing for fallow is usually done in the spring. Advantages claimed for fall disking are apparent rather than real, for it has actually reduced yields at Moro, Lind and Nephi (experiment stations). Spring disking of stubble generally is beneficial if done late. A good double disking then usually will kill all plant growth, which is the chief object of disking.

"The chief purpose of the summer fallow system is to conserve moisture for crop use during the growing period. The average moisture content of the soil to a depth of six feet on the Moro station after a season of fallow rarely exceeds 14 per cent, and a winter wheat crop usually reduces this content to about 5 per cent. There are other effects of tillage, however, which have a very important bearing on production and which should not be overlooked in considering the problem of fallow. Indirectly, because of its influence on soil temperature, aeration, moisture location, etc., tillage has a very marked effect in promoting the activity of soil bacteria; and as a result of this action and the direct effect of soil stirring and moisture additions, the chemical makeup of the soil and, consequently, the availability of plant food is very materially altered by tillage. Early, clean tillage in particular promotes the development of nitrogen and after a year of fallow there are much larger supplies of it in soils so treated than in those plowed late or on which weeds have been allowed to grow."

The bulletin was written jointly by D. E. Stephens, M. A. McCall and A. F. Bracken, respectively superintendents of the experiment stations at Moro, Lind and Nephi.

Hand-Power Sprayer

The Western Washington orchardist who has only a few trees to spray but does not feel justified in purchasing a large power outfit, yet can not get along with a small hand power sprayer, can do as A. J. Linstad did with a small 1 1-2 horsepower stationary engine. He bought a small spray pump and connected the engine direct to the shaft of the pump and mounted the two machines on a frame which fitted on a wagon bed. Enough room was left at one end for two barrels, which were filled with the spray material and pumped out as needed. Two hose connections were connected to the force pump and the machine operated in the same manner as a large spray machine.

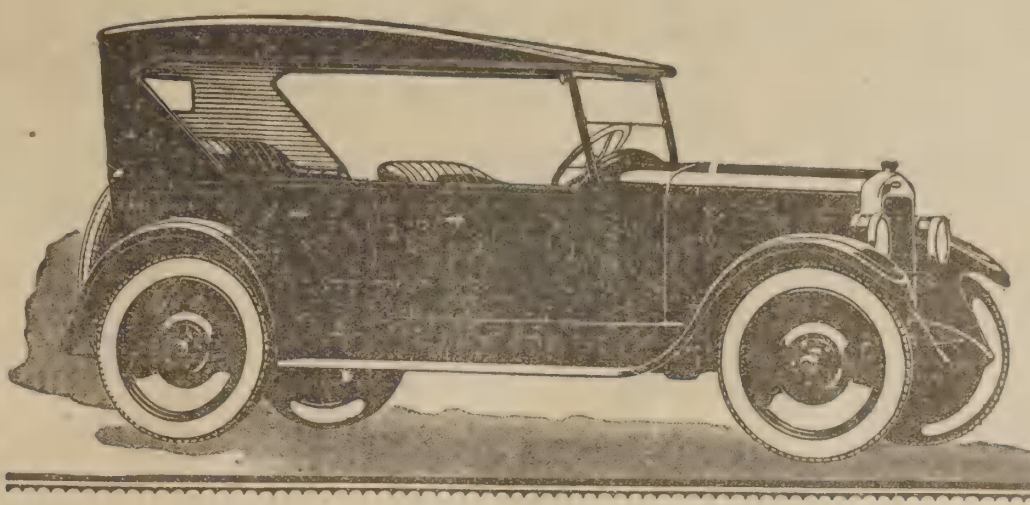
Mr. Linstad says he has been able to get a 250-pound pressure on the two hose lines, and he has been able to use it for any job needed at his orchard. The whole arrangement was installed at a total cost of $110 at the time it was built. This, however, includes prices which were prevalent nine years ago, but the machine has stood up during this time and is expected to last many years to come.

Bulletins of Interest

The "Eat More Lamb" campaign appears to have reached the printshop of the United States department of agriculture, for "Lamb and Mutton and Their Use in the Diet" is the title of a 14-page farmers' bulletin on the latest list available for free distribution. Others that may interest northwest farmers are "Rural Planning" (F. B. 1325), which deals with the improvement and beautification of rural recreation places, public grounds, and trade and civic centers; "Back-Yard Poultry Keeping" (F. B. 1331); and "Tomatoes as a Trunk Crop" (F. B. 1338). One which will be of greater interest because of the author is "Distribution of Types of Farming in the United States (F. B. 1289), by W. J. Spillman, formerly of Washington State college. Any of these may be had without cost upon application to the department at Washington, D. C.

FARM BUREAU CORPORATION.

Articles of incorporation have been filed at Olympia for the Spokane Farm Bureau corporation, Spokane. The capital stock is $4000 and the incorporators are George H. Johnson, H. R. Anderson, A. G. Craig, C. H. Anderson and J. L. Miller. This is a pooling organization which will handle the prune, potato and apple crop this year for members of the county farm bureau. A Spokane warehouse is proposed. T. S. Brown, secretary of the county farm bureau, is in charge of the business of the new company.



Announcing the 1924

Oakland "6"

Brand New and True Blue

Embodying Exclusive Features of Engineering Design and Superior Coachwork Never before Associated with Cars of Moderate Price

This True Blue Oakland was deliberately planned to be the most perfectly balanced, the most accurately engineered and the finest built light-six in the world.

Two years have been devoted to its design, manufacture and test. Two years—plus the wealth of Oakland experience gained through many other years of exclusive light-six manufacture and the limitless resources of the General Motors Corporation in money, machinery, materials and men.

From axle to axle—it's new! It embodies features of mechanical superiority—of beauty and comfort and performance—heretofore unheard of in cars of its price! Every single part—from the new engine to the new bodies—was designed and built to fit and function in perfect harmony with every other part.

And because it has been so carefully designed, so soundly built and so thoroughly tested—Oakland places upon it, without hesitation, the same written 15,000 mile engine performance guarantee and the same Mileage-Basis gauge of value that have proved the quality and the value and the excellence of Oakland cars for years!

Four-Wheel Brakes—Brand New Engine—New Bodies—Centralized Controls—Disc Steel Wheels

The finest light-six is now also the safest! Four-wheel brakes are on the True Blue Oakland! But four-wheel brakes—remarkable as they are on a car of Oakland's price—are only one of the many improvements and refinements built into this new and true blue car!

It has a brand new engine—smoother, quieter and more powerful than even its highly successful predecessor, the Six-44.

Its beautiful new blue bodies—built by Fisher—are wider, deeper, and more luxuriously upholstered. The top is permanent, accommodating a distinctly new type of door-opening side curtains comparable in snugness and utility to the door of a closed car.

A satin-wax finish stamps the open models with individuality never before attained in cars moderately priced.

Instruments are grouped on a single glass-covered panel, indirectly lighted. Controls are centralized on the steering wheel. Disc steel wheels are standard equipment, at no added cost.

See this new Oakland—see it at once! Come with a critical mind—because the more exacting you are, the more quickly will you realize that no other light-six in all the world approaches it in dollar-for-dollar merit.

Roadster Touring Car Sport Roadster Sport Touring Business Coupe 4-Passenger Coupe Sedan

OAKLAND MOTOR CAR COMPANY, PONTIAC, MICHIGAN

Division of Oakland *General Motors*

A Fleet of "True Blue Travelers"

—of which the 1924 Oaklands are exact counterparts—is engaged in a nation-wide demonstration! With thousands of miles of test service already on their speedometers—they are out to demonstrate, at first hand, the high quality of Oakland construction, and the remarkably efficient performance buyers may expect from their True Blue Oaklands.

Red Cross Directs Relief

(Continued from page one.)

The United States shipping board steamer City of Spokane, laden with 6000 tons of flour, anchored in Kobe, received instructions from the American government to offer the entire cargo for relief of the destitute.

All shipping board vessels scheduled to leave the harbors of San Francisco and Portland for Japanese points in the next 30 days are ordered to reserve all available cargo space and to make no more passenger reservations.

Naval foodstuffs stored on Mare Island near San Francisco, will be used immediately for shipment to Japan for the relief of earthquake sufferers, in compliance with orders received from Secretary of the Navy Denby. Eight ships in San Francisco bay have been under sailing or loading orders.

General George W. Goethals, builder of the Panama canal, has declared his readiness to organize an expedition of reconstruction to Japan. Other men of large affairs in construction work are ready to put their services at the call of Japanese leadership.

Previous Earthquakes.

Previous to the present catastrophe in Japan, in which about 240,000 lives are estimated to have been lost and 450,000 persons injured, probably the largest number of victims of an earthquake in recorded history was that at Yeddo, Japan, in 1703, with 200,000 victims. Ten years before this 54 cities and towns and 300 villages witnessed the disastrous earthquake in Sicily, the victims being numbered at 100,000. In 1628 Naples was shaken by an earthquake disastrously, 40,000 persons being victims. Lisbon, Portugal, was destroyed by an earthquake in 1755, where 50,000 people were victims. Only one survivor was recorded, 40,000 persons being victims, occasioned by the eruption of the volcano Pelee at Martinique and St. Pierre. As late as 1908 the earth opened at Chang, China, and engulfed 75,000 persons, and in 1918, 10,000 people lost their lives in an earthquake at Amoy, China.

Empire of Japan.

The empire of Japan consists of a chain of islands, as the school books would say, bounded on the north by the sea of Okhotsk, on the east by the north Pacific ocean, on the south by the eastern Sea of China, and on the west by the Sea of Japan These islands extend along a total length of about 2400 miles.

Some one says that were the Japanese empire stretched out in the Atlantic, off the coast of the United tates, at the same latitude Formosa would lie across Cuba and southern Florida; Tokyo would be due east of Norfolk and Sakhalin would be off Newfoundland and the northernmost island off Labrador.

The area of the Japanese empire is given at nearly 260,000 square miles and the population as 77,000,000.

Extremes of Climate.

Japan has extremes of climate, the southernmost island being nearly tropical and the northernmost nearly arctic in weather conditions.

For centuries closed to foreign influence, the U. S. expedition commanded by Commodore M. C. Perry, which arrived in Yokohama in 1853, broke through the reserve and the treaty he sought of amity and the opening of the ports of trade were signed in March, 1854.

Japan's Greatest Statesman.

Iyeyasu is regarded as the greatest statesman that Japan has known. He assumed the reigns of government in the early part of the 17th century. To his genius is due the system of government under which Japan enjoyed peace for two and a half centuries, and grew enormously in wealth, enlightenment and civilization. The vital feature of his reign was the arrangement for the control of the feudal nobles.

In Japan books are written either in Japanese or in Chinese. Chinese is preferred for history, science, law and theology—in short, for all serious subjects—while Japanese is the language of essays, poetry, fiction, the drama and in recent times for the magazine and newspaper press.

The literature of Japan owes much to inspiration from Chinese sources and to imitation of Chinese models. The works of Confucius and Menchus and other Chinese classics are familiar to educated Japanese at a very early period. Apart from this, there is abundance of literature in Japan, dating even from the earliest time, which displays originality of thought and of expression. The Japanese are not unlike the Athenians in their love for novelty and news. The marvelous growth of the newspaper press in Japan is doubtless due to this characteristic.

Japan has a large variety of religions, 12 sects of Buddhism, 13 sects of Chintoism and 12 forms of Christianity.

Service in the army is universal and compulsory; actual service begins at 20 and lasts for two years in the ranks for all armies. The peace strength of the active army is 300,000, with a reserve of 2,350,000.

Intensive Farming.

Though only 14.37 per cent of the soil of Japan is cultivable, owing to the mountainous nature of the islands, that arable portion supports 60 per cent of the population, and production per acre is high. Laborious terracing, the use of fish manures, intensive planting, assiduous labor—even the carrying of water up hillsides to pour it down—render productive every possible foot of soil. The proportion of her food supply which Japan herself produces is further increased by the fact that she has developed a sturdy and courageous race of fisherfolk. And yet the island empire, with a population—that of Japan proper—more than two-thirds that of the United States, and an area—Japan proper—very little greater than that of Montana, and so little of it arable, depends upon commerce for an essential proportion of her food supply. Her strength is essentially that of Britain—the strength of an industrial and maritime nation.

Agriculture and the industries are often represented in the same individual, however, for the small farm unit does not support all the family all the time. Straw-braiding, mat-weaving and other handicraft occupy such moments as could not, with all the Japanese farmer's ingenuity, be spent in further coaxing the precious soil. For this reason industrial manufacture will go on less interrupted than in countries where factory methods have supplanted handicraft, and where manufacture is solely the province of the city.

Chief Crop Is Rice.

More than half the cultivated land is in rice, with barley or rape grown as a second crop. Rice production normally lacks only about 12 per cent of supplying Japan's own need in that respect. The imported rice is largely in the unhusked form.

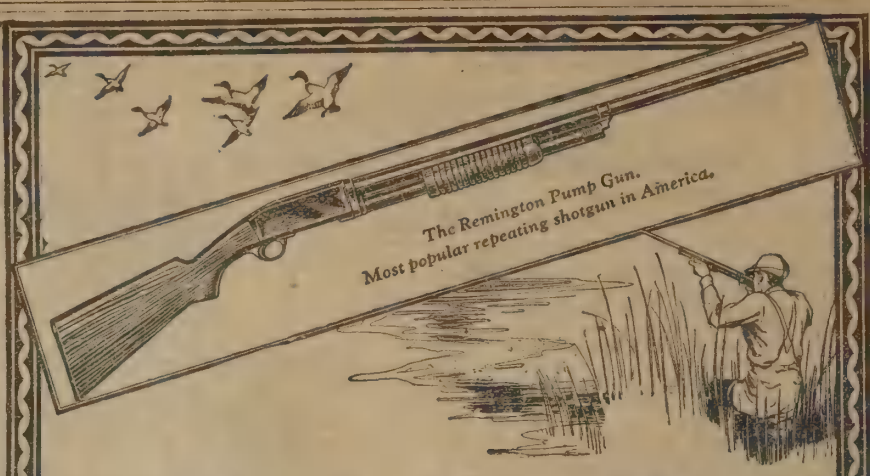
The populace being in a high measure vegetarian, peas play an important part in the diet. Japan both imports and exports peas, sending out the green product for the French market, while the incoming supply probably takes the dried form in large measure. Likewise, though she imports

(Continued on page sixteen.)

Made only of wheat and barley scientifically baked 20 hours — Supplies Vitamin-B and mineral elements.

How can Grape-Nuts be other than a wonderfully appetizing, healthful food?

"There's a Reason"



Why the Good Old Remington Pump Gun Still Outsells all Others

There's a new 20-gauge model, too—the best of the light-gauge guns. See it at your dealer's

ASK any of your friends who shoot a Remington 12-gauge Pump Gun—there are lots of them—what it is that has made this the favorite 12-gauge ever since Remington brought it out in 1900—the *first* solid-breech hammerless repeating shotgun ever produced.

Or better yet—if he'll let you—borrow his Model 10 and take it out in the fields or down by the water for an afternoon and try it for yourself.

* * *

Fire arms experts always comment on the precision and finish of the Model 10—the result of 245 separate inspections in the Remington plant.

And they remark that the receiver is *machined out of solid* steel—instead of made of stamped metal or a cored casting as is done with many shotguns.

But the man who goes out for a day's sport or to get a few ducks or rabbits for supper isn't so apt to say anything about these technical features.

He'll tell you that the Remington Model 10 shoots *harder and straighter* than any other 12-gauge he ever had in his hands, has an action that never balks or clogs—and seems to get *better* the longer he uses it.

If you're in line for something specially good in a 20-gauge—

Get your dealer to show you the new Remington Model 17. This is a hammerless, solid-breech pump action, too. Chambered for 2¾ inch shells which gives it the power and range of a 16-gauge. It is comparatively new—but already many old-timers swear by it as a "real man's gun."

The first time you get a chance go to the gun rack at the store and look at these Remingtons. Your dealer will be glad to tell you anything you want to know about them.

Write for Booklet A—"*The Complete Story of Remington Game Loads.*"

REMINGTON ARMS COMPANY, Inc.
25 Broadway, New York
Established 1816

Remington

THE AUTHORITY IN FIRE ARMS, AMMUNITION AND CUTLERY

Hard Red Spring Wheats

Twenty-Four Distinct Varieties Are Grown

FIRST ARTICLE.

Wheat is graded in five classes under the official grain standards of the United States. The first class is designated as hard red spring. About 24 per cent of the wheat acreage of the United States is of this class. The varieties which make up this important class of wheat are distinguished by having hard red kernels and are grown from spring sowing, chiefly in the north central part of the United States. The states of North Dakota, Minnesota and South Dakota lead in its production. A considerable acreage also is grown in Montana, Iowa, Illinois, Wisconsin, Nebraska, Washington and Idaho and smaller quantities of but little commercial importance in 21 other states.

There are 24 distinct varieties grown, one-third of which are important.

Flour of high bread-making quality is manufactured from the principal hard red spring varieties.

About 14,000,000 acres of this class of wheat are grown annually in the United States, comprising about one-fourth of the total wheat acreage in the last 10 years.

Wherever the winters are not too severe winter or fall sown wheat is usually more productive than spring wheat.

In the northern intermountain region and in the Pacific northwest certain varieties of hard spring wheat are fairly successful. In most of this region, however, the yields of hard red spring wheats are less than those of winter wheats, including common and club varieties of white spring wheat. In the irrigated sections of this area hard red spring varieties give comparatively lower yields than on the dry lands.

The 24 distinct varieties of hard red spring wheat in the United States are known under about 80 different names.

Marquis Most Important.

The Marquis is the most important variety of hard red spring wheat. Although it has been grown in the United States only since about 1913, it is now the leading spring wheat variety and is exceeded in acreage by only one variety of winter wheat. Approximately 11,800,000 acres of Marquis wheat were grown in the United States in 1919. The Marquis variety has rather short straw, heads, chaff and kernels. It matures fairly early. It has beardless heads, smooth, white chaff and red kernels. The chaff is rather firm, so the heads are not easily shattered.

Marquis is a selection from a hybrid produced by crossing a hard red wheat from Calcutta, India, and the well-known Red Fife. The cross was made by Dr. A. P. Saunders about 1892. The Marquis was selected and named by Dr. C. E. Saunders, dominion cerealist, and was first grown as a pure line at Ottawa, Canada, in 1904. The commercial growing of Marquis wheat in Canada began in 1909. The largest acreages are in North Dakota, South Dakota, Minnesota, Montana, Illinois, Iowa and Wisconsin. Marquis has given the highest average yields of any hard red spring variety in nearly all areas where this class of wheat is grown. In the quality of its flour for breadmaking, the Marquis excels all other varieties of hard red spring wheat which are now commercially grown in the United States.

The Red Fife.

The Red Fife variety (known also as Canadian Fife, Fife, Saskatchewan Fife and Scotch Fife) differs from Marquis in being somewhat taller and later and having longer heads and kernels. The original Red Fife wheat is supposed to have come from Poland or Russia by way of Germany and Scotland. About 77 years ago David Fife of Otonabee, Ontario, Canada, received a sample of wheat from a friend in Glasgow, Scotland. The friend had obtained the sample from a shipload of wheat from the German port of Danzig, but supposedly of Russian origin. Mr. Fife sowed the wheat in the spring, but it proved to be a winter wheat. One plant of spring wheat developed, however, which was saved and increased. This was the beginning of the Red Fife wheat, which became widely grown in Canada. The cultivation of Red Fife in the United States began in 1860. Prior to the introduction of Marquis it was our leading spring wheat. The Red Fife variety was grown in 22 states in the United States in 1919. It is most widely grown in Minnesota and the Dakotas.

Power (Power's Fife) is practically identical with Red Fife, although in the length of head and kernel it is shorter and very similar to Marquis. The original Power's Fife was developed from a single plant found growing in an oat field by James Holes of Fargo, N. D., about 1885. Some of this seed was obtained by J. B. Power of Power, N. D., who increased it and distributed it in large quantities under the name of Power's Fife. The North Dakota agricultural experiment station, which grew this wheat under the designation of station No. 66, made some selections from it and distributed one of them from the Williston substation as Power or North Dakota No. 313, which is the origin of most of this variety now grown.

Power is commercially grown only in North Dakota and Montana.

Minnesota No. 163.

Glyndon (Minnesota No. 163) differs from the Red Fife and Power varieties principally in having longer and more open heads. The kernels also are slightly longer. This strain of Red Fife dates from about 1891, when it was first grown by the Minnesota agricultural experiment station as No. 811 at the Glyndon substation in western Minnesota. Glyndon is still grown to some extent in Minnesota, North Dakota and South Dakota. The yields of Glyndon usually have been less than those of Red Fife and Power. In milling and baking value Glyndon is inferior to Marquis, and it is slightly inferior to Red Fife and Power in the percentage of flour produced, but in breadmaking Glyndon consistently produces a much larger loaf than Power.

Wellman (Wellman's Fife) differs from Glyndon in being slightly taller and in having a longer and more open head and a shorter and softer kernel. This variety was developed by D. E. Wellman of Frazee, Becker county, Minn., from a plant selected from Red Fife wheat, which he called "Scotch Fife." The original sample of Scotch Fife was a mixture and had been

(Continued on page thirteen.)

Now— the Exide first cost is low

For a great many years Exide has been known as the long-life battery. It stays on the job so long that thousands of car owners have found it to be by far the most economical battery in the end. At the present prices of Exide Batteries, even the *first* cost is low.

Now, no man need deny himself the satisfaction of getting a willing, rugged Exide. It will serve you so long and with so little expense for upkeep that you will find it the soundest kind of economy.

The quality remains the same that has brought world-wide acceptance of Exide as the standard storage battery. Exide was on the first electrically started automobile in 1911. Today, more new cars leave the factories equipped with Exides than with any other battery.

For your comfort and for the sake of economy, go to the nearest Exide Service Station and get the Exide Battery made for your car.

Before putting a New Battery in your car, get the New Price of the Exide at the nearest Exide Service Station

THE ELECTRIC STORAGE BATTERY COMPANY
Philadelphia
Branches in Seventeen Cities
Manufactured in Canada by Exide Batteries of Canada, Limited
133-157 Dufferin Street, Toronto

Exide
BATTERIES

Exide BATTERIES SERVICE STATION
RADIO

Look for this sign. Wherever you see it you can get Exide for your car competent repair work on any make of battery.

For your radio set get the Exide Radio Battery.

THE LONG-LIFE BATTERY FOR YOUR CAR

LIVESTOCK AND DAIRY

Beef Supply

Is Now Consumed by Home Folks

Growth of population in the United States to a point at which the domestic market has become large enough to absorb the country's normal beef production is the chief reason why American beef is no longer an important source of supply for Great Britain, says Charles J. Brand, marketing specialist for the department of agriculture, who recently studied the meat trade situation in Europe. Another factor working against an increase in our beef exports, he declares, is the lower cost of beef production in countries like Argentina which are still in the pioneer stage.

Mr. Brand points out that from 1891 to 1921 the human population of the United States increased from 62,948,000 to 107,833,000, while the number of cattle in the country increased only from 51,363,572 to 66,652,559. It is thus obvious that the growth in population has absorbed the increased beef production, and the same is true of mutton. Our increased production and exports of beef during the war proved, according to Mr. Brand, that given the stimulus of a profitable market the American live stock grower can and will quickly expand his beef output, but many factors are at present diminishing his incentive to do so.

Among these factors the most important, in Mr. Brand's opinion, is the relatively high cost of beef production in the United States compared with its cost in countries now in the pioneer stage. This fact, he says, has convinced the meat trade of Great Britain that the future will see greater and greater production in Argentina, until the supply from that country overshadows that from any other source. Next in importance as sources of additional supplies are Australia and New Zealand.

Arsenic as a Tonic

To the Editor: I notice in your paper that Dr. E. E. Wegner of W. S. C. has had numerous inquiries relative to the conditions of hogs that can not raise their hind parts. He gives a prpeventive but does not give the remedy. Here is a simple and cheap remedy that will work in two or three days if given according to directions.

Give in one gallon of milk or slop a little arsenic the size of a small army bean or just what will lie on the point of a pocket knife blade, morning and evening for three days.

Five cents' worth of arsenic will be more than is needed. The hog will not eat an overdose of it and when they have had enough will refuse to eat it, but be careful to not give too large a dose or they will not eat it. There is no danger of poisoning at all. J. W. WILDE.

Boyd, Ore.

Referring to the above letter, Dr. S. B. Nelson of the State College of Washingtan, says: "The remedy that Mr. Wilde gives can not do any harm, if given within the range of dosage for hogs, which is about one grain two or three times daily. Arsenic is a pretty strong tonic and might be of value in this case."

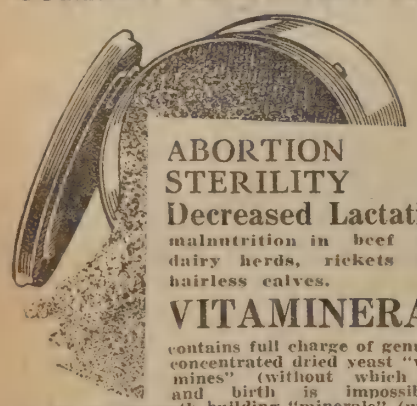
We Buy and Sell

Grade and Pure Bred Dairy Cattle.
We can save you money whether you wish to buy or sell. One or a carload.

Graham Livestock Co.

E2605 Broadway, Spokane, Wash.
NEAR CARSTENS' PACKING PLANT.

CORRECT TREATMENT FOR



ABORTION
STERILITY
Decreased Lactation

malnutrition in beef and dairy herds, rickets and hairless calves.

VITAMINERAL

contains full charge of genuine, concentrated dried yeast "vitamines" (without which life and birth is impossible); health and strength building "minerals" (which cattle do not get from ordinary natural or prepared feeds).

Vitamineral is indorsed and used by leading veterinarians, farm advisers, county agents and big breeders everywhere. Secretary Axby (Indiana State Vet. Ass'n.) has had miraculous results with VITAMINERAL in entire herds afflicted with abortion; he advises every veterinarian and breeder to use it.

Avoid dangerous, fatal contagion; make more beef; increase milk flow and butter fat; get healthy, sturdy calves.

Ask your veterinarian or write for free illustrated book "Vigorize Your Herd."

ROSE CITY VETERINARIAN HOSPITAL,
N. W. DIST'RS., 415 E. 7th St.,
PORTLAND, ORE.
(Vitamineral Pro. Co., Peoria, Ill., Mfrs.)

VETERINARY

By DR. S. B. NELSON.

Abscess—Last spring a lump grew on the side of our cat's neck. It got hard and then burst, running for a long time. Now another one just like it is coming on again. R. R.

Goldendale, Wash.

The abscess should be opened and the wound dressed with tincture of iodine and this dressing of iodine continued until the wound is healed.

Cows Chew Mangers—I have a number of cows and recently they have developed a tendency to gnaw the mangers, fences or any wood they can find. They are fed on alfalfa hay, small quantity of potatoes morning and night and at all times have salt available. W. C. H.

Granger, Wash.

Try giving the cows one tablespoonful of the following mineral mixture: Precipitated calcium phosphate, one part and sulphur, two parts; magnesium sulphate, three parts; charcoal, four parts, and salt, five parts.

Wire Cut—We have a horse that was badly cut with barb wire. We have never been able to heal the leg. Now it has large bunches of proud flesh on it. What will remove this? M. D.

Moiese, Mont.

The quickest way of removing proud flesh is to sear it or burn it with a hot iron. Great care should be used not to bring the hot iron too close to the healing edges of the wound.

Of course, it can also be operated with a knife, but that is a little more difficult than with a hot iron.

Fistula—My 3-year-old colt has what I beleve to be a fistula. It is a large running sore just behind and a little to the left of where the collar would work on the top of the shoulder. It is not the result of a collar bruise, for the colt is unbroken. He is in good condition. The sore is of six or seven weeks' standing. M. M.

Springdale, Wash.

It si quite probable that frequently a fistula is caused from something besides a bruise. I remember the first time I saw a fistula at the state college, some 20 years ago. We had seven in less than a week, four from a place where they had never had fistula before, and not a single one of these animals had been broken to work. It is a disease that requires the services of the best veterinarian you can get.

Ration for Sow—Would you suggest a ration for a sow we have? Last spring she had 19 pigs, but 10 were born dead. This was her third litter. Her other litters were 13 and 15, the sow raising one litter of 10 and 11 of the second. We thought wrong feeding might have caused the loss in the last litter. She is bred again. We thought of feeding tankage, but do not know how much to feed. J. C. H.

Ridgefield, Wash.

The following farrowing ration has been recommended by William Hislop, former animal husbandman of the state college: 45 pounds ground oats, 45 pounds barley meal, 10 pounds of tankage, alfalfa or clover hay in rack. After farrowing he recommends 50 pounds barley, 20 pounds shorts, 15 pounds bran, 10 pounds oil meal, 5 pounds tankage.

These are simply samples of any ration and may be dependent upon the availability of the materials, or the low cost of them.

CAUSES OF CALF ILLS.

Nearly all disorders or diseases of calves, says the United States department of agriculture, are caused either directly or indirectly by lack of cleanliness. Filth, whether it is in feeds, pens, bedding or pails and utensils, is dangerous to the health of the calf. To be on the safe side use nothing but clean milk (sweet or sour), scald the pails with hot water or sterlize them with steam, remove old feed from the boxes and clean them daily. Filth and dirt are the natural breeding places of many bacteria that will cause disturbances in the young animal's stomach. Freedom from filth usually means freedom from disease.

The Truth About Railroad Valuation

For many years it was charged the railways of the United States were "overcapitalized."

The Interstate Commerce Commission in 1920 placed upon the railways a "tentative" valuation of $18,900,000,000. This was $1,500,000,000 more than the bonds, stocks and other securities they had outstanding in the hands of investors.

The valuation has since been attacked as excessive by the same persons who previously attacked the capitalization as excessive.

Senator LaFollette's Valuation Law

What are the real facts about valuation?

Congress in 1913 passed a law directing the Interstate Commerce Commission to make a valuation of all the railways. Its author was Senator Robert M. LaFollette of Wisconsin. He estimated the valuation would cost two and one-half million dollars. It has already cost the government 24 million dollars and the railways 66 million dollars—total, 90 million dollars.

How the Valuation Was Made

The Transportation Act of 1920 directed the Commission to make a "tentative" valuation as a basis for regulating rates until the final valuation could be completed.

It has been charged this tentative valuation was based upon stocks and bonds. E. E. Clark, then Chairman of the Interstate Commerce Commission, testified before the Senate Committee on Manufactures in January, 1921: "Stocks and bonds were not considered at all. It is the fair value as closely as could be estimated and approximated at that time of the **physical property** which was devoted to the transportation service."

Henry C. Hall, a member of the Commission, testified before the Senate Committee on Interstate Commerce on January 5, 1922, that the commission **used the information it had gathered under the LaFollette Valuation Law of 1913.**

It has been claimed the valuation was based on the high cost of labor and materials in 1920. Chairman Clark testified: "The principal figures used in our valuation are as of 1913 and 1914." The wages of labor and prices of materials in these years were not half as high as in 1920.

An Argument for Confiscation

It has been claimed the valuation should be reduced because it exceeded the market value of railway securities on the Stock Exchange.

The Interstate Commerce Commission was not authorized by either the La Follette Valuation Law or the Transportation Act to consider the market prices of securities. Their prices, like those of wheat and corn, rise and fall constantly, **and in 1920 were the lowest in history after the government had operated the railways at a heavy loss and returned them to their owners incurring a huge deficit.** For the government to base a valuation upon prices of securities, made so low by the way the government itself managed the railways, would be the most colossal and indefensible act of confiscation ever committed outside of Russia.

The valuation has been criticised because it was not based solely on what it cost to build the railroads.

The railways of the United States have been in course of construction and development for almost 100 years. In this long period many records have been lost, destroyed by fire and otherwise become unavailable. Therefore, the actual cost of many roads can not be ascertained. Furthermore, the Supreme Court of the United States always has held that in the valuation of a railroad or public utility, what it would cost to construct it at present, as well as what it actually has cost, must be considered.

What the Railways Are Seeking

It has been claimed the railways are seeking a valuation of 30 to 35 billion dollars. All the railways ever have asked is that any valuation made shall give to railway owners the protection from confiscation guaranteed to owners of every kind of property by the Constitution of the United States.

Railways' Net Return Less Since Valuation Was Made

It has been claimed the valuation and the net return the railways have been allowed to earn on it have been the reason why rates have been higher than before the war.

Higher rates have been made necessary entirely by increased operating expenses, principally wages and taxes. The railways have earned less net return since the valuation was made than before. In 1916 and 1917, the last two years before government operation, the net return earned by them averaged over 82 million dollars a month. Since the valuation was made their net return has averaged less than 60,000,000 dollars a month.

Valuation and Rates

It has been claimed a large reduction of the valuation would make possible a large reduction of rates. But operating expenses and taxes, which are costing 85 cents out of every dollar the railways earn, would not be affected at all. If one-third of the valuation were arbitrarily wiped out the resulting permanent reduction of the net return the railways were allowed to earn would bankrupt many of them and stop railroad development; **but this reduction of one-third in the valuation could not possibly make a difference of more than 5 per cent in rates.**

Why Valuation Is Important

From the standpoint of rates the question of valuation is comparatively unimportant. From the standpoint of railroad development and service it is vital. Upon the valuation finally made will depend the net return the railways will be allowed to earn and their ability to raise new capital and expand their facilities. Upon their ability to expand their facilities and render increased transportation service will depend whether the farmers and other producers and shippers will be able to do a prosperous business in future.

This is one of a series of advertisements published to give the farmer authentic information about railroad matters. Any questions that you would like to ask will be cheerfully answered. Address:

WESTERN RAILWAYS' COMMITTEE ON PUBLIC RELATIONS

650 Transportation Building, Chicago, Illinois

S. M. FELTON, President,
Chicago Great Western Railway,

J. E. GORMAN, President,
Chicago, Rock Island & Pacific Railway,

H. E. BYRAM, President,
Chicago, Milwaukee & St. Paul Ry.,

W. H. FINLEY, President,
Chicago & Northwestern Railway,

HALE HOLDEN, President,
Chicago, Burlington & Quincy Railroad,

C. H. MARKHAM, President,
Illinois Central Railroad,

C. E. SCHAFF, President,
Missouri-Kansas-Texas Lines,

RALPH BUDD, President,
Great Northern Railway.

SEEDS AND NURSERY STOCK—Yes, they are offered on this week's "Want Ad" page.

continuous service since **1917** *and not one cent for* **repairs**

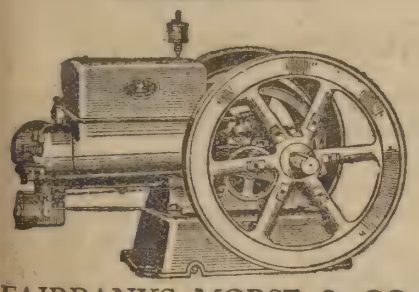
'Z' engine

Says R. Stanley Dutrow, Walnut Grove Stock Farm, Charlestown, W. Va. "That 1½ horse Fairbanks-Morse Engine that I got of you is certainly some horse for work. The only REAL engine I ever owned." Says Silas A. Smith, Oakboro, N. C... "The engine I purchased from you in 1917 has been in continuous service ever since and has not cost one cent for repairs."

Over 350,000 users have approved the "Z" Engine. No matter what your power requirements, there is a "Z" Engine to exactly suit your needs. Over 5,000 dealers carry these engines in stock and will save you money on freight.

1½ H.P. "Z" (Battery Equipt)	$ 54
1½ H.P. "Z" (Magneto Equipt)	74
3 H.P. "Z" (Battery Equipt)	90
3 H.P. "Z" (Magneto Equipt)	110
6 H.P. "Z" (Magneto Equipt)	170

f. o. b. factory
Add freight to your town



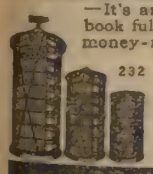
FAIRBANKS, MORSE & CO.
Manufacturers CHICAGO

Western Branches: San Francisco; Seattle; Los Angeles; Portland

NATIONAL
SILOS
TANKS — LUMBER

From the cheapest that's good to the best that's made—National Quality Silos are made from finest lumber, accurately fitted, scientifically designed and braced to withstand any weather. Exclusive patents protect our better bracing system, improved doors, and other exclusive features. From the heart of the world's greatest lumber country we ship our lumber, tanks and silos anywhere.

Write for "Making Silage" —It's an interesting book full of facts and money-making ideas.



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"A National Silo is a Sign of Prosperity."

NATIONAL TANK & PIPE CO.
154 Col. Blvd. Portland, Ore.

When you write to advertisers be sure to state that you saw their ad-

Quality of Eggs
Is as Vital as Is the Number Laid

How many eggs does your flock average? What was the highest individual production?

How much do your eggs weigh per dozen? How shapely are they? Is their color uniform or is it a bit uncertain?

The foregoing are two sets of questions worthy the consideration of any poultryman. The former set usually receives the bulk of the thought, and hens are bred and fed with a view to number of eggs rather than size, shape and color. Quality, of course, includes much besides size, shape and color, but these are prominent points and go a long way toward determining the market value.

It is exceedingly common to find small eggs in the nests along with the medium and the large. It is just as common to find eggs with certain very noticeable characteristics that render them unattractive to the market. For instance, among the white eggs there is one that shows distinct touches of brown. There is one that shows a tendency toward being speckled—a shower of little brown spots on it. There is one with a rough, unfinished point to the shell. Among the brown eggs there are pales and darks; eggs with even coloring and uneven.

Now it may be plain prejudice on the part of city folks that use our eggs, but they want uniformity. They want attractiveness. If they want a white egg they want it beautifully white. If they like the brown they want it uniformly colored.

Likewise, they want eggs that fill the little compartments of the cartons reasonably snugly. Every purchaser of eggs at the grocery store feels that he is cheated if he can feel and hear the eggs roll about in the carton; even one loose egg gives an uncomfortable feeling.

The point at issue is that number of eggs is not the only evidence of a valuable hen. The producer of 200 eggs in a year that grade No. 1 or fancy is worth more than the producer of 210 or even 225 that grade low.

Therefore, is it not time for more attention to be paid to the second set of questions at the head of this article? Is it not time for the poultryman to become as careful about the size, shape, color and general quality of the eggs laid by individual hens in his breeding flock as about the number of eggs they lay?

As stated before, quality includes much more than size, shape and color, but the other elements are more easily controlled. Feeding and care of the eggs after laying are outstandingly important in the matter of getting quality. The feeding is more of a scientific matter than the care, perhaps, but plenty of fresh water, plenty of green feed, a grain and mash ration balanced and fed, according to the many experiment station recommendations, and charcoal, grit and oyster shell are the fundamentals of feeding. Care means, among other things, frequent gathering during warm weather, keeping in well-cooled quarters and early delivery to market.

Did you ever break an egg into a saucer and try to pick it up with the thumb and fingers of one hand? Try it. You can not pick up a saucerful of water that way. If you can lift the entire egg, leaving only a little moisture in the saucer, the likelihood is that it will qualify as a first-class egg. At least, the cook in the high-class restaurant or hotel depends to a large extend upon this test when considering an offering of eggs. But you may depend upon it that an egg that has been held a long time and become stale will not thus pick up. Neither will it if it has remained in the nest for several warm hours after being laid. Nor does quality hold up when improper feeds are given, though usually a hen goes on strike and will not lay at all if she gets feed that is lacking in some essential in the production of good eggs. Hens do not cheat you; they will not put poor materials in their product if there is a chance to avoid it.

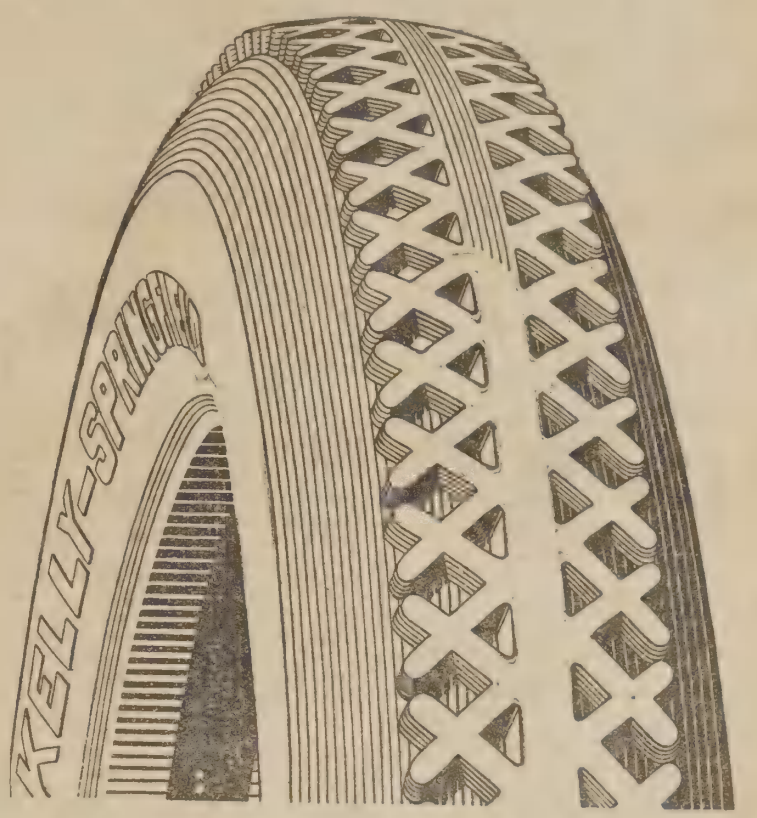
Apple Harvest Early

September 20 has been officially set as the date of the opening of the 1923 apple harvest by the growers and shippers of the Wenatchee district acting in conjunction with the local employment office. This means that upon that date many outside men and women will be given work in the orchards and warehouses of the district. Usually the opening of the apple harvest is about October 1, but the crop is fully 10 days earlier this year than last. An effort will be made to keep people from reaching the field before September 15 to 20, as they will probably not get work before that time.

THURSTON COUNTY, TOO.

Thurston county now comes to the front with plans for an accredited hatchery which will raise the state-wide standard of 200-egg record cockerels to 250 eggs for the males that are to be used in the breeding pens. Sufficient breeders have been signed up to warrant the completion of the plans and O. B. Gregory of Olympia has been selected to operate the model incubator house which will have a capacity of 12,000 eggs.

KELLY SPRINGFIELD TIRES



Kellys Give Good Service in a Hard Job

Mr. H. H. Tanner is a R. F. D. mail carrier in Milledgeville, Georgia. He drives his car over all kinds of roads and in all kinds of weather. He puts his tires to the severest sort of test. Here is what he says about Kellys:

"I have used practically every standard tire in my twelve years of auto driving in the R. F. D. mail service and my conclusion is that there is no tire made that will give the service and satisfaction that the Kelly-Springfield will, so when I bought my new Superior Chevrolet, eight weeks ago, I told the dealer that I wanted him to change the tires for me so that I could 'keep smiling with Kellys'.

"Kellys are the best tires in the world for the roughest service in the world because we hit all the rough spots going to the roadside mail boxes and then the excessive stopping and starting is hard on tires."

Every farmer knows the hard usage which tires receive on a R. F. D. mail carrier's car. That is why we have printed this letter here. If Kellys can give satisfaction for this work, they will give satisfaction anywhere.

It costs no more to buy a Kelly

POULTRY AND RABBITS

Poultry Culling
Is Taught in Many Communities

By RALPH ERSKINE.

Although the culling demonstrations have their place in the training of farm men and women to cull their flocks of hens for better egg production, W. D. Buchanan, poultry specialist of the state college, is working out a plan which he believes will reach more people and therefore result in the culling of more hens than other methods that have been used. This plan is the culling school which differs from the demonstration in that a number of project leaders in each county are given a whole day's training in the culling of hens by the use of a revised score card. These leaders will in turn train the flock owners in their own locality to do their own culling.

The plan is a unique one and has been put on in 21 different places throughout the state this summer and Mr. Buchanan expects to reach a large number of people. In fact, as he himself put it, the point can best be illustrated by two verses of an old poem in which the word SERVICE is substituted for the word LOVE.

Make channels for the stream of love,
Where they may broadly run,
And love has overflowing streams,
To fill them ever one.
But if at any time we cease,
Such channels to provide
The very fount of love for us
Will soon be parched and dried.

When one understands that those who enroll in the culling schools are well versed in the art of poultry raising before they are allowed to enter, he can better understand that they can fit themselves for the training of others and thus fill the "channels of service" in their neighborhood after a full day's instruction under the supervision of an expert. In order to show that they are capable of training others they are each given a culling card, a kind of certificate, by the state college on completion of the school. This can also be used in case there should be any doubt on the part of a breeder as to their ability to cull poultry.

But to begin with the opening of a day's work and follow the instruction to the close when the grades are given out.

The first detail is to give out the score cards and explain every point. The card is one that Mr. Buchanan has revised with the assistance of a number of other poultry authorities in the northwest and other parts of the country. The purpose of such an outline, which is really a utility score card, is not to give the leaders something to follow while they are working, but is rather a basis of comparison for the different points which must be considered.

THE UTILITY SCORE CARD.

The figures indicate the number of points of credit to be given for a perfect bird:

Head.	
Eyes bright and bulging	6
Beak short and curved	3
Comb and wattles red and velvety	6
True to sex type	4
Ear lobes smooth and of standard color	1
Body.	
Back broad and angular	5
Deep from center of back to front of keel	10
Span from keel to pelvic bones, wide	4
Pelvic bones, medium, thin and wide apart	6
Handling Quality.	
Body solid and well meated	5
Abdomen soft and pliable	10
Late moulting	10
Legs and Toes.	
Legs flat and scales fine	3
Toe nails short and blunt	2
Pigmentation.	
Vent and beak, white	5
Shanks entirely bleached	20
Total	100

The above score card can be applied only to the breeds that have yellow skins. If desired to grade by the number of eggs that the bird will lay, a separate column can be made by multiplying each set of points by three. This will make a total of 300, which is considered the standard production for an ideal laying hen.

"I don't want you to try and follow the score card every time you pick up a bird," said Mr. Buchanan as he explained the plan, "but I am giving you this outline so that you will not forget any important points which should be considered. The card is by no means perfect, but it is the best that we have and it has been checked and found to comply very closely with the trap nest record of birds on which it has been applied. While it applies best to the hen with a capacity of 150 eggs and better, there has been a tendency to overestimate the medium capacity birds. If this point is considered it will prevent a possible error in the hens of this class.

"It should also be understood that where the late moulting bird is graded 10 points, she could not be given as much if graded during July or August. For this reason we have decide to allow only three points if she has not moulted by July and six points in August if there is no sign of shedding the feathers. In September the 10 points could be given provided it was not too early in the month and she showed no signs of beginning a moult."

Estimating Egg Production.

In order to estimate the number of eggs which the hen will lay in the year it is first necessary to know about when she began to lay. If she has been laying only one month when graded the score given should be multiplied by one-fourth. If she has been laying two months, multiply by one-half, and so on. Such a check, if properly done, will not be far off from the trap nest record, which proves that the score card is accurate enough for any practical use.

Practically all of the forenoon was spent in going over the points of the score card and applying its points to one bird each for every person at the school. After all had made their score, Mr. Buchanan took the hen and made his marks and then a check was made between the two grades. In the mjority of cases there two grades.

During the noon hour the subject of poultry was dropped only long enough for the folks to eat their lunches, and it began where it had left off. After lunch the real examination began. Each member took a bird and graded it and turned it over to Mr. Buchanan for his verdict. If their grade was correct they were marked 10. If the bird should have been put in

(Continued on page fourteen.)

GENERAL ADVERTISING.

Swedish Inventor Has New Oil Light

Claims Whiter and Much Cheaper Light Than Electric or Gas.

Edison enabled us to enjoy the benefits of electric light, Count Welsbach's mantle made it possible to have the incandescent gas light, but it remained for a Swedish engineer named Johnson, now living in Chicago, to devise a lamp that would burn ordinary, every day kerosene oil and produce a light said by the many scientists who have seen it to be whiter than electric. The lamp is as simple to operate as the old style oil lamp, burns without odor, smoke or noise and is proving a sensation where oil light is needed.

Mr. Johnson offers to send a lamp on ten days' free trial and will even give one to the first user in each locality who will help introduce it. A letter addressed to W. R. Johnson, 31 N. Fifth St., Portland, Ore., will bring full particulars about this wonderful new lamp. He has an interesting agency to offer, too.—Adv.

$35 a Day--
with this saw mill

Men without experience make this income each winter sawing wood lot timber.

Send today for Free Booklet that tells you how.

AMERICAN SAW MILL MACHINERY CO.
144 Main St., Hackettstown, N. J.

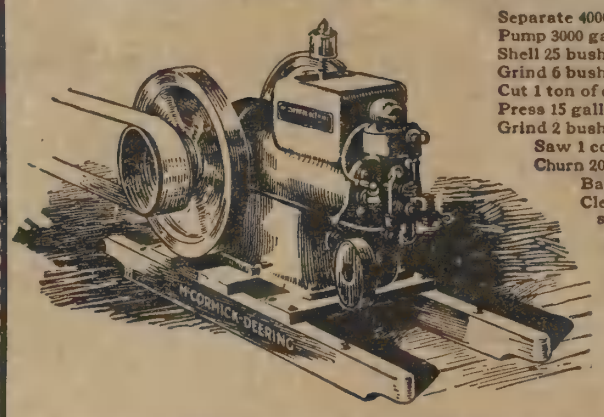
American Portable Saw Mill

GENERAL DISTRIBUTORS
The Higgins Machinery Company
309 First Ave. So. Seattle, Wash.

The Great Usefulness
of the New 1½ h. p.
McCormick-Deering Engine

TO SEE the new 1½ h. p. McCormick-Deering Engine standing quiet, compact and unassuming at the dealer's store, it is hard to realize the great range of its usefulness and the degree of the power it will deliver at trifling cost of operation.

Two cents worth of fuel in this McCormick-Deering Engine will do any of these jobs:



Separate 4000 pounds of milk.
Pump 3000 gallons of water.
Shell 25 bushels of corn.
Grind 6 bushels of feed.
Cut 1 ton of ensilage.
Press 15 gallons of cider.
Grind 2 bushels of corn meal.
Saw 1 cord of wood.
Churn 200 lbs. of butter.
Bale ½ ton of hay.
Clean 30 bushels of seed wheat.
Grind 25 gallons of cane juice.
Light up the farm for 2 hours.
Do a family's weekly washing.
Grind the mower knives for a season.

Such many-sided labors may be turned over to this tireless hired man the day it is set down on your place and for years to come. It is of lasting reliability and you will know why when you have inquired into the details of its construction.

The new McCormick-Deering runs at low speed (500 r.p.m.). It is equipped with Bosch high-tension magneto and spark plug, removable cylinder, enclosed crank case, throttle governor, simple fuel mixer, and large, well-made, replaceable bearings. It has a simple cooling system and an unfailing oiling system.

This 1½ h. p. size operates on gasoline. The other McCormick-Deering Engine sizes, 3, 6 and 10 h. p., use kerosene as fuel. All are made of equally high grade materials throughout and include many of the features named above.

Write for detailed information. Stop at the McCormick-Deering dealer's store and go over the engine of the size you require.

INTERNATIONAL HARVESTER COMPANY
OF AMERICA (Incorporated)
606 S. Michigan Ave. Chicago, Illinois

Boost your Egg Yield Now!

HANG a Coleman Quick-Lite Lantern in your hen house a few hours these winter nights and mornings. It puts your hens on a spring laying schedule. Longer feeding hours greatly increase egg production. Users report from 15% to 20% more eggs. Poultry authorities and practical poultrymen recommend artificial light to boost the egg yield. Thousands are now making bigger profits by selling more eggs than ever at high prices.

Style L0-327 Coleman Quick-Lite
"The Sunshine of the Night"

Makes and burns its own gas, from common motor gasoline. Gives 300 candle power of brilliant white light. Brighter than 20 old style oil lamps. Can't spill fuel or explode, even if tipped over. 12 hours of light on one filling. Lights with matches—no torch needed.

Built of brass, heavily nickeled. Will last a lifetime. Mica globe and reflector. Won't blow out. Handiest and most convenient light you ever saw. For very large hen houses we manufacture the same form of lighting in a complete plant, equipped with fixtures, globes, etc.

30,000 DEALERS sell Coleman Quick Lite Lanterns, Lighting Plants and Lamps. If yours can't supply you, write us for booklet "More Light—More Eggs." Address Dept. PN18.

THE COLEMAN LAMP COMPANY
WICHITA, KANSAS

Westrobac
NITROGEN BACTERIA
For Alfalfa, Cover Crop Seeds.
Reduced Price—$1.50 per Acre.
Western Soil Bacteria Co.
510 BATTERY STREET
San Francisco, California

Have you glanced over the farm bargains on the "Want Ad" page?

Sell Apples in the Middle West

The Farmers' Union of Washington and Northern Idaho is taking steps by which it is hoped to improve the apple market of its apple-growing members, and, at the same time, furnish farmers' union members in middle western states good northwestern fruit at lower prices than the retail market in those states generally affords.

Negotiations have been under way for some time between President J. Q. Adams and other officers of the Washington union and officers of state farmers' union exchanges in the middle west. It is proposed that Washington locals shall place upon their boxed apples a label copyrighted by the state organization and that these apples shall be shipped direct to the middle west union exchanges to be sold to individual members in those states at the price paid to the producer plus normal costs of transportation and handling.

The label that has been prepared for pasting on the boxes is both attractive and educational. It takes the form of a large wheel, around the outside of which are the words, "Farmers' Union Fruit Department." The emblem of the farmers' union is the hub. Each spoke carries the name of a variety of apple and the months of the year during which it is in best condition for being eaten. This information is given to protect the eastern exchanges against the purchase of fruit of certain varieties at times when they are not satisfactory for general consumption. The label also carries a guarantee of the quality of the fruit and an explanation of the grades fixed under state law.

President Adams is this week holding meetings with farmers' union fruit growers in the Wenatchee district preparatory to putting the new plan into execution.

The farmers' union has state exchanges in Nebraska, Kansas, South Dakota, Iowa, Kentucky and other states. Officers of some of these exchanges with whom the proposition has been taken up express enthusiasm over it as a means of providing their members with good fruit at a small margin over the price received by their fellow producers in the Pacific northwest.

Seek Lower Rates

Alleging that, due largely to excessive railroad rates, the live stock industry of Oregon and southern Idaho is close to bankruptcy, the Oregon Cattle and Horse Raisers' association, Portland Live Stock Exchange and the Northwest Live Stock Shippers' Traffic league have filed complaint with the interstate commerce commission asking rate reduction and reparation payment of approximately $100,000. The league membership includes four packing houses of Frye, Carstens, Henry & Barton on Puget sound and 1700 live stock shippers. The three northwest states' complaint charges that rates have never been adjusted by the commission but were set arbitrarily by railroads and never changed to meet present conditions. Establishment of maximum mileage scale is asked and largest reductions south are from southern Idaho, rates asked constituting reduction of from $5 to $35 on each carload cattle and double deck carload sheep, $10 to $40 on each carload of hogs and $30 to $50 per double deck carload of hogs from southern Idaho. Establishment of tariffs for double deck carloads of hogs from eastern Oregon and of calves from eastern Oregon and southern Idaho is asked and high rates from branch line points are attacked, comparison showing, it is declared, that rates from Montana to Seattle, Tacoma and Portland are much lower than from Idaho and Oregon.

The Northern Pacific, North Bank, O.-W. R. & N., Great Northern, Oregon Short Line and Oregon Trunk are defendant railroads. S. O. Correll, secretary of the Cattle and Horse Raisers' association; R. L. Clark, secretary of the Portland Live Stock exchange, and William Pollman, president of the Northwest league, sign the complaint.

AT YOUR SERVICE.
DEMPSEY
Hotel and Restaurant
(C. C. DEMPSEY & SONS)
UP TO DATE.
Opposite Union Station. Spokane.

FLY-TOX
KILLS
Flies
—and other household Insects
Harmless to humans and animals. Pleasant odor... Won't stain. Made by
WENATCHEE REX SPRAY CO.
Wenatchee, Wash.
Sold by Grocers, Druggists, Etc.
91

Hard Red Spring Wheat

(Continued from page nine.)

obtained from the Saskatchewan valley in Canada. The Wellman strain, however, is identical with an older variety called White Russian, which apparently was mixed with the sample of Scotch Fife gorwn by Mr. Wellman. This variety of wheat has almost disappeared from cultivation.

Ghirka (Ghirka spring, known also as Early Russian, Russian and Russian Fife) differs from the true Fife strains in having a longer and more tapering spike and larger and softer kernels. The straw or ripe stem usually is tinged with purple. It is slightly earlier than Red Fife. Ghirka was an important variety in Russia, grown principally in southern Russia and the Volga river district, when it was introduced into the United States. During the period from 1898 to 1904, inclusive, eight lots were obtained by the United States department of agriculture. Other importations were made by Russian immigrants. Owing to the phenomenal success of Marquis, the Ghirka is now grown only sparingly in North Dakota, South Dakota and Wyoming. Ghirka is quite drought resistant and will often yield well in dry seasons in the Great Plains area. Farmers' bulletin No. 1281, from which these facts about hard red spring wheats were taken, says decisively that the growing of Ghirka should be entirely discontinued.

Kitchener.

Kitchener differs from Marquis in being slightly later and taller and in having a purple straw and a slightly longer kernel. Kitchener originated from a head of wheat found in a field of Marquis in 1911 by Dr. Seager Wheeler at Maple Grove farm, Rosthern, Saskatchewan, Canada. Kitchener is grown to some extent in Canada, but it is not yet important in the United States.

Red Bobs.

Red Bobs usually can be distinguished from other varieties because of the absence of short beards on the tip of the head. The heads of practically all beardless wheats have short beards, varying from one-fourth to one inch in length, near the tips of the heads. Most of the heads of Red Bobs, however, do not have the short beards. The Red Bobs is several days earlier than Marquis. Red Bobs originated from a head found in a field of Bobs, a white wheat, in 1910, by Dr. Seager Wheeler at Rosthern, Saskatchewan, Canada. It probably is the result of a natural field hybrid between Bobs and Marquis. Red Bobs was first distributed in 1918. As yet it is grown only to a limited extent in the United States, having been introduced but recently. In experiments in central and northern Montana Red Bobs outyielded Marquis during two years. Under conditions of extreme drought Red Bobs is declared to be likely to yield more than Marquis, owing principally to its earlier maturity. It is a good wheat for milling and baking.

Grape Growers Meet

A meeting of the Island Belle Grape Growers' union was held recently at Stadium, in Mason county, where the members discussed problems concerning marketing of this year's crop.

From all reports received from growers and commission men there is every indication of a bright future for this variety in western Washington. Although the acreage is increasing each year, the greatest trouble has been in getting enough grapes to supply the demand.

Displays of the Island Belle grape will be made both at the Mason county fair and at the Western Washington fair at Puyallup, in order to show the people the excellent qualities of this variety. Yields of six tons to the acre have been known and an average has been estimated at four tons, under proper management.

The election of officers resulted in the following: Adam Eckert (re-elected for the sixth time), president; J. L. Rauschert, vice president; Charles Somers Jr., secretary, and the following directors: Ed C. Suiter, Ed Wilson, Jacob Wingert, Karolina Sund, W. R. Polk and Edgar J. Wright.

COMING LIVESTOCK SALES.

Sept. 14.—County fair grounds, Ellensburg, Wash., Kittitas County Hampshire Sheep Breeders' association, 100 rams.

OPPORTUNITY TO LEARN.

The fair is a worthwhile school.

Here's ideal
fuel for farms

for ranges, heaters, brooders, smudge pots, furnaces, boilers and wherever heat is needed use

Diamond Briquets

You probably need two kinds of coal. One kind to give quick, intense heat—a free burning coal. Another kind to hold the fire, keep it steady and make it last—a coking coal.

Now you can get these two kinds of coal in one single fuel—Diamond Briquets!

Diamond Briquets are a lump fuel containing two high grade coals, Black Diamond, a free-burning coal, and South Prairie, a coking coal. These two brands lead all others for quality in Western America.

Open your drafts—Black Diamond, the free-burning coal, takes the lead and brings the fire to quick intensity. Close your drafts—South Prairie, the coking coal, will not let the fire die, but will hold it steadily, evenly and for a long time. Thus these two coals BLENDED into Diamond Briquets work hand in hand to give you the kind of heat you need, wherever you need it, and as soon as you need it.

There is nothing better. Diamond Briquets are the latest and best in fuel. They contain no other coal than these two, which are thoroughly washed, carefully pulverized like sugar to get a complete blend and then compressed under 2000 pounds pressure into uniform, hard, clean lumps. Diamond Briquets are harder, decidedly cleaner and, best of all, substantially lower priced, than the raw lump coals they so satisfactorily displace.

181 agents and dealers in 126 cities and towns of the Pacific Northwest are ready to supply you with Diamond Briquets.

Send this coupon today for details and name of nearest dealer.

Pacific Coast Coal Co.,
Main Office, Seattle, Wash.

Send this coupon for more facts NOW

PACIFIC COAST COAL CO.,
536 Railroad Ave. So., Seattle, Wash.
Gentlemen: Please send me more information about Diamond Briquets and name of nearest dealer. I understand that this puts me under absolutely no obligation.

Name .....

Address .....

Grading Lettuce

Big Factor in Marketing Crop

The lettuce growers of King county and the adjoining country seem to agree that grading is the big factor in the marketing of the crop. There is too much of a tendency on the part of some growers to sell all of the crop as the heads mature and thus get many heads in the crate that lower the grade and consequently the price.

There were about 35 growers and others interested in the industry who met at the Seattle Chamber of Commerce to listen to Professor E. F. Dummeier, instructor of economics at the state college, who explained many of the problems that confront marketing organizations. He told the growers that he believed there were good opportunities for those engaged in this business to form an organization that would help in putting their product on the market at a more uniform price.

"The one thing that will do more than anything else to sell any product is to establish a system of grades which can be advertised," he said. "The state or federal grades can always be depended upon, as they are inspected at the loading point and shipped as such. This prevents the buyer from making any false claim as to the condition and grade of the shipment on its arrival.

"In order to have an organization that will function successfully it is first necessary to have an efficient manager who knows his business and who has the confidence of the majority of the members. No organization can be carried on under poor management and it is just such practices that have given cooperative organizations a bad name in the past."

At the close of Professor Dummeier's talk the growers discussed the marketing situation and appointed a committee to discuss the organization of an association that would work on the plans outlined by the speaker. The Japanese growers who were present agreed with the others that by shipping the best grades out to the more distant markets, a better market would be created at home for the surplus and yet not necessitate the dumping of the lower grades on the local markets.

The committee named to look into the plan of organizing consisted of J. G. Robinson, Kirkland, chairman; Joe Desmone, Tony Aries, Bellevue; S. Nakatsuka, Kent; K. Yamane and David Yates, Seattle. It is interesting to note that there were three Japanese banks of Seattle represented at the meeting. There were also a number of commission men present who were favorable to the formation of some organization that would improve the quality of the lettuce and help the growers to work together for their mutual benefit.

The meeting was arranged by W. W. Henry, the county agent, who offered to assist the growers in getting such information as was given by Professor Dummeier, but he insisted that any organization details be taken up entirely among the producers themselves, since the extension service can not participate in marketing organization work.

Poultry Culling

(Continued from page twelve.)

the next class, one point was taken off and so on. The culling continued until each member had culled 10 birds, when their grade could easily be determined by adding up all of the grades given.

In all of the schools held there were very few cases where a grade below 90 was made and there were some that made 99. The grade was generally between 94 and 96.

The classes passed on were:

1. Culls, anything below 120 eggs.
2. Low medium, between 120 and 130 eggs.
3. Medium, between 130 and 140 eggs.
4. High medium, between 140 and 150 eggs.
5. Good, anything above 150 eggs.
6. Extra good, above 200 eggs.

It is on their ability to place birds in these classes that students are graded.

Twenty-One Schools.

"At Burlington, Skagit county, there were 24 enrolled for the school," said Mr. Buchanan, "and 100 per cent were present and 12 extra, which brought the total attendance to 36.

"Mr. H. L. Willis of Mt. Vernon added to the interest by furnishing 20 trapnested hens to beb scored. Sixteen of them varied but a few eggs from the trapnest record, and of the four 'missed,' two were afterwards rescored. One of these, it was discovered, had laid fine at the beginning and end of the year, but had been a very low producer for four months in the spring. The other, on rescoring, showed an error in multiplacation, and tallied exactly with the trap-nest record."

The 21 culling schools have been held in the following counties: Thurston, Mason, Kitsap, Kittitas, King (2), Snohomish, Whatcom (2), Skagit, Clallam, Wahkiakum, Pacific, Lewis, Grays Harbor, Yakima, Benton, Franklin, Walla Walla, Spokane (2, one adult, 1 club) and Stevens.

The culling demonstrations differ from the culling schools inasmuch as more people are allowed to attend and there are no cards given out, as is done at the schools. The people are merely shown how to cull hens by the use of the score card, and in most cases have been asked to practice what they have learned on the flock when the demonstration is held. These culling demonstrations have been held in Pend Oreille, Douglas, Island and Grant (4 demonstrations) counties.

Succeeds With Berries

From the 479 gooseberry bushes on one-half acre of the P. B. Gedelman farm in the Blyn district, east of Sequim, Clallam county, Mr. Gedelman picked 2159 pounds of berries. The bushes in their third summer are all in fine shape. They were planted six feet each way. They are all the Oregon Champion variety and are said to be less apt to mildew than some of the more common varieties. The whole patch is sprayed with Bordeaux to prevent trouble of this kind.

Six and one-half acres of bottom land on the Gedelman farm are devoted to loganberries. In addition, Mr. Gedelman has three and a half acres of raspberries. This bottom land, when well drained, seems to be adapted to all berries.

CLEAN-CULTIVATE ROSES.

Rose chafers, which are small, long-legged beetles that eat the flower of the rose, do not breed in clean-cultivated ground. Five pounds of arsenate of lead to 50 gallons of water, with an added gallon of molasses, makes an effective spray for an extensive rose plantation. These beetles attack also the blossom of the grape and the fruit of the cherry.

Fertilizers

Different on Different Crops

Fertilizers have different effects on different crops and very often the same soil will need an altogether different fertilizer for one crop than it will for another. This fact was brought out in a fertilizer demonstration on the A. J. Linstad orchard at Vashon, King county, Washington. A block of 80 Baldwin trees were selected three years ago with the assistance of A. B. Nystrom, then county agent, and the alternate rows were treated with nitrate of soda, potash and superphosphate. Every odd row was used as a check row, and no application was made.

The rows treated with nitrate of soda showed the best results of any of the three fertilizers for the trees that were bearing fruit, according to Mr. Sunstad's records. There were twice as many apples on the trees thus treated than there were on the check rows, which received no fertilizer. Neither the potash nor the superphosphate gave satisfactory increase and it was therefore concluded that the apple crop needs more nitrogen than is supplied from the soils in this particular district. Mr. Linstad found, however, that it was best to apply only a light application of nitrate of soda, as too much is harmful to the trees. When applied to young growing trees it seemed to retard their growth more than on the check rows.

Mr. Linstad also tried seeding half of his orchard with a vetch cover crop while the other half was plowed and left in the rough during the winter. The experiment is yet incomplete, since the best results will be shown next year, but it is safe to say that the vetch cover crop is producing a better growth and there is a noticeable difference in the color and growth of the foliage in the trees in this part of the orchard. The vetch was turned under early in the summer and the soil was left in a clean condition during the summer months. He had very little trouble in getting this crop started, and believes it is one of the best ways to add humus as well as nitrogen to the soil and thus increase the growth of the foliage as well as producing a better crop of fruit.

Honey Yield Is Big

Last year there were 50 colonies of bees lost from spray poisoning on the M. J. Leak farm at Naches, Yakima county, Wash. There has been practically no loss from this source this year on this farm and the bees have done extra well.

The best record by a swarm of bees he has ever known for the short space of 10 days of honey gathering was made by a swarm which he caught recently. The bees were provided with complete but empty frames. So industriously did they go to work that at the end of 10 days, when he weighed the hive it tipped the scale at 128 pounds. A hive filled with empty frames but no bees weighed 41 pounds. The honey and the bees thus weighed 87 pounds. Allowing seven pounds for the bees, they had made 80 pounds of honey in 10 days from the time the swarm was hived and put in its place.

Giving may be easy or giving may be hard, but giving remains one of the half dozen biggest words in the language.

Best "Sixty" hauling 250 sacks of wheat, averaging 130 pounds each
Drawn over actual photograph

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Interstate Fair

(Continued from page three.)

dition to the cash prize of $10, Max Merritt was awarded the John H. Roberts silver trophy cup in this competition.

Horse Championships.

The championships in the draft breeds were as follows:

Percherons—Senior champion stallion, Stadacona, owned by A. H. Poston & Sons, Spokane; junior and grand champion stallion, Star, owned by Mr. Doepke; senior champion mare, Madam, owned by Mr. Thayer; junior and grand champion mare, Belmont, also owned by Mr. Thayer.

Shires—Senior and grand champion stallion, Champ Clark; junior champion stallion, George Cooper; senior and grand champion mare, Martha Washington, and junior champion mare, Princess Victoria, all owned by the Messrs. Merritt.

Clydesdales—Senior and grand champion stallion, Majesty's Best, owned by Mr. Whitman; senior and grand champion mare, Garfield Bell, and junior champion mare, Bonnie Brae Gem, both owned by Mr. McCroskey of Garfield.

There was a good, though not large, showing of the lighter breeds, made up of standard breds and Morgans, exhibited by Harry L. Needham, Greenacres; William Williams, Lewisville, Idaho; George A. Kelly, Walla Walla, and Fred Aldrich of Spokane. Thoroughbreds were exhibited by Richard Allman, Coulee City, J. T. Clark, Raymond, Alberta, and Meiks Brothers, Raymond, Alberta.

There was a small showing of Shetland ponies.

J. A. Marion, Fairfield, showed one jack.

The Beef Cattle.

In the beef cattle barns Frank M. Rothrock, with a herd of young Hercules Shorthorns, made up the entire exhibit in this breed, with the usual high quality for which Hercules farm has a reputation. Across the aisle the outstanding milking Shorthorn herd of Northwood farm from Redmond, on Puget sound, made a great showing, though with no competition. Competition, however, was keen in the Hereford classes, with four well-known breeders dividing the honors. The strong herds of O. A. Boggs & Sons of Alberta and Herbert Chandler of Baker, Ore., divided the greater number of the top awards, with Diamond B ranch of Lowell, Ore., and Weatherford Brothers of Dayton, Wash., adding real interest to the rivalry.

In the Aberdeen Angus department Congdon & Battles showed their superior herd without competition.

The beef cattle championships were as follows:

Shorthorns—Junior and grand champion bull, Hercules Marshall, and junior and grand champion heifer, Hercules Sylvia 3d, owned by Mr. Rothrock.

Herefords—Senior and grand champion bull, Alberta Panama; senior and grand champion cow, Panama Lady 2d, and junior champion heifer, Panama Lady 4th, all owned by Boggs & Sons, and junior champion bull, Prince Donald, owned by Mr. Chandler.

Aberdeen Angus—Senior and grand champion bull, Prizemere 10th; junior champion bull, Prideman C. B. 22d; senior champion cow, Erica 7th of Rosemere, and junior and grand champion heifer, Barbara C. B. 2d, all owned by Congdon & Battles.

Milking Shorthorns—Senior and grand champion bull, Gretna Challenger; junior champion bull, Northwood Lad; senior champion cow, Lily L. 3d, and junior and grand champion heifer, Northwood Maggie, all owned by Northwood Farms.

The Dairy Cattle.

In the dairy show ring there was interesting competition between the Holstein herds of John L. Smith, Spokane, and Hollywood farm of Hollywood, near Seattle. Most of the top honors went to the Smith cattle, with Hollywood capturing the senior championship on their typy aged cow, Snow Ball Powers Mutual.

In the Jersey department Glen Tana farm, Spokane, won nearly all of the first places and took all championships with its high-class show herd, headed by Glen Tana Morocco Wonder. Glenwood farm of Buckeye, a neighbor of Glen Tana, and R. J. McGebran, E. J. Roberts and Margaret Campbell, a club girl, divided the secondary premiums. The Jersey show was especially interesting in that the greater number of the animals shown were close descendants of the old herd sire at Glen Tana, now dead, Morocco Pioneer. Both bull champions were his sons, while the junior champion heifer was his granddaughter.

A small showing of Guernseys was made by Indian City farm, Spokane; J. C. Trotter, Rockford, and Mrs. Anna J. Odell, Valleyford.

No Ayrshires, Brown Swiss or Red Polled were shown.

The championships in the dairy breeds were as follows:

Holsteins—Senior and grand champion bull, Hazelwood Heilo Butter King; junior champion bull, Hazelwood Ormsby King, and junior champion heifer, Hazelwood Heilo Fayne Bessie, all owned by Mr. Smith, and senior and grand champion cow, Snow Ball Powers Mutual, owned by Hollywood farm.

Jerseys—Senior champion bull, Glen Tana Morocco Wonder; junior and grand champion bull, Glen Tana Morocco Majesty; senior and grand champion cow, Glen Tana Sybil 2d, and junior champion heifer, Glen Tana Wonderful Dorothy, all owned by Glen Tana farm.

Guernseys—Senior and grand champion bull, Amy's King, owned by Indian City farm, and junior champion bull, an unnamed calf owned by Mr. Trotter.

The Swine Show.

In most respects the hog show lived up to the Interstate fair's reputation. Indian City farm and F. M. Curtiss, Fruitland, Wash., made up the Berkshire show, each winning two championships. In the Poland China classes B. F. Kammerzell & Sons, Colfax; A. Kloppenburg, Spokane; A. J. Gage, Valleyford, and John F. Lynn & Son, Peach, Wash., competed. Kammerzell and Kloppenburg divided the championships evenly. In the Chester Whites, C. M. Meenach of Sharon, H. S. Curtis of Palouse, J. L. Davidson, Tekoa, and Charles Meenach, a club boy, made up the show, with all championships going to Mr. Meenach.

The Duroc Jersey show was noteworthy as a demonstration of the value of live stock club work. Boys who have had from one to three years' club experience took the majority of first prizes and captured all but one championship. Edwin Pease of Usk won senior and grand championship on his aged boar. Jack Adams of Spokane captured senior and grand championship with his yearling sow. Lester Hartley, Cheney, showed the junior champion boar, leaving the junior sow championship to the only veteran breeders able to break in, A. H. Poston & Sons of Spokane. Willard Brown of Spokane and Edgar Boucher of Cheney also won prizes as club boys.

The best Hampshire hog show in recent years at this fair was made up by the entries of J. M. Fruitts, Cambridge, Idaho, and Hayes & Harter of Grants Pass, Ore. Fruitts was the heaviest winner, taking all but one championship. His three purebred barrows win the sweepstakes over all breeds in the fat barrow classes.

The Sheep Show.

Nine breeds of sheep were shown with fairly well filled classes in all cases. J. G. S. Hubbard & Sons, Monroe, Ore., and the University of Idaho divided most of the Hampshire honors. Floyd T. Fox, Silverton, Ore., was leading winner in Shropshires. Hubbard & Sons and the University of Idaho competed in Southdowns, Hubbard taking all firsts but two. In the Oxfords, Mr. Fox, Harold W. Hastings, Thornton, Wash., and E. F.

(Continued on page twenty-three.)

Red Cross Directs Relief

(Continued from page eight.)

raw beans, condiments in which the bean is an ingredient are exported. Even at that, the value of the imported beans and peas, together, exceeds that of their value in her export, and it may be deduced that her production of the two is below consumption's requirement. Indeed, we find specific statement that her beans are insufficient. Soy bean dishes enter daily into the diet. Sweet potatoes, and, of late, Irish potatoes, are used, and some Irish potatoes are exported. New grains and succulent vegetables are being introduced. The use of an edible seaweed increases the food supply.

The fish supply is more than adequate for her needs, and Japan has foreign markets for several species.

Her imports in sugar are about twice in value that of her export sugar.

About three-fifths of the arable land is owned by small peasant proprietors, the holdings of an acre, more or less, each. The rest is mostly worked by tenant farmers. More than half the land is used for growing rice, the staple food of the country. Large crops are raised of wheat, barley, rye, millet, buckwheat, maize, beans and potatoes, also tobacco and tea. Mulberry trees are widely grown and the number of families who are engaged in silk culture reaches nearly 2,000,000. Nearly 4000 factories have been engaged in the silk industry, employing 64,000 men and 430,000 women.

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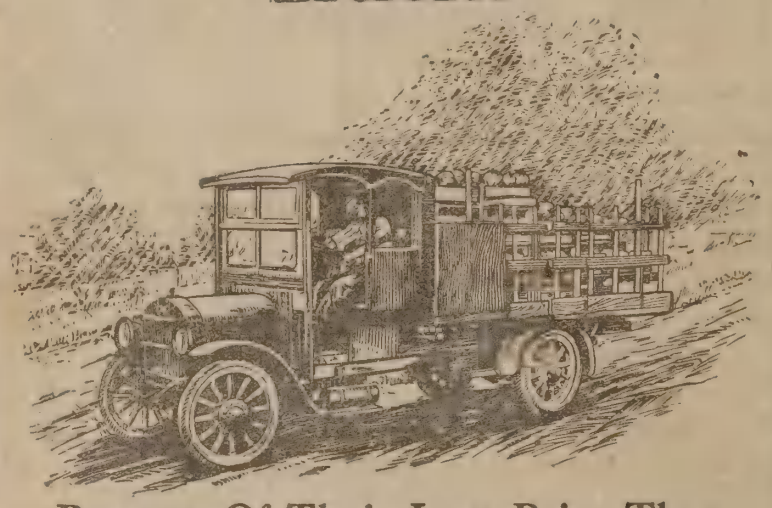

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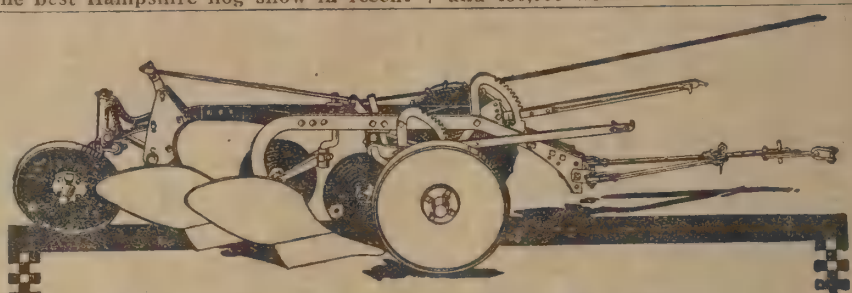

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ORCHARD AND GARDEN

Pruning Blackberries

By C. L. VINCENT.

Department of Horticulture, Washington State College.

In a previous article Prof. Vincent discussed the pruning of raspberries.

The fruiting habit of the blackberry is quite similar to the red raspberry. When the canes go into their winter condition there may or may not be side branch development. Whether this is the case or not will depend somewhat on the system of training the grower wishes to follow and somewhat on the culture and the variety. The loganberry and Evergreen blackberry usually form side branches.

In Puyallup valley canes with very little side shoot growth are desired. At the end of the first season then, lateral buds only will be formed on the main canes in the greater number of cases. The following year leafy growths start from these lateral buds, on which are produced from three to five three-leaflet leaves. This growth terminates in a dense cluster of flowers, and it is only seldom that leaves are found scattered among the blossoms.

The blackberry may be pruned in practically the same way as the red raspberry. It is a very simple operation, if done regularly every year. A blackberry patch which has had its pruning neglected for any length of time is difficult to prune.

Four Steps in Pruning.

The first pruning given the blackberry is at planting time, when the canes are cut back to about a foot long; the second consists of cutting out the old fruited canes, as soon as harvest is over, and while the canes are more easily cut. Later the canes become woody and hard. Burning the old canes at once disposes of any fungus spores or insect pests which may be on them. The third step in pruning blackberries is to remove the surplus new canes. If all the suckers and new canes which appear are allowed to grow, the berry field would become unmanageable in a year or so, making the berries hard to harvest and materially reducing the yield. The plants must be kept in individual hills, which will necessitate some hand hoeing to keep the suckers out. The space between the rows is kept free from sucker growth by frequent cultivation. New canes to take the place of the old ones removed come up as suckers during the growing season around the crown of the plant and should not be touched until spring. In the spring select six or seven of the strongest canes to produce that year's crop, removing all the rest. Care must be taken to cut the canes all close to the crown. In the case of the loganberry, growers in parts of Willamette valley do not consider six canes enough, hence the practice at present is to leave 10 and 12 or even more. The final step in pruning is to clip back the fruiting canes slightly if there is any evidence of winter injury on the ends of the canes or if they are too long to be easily handled.

If side branches are produced on the young canes during the growing season instead of just the lateral buds, these should also be clipped back in the spring if they are too long or if there is any evidence of winter injury. It is best not to cut the side shoots back to less than 20 inches.

A third article by Professor Vincent will discuss the pruning of currants and gooseberry bushes.

Strawberry Root Weevil

In districts where the strawberry root weevil have been doing their deadly work there have been many growers who have plowed their patch up as soon as the injury has spread enough to indicate that the entire patch would soon be affected. Such a practice is not always necessary, since there are times when control methods can be applied and the plants saved for another crop.

H. B. Carroll Jr., county agent of Whatcom county, gives the following plan of controlling the pest as is being tried in that district:

Do not plow out an infested patch just after harvest. If the patch is plowed out during the summer the beetles are caused to leave and to infest surrounding fields and to lay their eggs there, thus spreading the pest. Leave the infested patch lie until about September 1.

At that time hook out the plants and remove them from the field and plow the ground. Leave no vegetation whatever for the grubs to live on. Keep the ground absolutely clean cultivated and entirely free from any growing matter for three months.

The result of this treatment is that the beetles are induced to remain in the infested field through the summer and lay all their eggs there. The beetles that have come over from last winter then die. These eggs in this infested field then hatch and their grubs come out. If the field has been plowed and the vegetation kept down these grubs find nothing to live upon and then perish.

The same ground is then free from grubs and it may be planted to any crop desired, even back to strawberries, the next spring. However, if strawberries are returned to the land at once it is recommended that the barrier be used to keep beetles from coming back onto the ground and reinfesting it. Several growers in western Washington have used the barriers with crude oil and were successful.

Another control method that looks very promising is one tried by T. N. Clapsaddle of Arlington, who finds that by running a few young pullets on the patch as soon as the crop has been picked the weevil will practically all be destroyed. Although he had but a small patch, he turned the chicks onto the strawberries, since he figured they had been destroyed by the weevil and he planned to plow the patch the following spring.

The plan has been recommended by those who have made a study of the strawberry pest, since they find that both the larva and the adult weevils are above the surface of the ground during the month of July, so if the young pullets can be given the run of the strawberry patch at this season, or as soon after the crop has been harvested as possible, the birds should pick up a large part or possibly all of the weevils.

At least this is an easy remedy to try out and there have been a number of growers who have determined to keep their plantings another year and be prepared to run chicks over the patch and thus avoid further ravages of the pest, which have gotten only a foothold so far.

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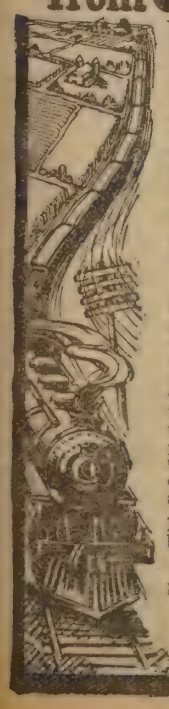

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You will be amazed and delighted. You will know what clean teeth really mean. Cut out coupon now.

Protect the Enamel

Pepsodent disintegrates the film, then removes it with an agent far softer than enamel. Never use a film combatant which contains harsh grit.

1252A

10-Day Tube Free

THE PEPSODENT COMPANY,
Dept. 261, 1104 S. Wabash Ave., Chicago, Ill.
Mail 10-Day Tube of Pepsodent to

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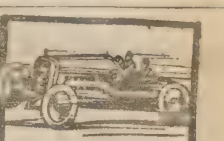
Only one tube to a family.

LEARN AUTO AND TRACTOR BUSINESS IN 6 TO 8 WEEKS



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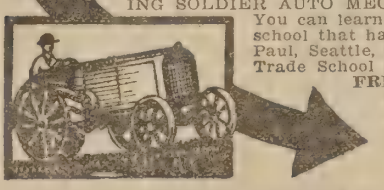
THE HARVEST DAYS ARE NEARLY OVER, PREPARE NOW TO EARN MORE MONEY.

Automobile, Airplane and Tractor mechanics, Vulcanizers, Acetylene Welders needed everywhere. We teach you to be an expert so that you can make the biggest kind of money. Our Graduates command the biggest pay.

WE ARE THE ONLY AUTOMOBILE AND TRACTOR SCHOOL NORTH OF MISSOURI, WHICH WAS APPROVED AND EMPLOYED BY THE U. S. GOVERNMENT WAR DEPARTMENT FOR TRAINING SOLDIER AUTO MECHANICS.



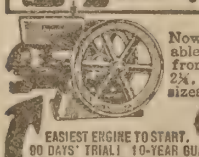
You can learn this attractive, well-paying business in a practical school that has complete equipment. Transfers to all schools—St. Paul, Seattle, Spokane, San Francisco and Vancouver. The Largest Trade School System in America. Day and evening classes.

FREE—Send for our Free 100-page illustrated Catalog which will explain everything fully. Write for it today.

Modern Auto and Tractor Schools

Spokane. W1302 Second Ave. Dept. 10. Seattle. 700 Mercer St.

1½ H.P. $43.45



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EASIEST ENGINE TO START. 90 DAYS' TRIAL! 10-YEAR GUARANTEE; or EASY TERMS.

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MEN WANTED

to sell our goods in the country and city. Why work for others when you can have a business of your own with steady income? We sell on time and wait for our money. Team or auto needed for country; no outfit needed in city. Experience unnecessary. We train in salesmanship.

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WINONA, MINN.

(Mention this paper.)

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HOW TO GET A MAELSTROM DRY-CLEANER AND SPIRAL MOP WRINGER FREE.

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32 page book—how to keep your dog well — how to care for him when sick. Result of 35 years' experience with every known dog disease. Mailed FREE. Write today. Dept. 449

H. CLAY GLOVER, V. S.
129 West 24th St. New York

In writing advertisers, be sure to say you saw their advertisement in The Washington Farmer.

When Driving in a Large City, Look Out

By L. J. SMITH, State College of Washington

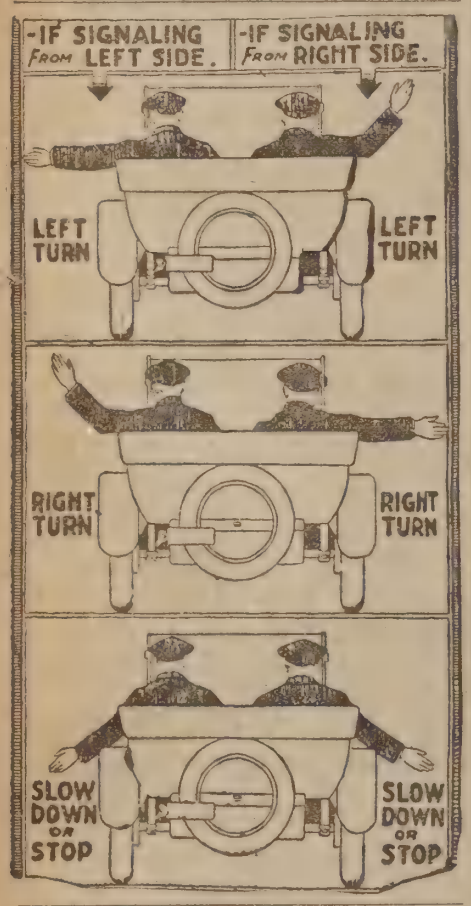
Those of us who live and drive our cars in the freedom of the open country and smaller towns often feel embarrassed and hampered by the strict traffic regulations of the teeming streets of the larger cities, and at first thought are often inclined to resent the many city laws governing the use of the streets.

Without these rules, however, it would be impossible to conduct the business of our large cities at all. We must also remember that most of the regulations are for our own safety and to assist us in passing through congested districts as rapidly as possible.

The traffic regulations of most cities are, in their fundamental particulars, fairly uniform. The restrictions increase with the congested areas until the stranger breathes a sigh of relief if he gets through a day in the city without getting into trouble with the police.

Last year, while driving in Spokane, I passed an office building, and recalled that I wanted to visit an office in it, and stopped hurriedly and went in. Upon my quick return, I found a tag on my wheel inviting me to visit the police station. I went over at once, which is the best thing to do, and the sergeant at the desk was inclined to be cross; but when he found that I was from out of town and that it was my "first offense," he let me off with a copy of the city traffic regulations, and this remark: "You people from the country cause us a lot of trouble."

Parking cars presents no small difficulties in the cities. In Los Angeles it has come to such a pass that people are willing to pay 35 to 50 cents a day to park their cars in a convenient vacant lot. While in that city last month the writer, with some

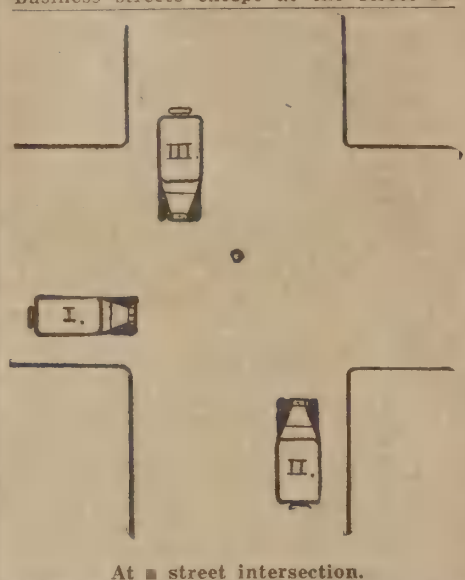


difficulty, found what appeared to be a proper place to leave his car, but to be doubly sure, asked an officer who happened along. "No," he said, "you can't park there, nor those two cars behind you," and he went over and "tagged" the other cars. We three had failed to see a small green sign partly hidden by the branches of an adjacent tree which prohibited parking between the sign and the corner.

While the time limit for parking runs from two hours to one-half an hour, there are often ways, known to the resident, of being able to extend the time. For example, having stopped in front of a small store, I asked the merchant how long one could park in that block. "Two hours," he answered, "but today you can stay as long as you like." "How's that?" was my natural query. "The checking officer makes this street every other day," said the observant salesman. "How will you manage tomorrow?" I asked, getting more interested. Here was inside information from one wise in the ways of his city. "Well, tomorrow I have to watch. When the officer comes along he makes a chalk mark on the front wheel up under the fender and makes a note of the time. Then I know I have to move within two hours."

No one should enter a large city without knowing the three driver's signals—the left turn, the right turn, and the stop signal. The accompanying illustration, which is from the Seattle traffic book of regulations, shows these standard signals which are used in all larger cities and towns. Many who know these signals fail to use them soon enough. The signal should be given at least 25 feet before the turn or stop. Too often the driver sticks out his or her hand quickly and as quickly draws it back. The arm signal should be continued until the movement is well executed.

No vehicle is allowed to make a turn in business streets except at the street in-



At a street intersection.

tersections. In many cities only the right turn is permitted at certain extremely busy corners during business hours, and in extreme cases, neither right nor left turn is allowed. A sign at the right near the corner gives the driver warning of such regulations. A right turn is usually not allowed unless the traffic officer is allowing that "line of traffic" to pass his corner. If a right turn is contemplated, the driver should work over nearer the curb and make the turn near the corner, watching out for pedestrians not facing the car.

The question as to who has the right of way at the corners perplexes some. Usually street cars have the right of way in any case. If you and another car are approaching an intersection simultaneously, the car on the right has the right of way. In the illustration, car No. 2 has the right of way over No. 1, but No. 1 has the right of way over No. 3.

Care must be exercised in backing away from the curb. The driver backing out must do so very slowly, for those coming on from behind have no warning of his intentions.

If you desire to drive slowly, keep well to the right.

Don't park near fire hydrants (15 to 20 feet), or near corners (usually 20 feet), or

(Continued on page twenty-three.)

Farmers' Want Ads

MONUMENTS F

COMPLETE STOCK. WRITE FOR DESIGNS and prices. Inland Monument Co., N1001 Monroe, Spokane.

HELP WANTED—Female 1

GIRLS DESIRING WORK FOR HALF BOARD and room, while attending school, write Gooding College, Gooding, Idaho, today.

HELP WANTED—MALE 3

YOUNG MAN WANTED FOR DAIRY WORK; permanent job. Perfection Dairy, Pendleton, Ore.

HELP WANTED GENERAL 5

MEN AND WOMEN, AGE 17 TO 30, AT ONCE to train for positions with Western Union Telegraph Co. and various railroads. Pacific Telegraph Institute, Spokane, Wash.

AGENTS WANTED

SELL DRY GOODS REMNANTS—GREATEST bargains in fine goods. Agents, Pacific Remnant Co., 169 N. Shaffer, Orange, Calif.

SALESMEN WANTED 12

ARE YOU LOOKING FOR A PAYING POSITION? Sell trees and plants for a reliable company. Terms on request. Salem Nursery Company, 428 Oregon bldg., Salem, Ore.

SITUATIONS WANTED—Male 21

EXPERIENCED FARMER, SINGLE, WANTS permanent job on ranch as working foreman; understands irrigation, all kinds of farming and livestock raising; good references. Address A 5, Idaho Farmer, Spokane, Wash.

SCHOOLS AND COLLEGES 26

EARN $110 TO $250 MONTHLY; EXPENSES paid as railway traffic inspector; position guaranteed after completion of 3 months' home study course or money refunded. Excellent opportunities. Write for free booklet G-157. Stand. Business Training Inst., Buffalo, N. Y.

FRESH FOOD PRODUCTS 51-3

FAMOUS NONIRRIGATED DEHYDRATED Oregon prunes direct; especially fine quality, packed in wax paper lined boxes, sanitary; 25 pounds (25 pounds net), large size, 40-50 to the pound, 11c per lb.; 50-60, 9c; 60-70, 8c, or in 100-pound double bags, 1½c less per lb. These prices are cash f. o. b. Red Hill orchard, R3, Box 158, Salem, Ore.

FISH—4 LBS. SMOKED SALMON, $1; 4 LBS. Alaska salmon bellies, $1; 4 lbs. black cod, $1; 3 lbs. best codfish, $1; delivered by mail. Coffin Fish Co., Seattle, Wash.

BEES AND HONEY 53

ALFALFA-SWEET CLOVER HONEY—2 60-LB. cans, $9.75; one can, $5, f. o. b. Rigby; one 40-lb. can, prepaid to fourth zone, $5.75; quality guaranteed. Heckman & Larsen Honey Co., Rigby, Idaho.

VALLEY BLOSSOM HONEY, QUALITY GUARanteed, 1 60-lb. can, $7.50; 2, $14.10; discounts on large quantities. Ernest Sires, Route 7, Yakima, Wash.

ALFALFA, SWEET CLOVER HONEY, PREpaid second zone, 3 10s, $5; 60 lbs., $8.30; two cans, $14.50, not prepaid. Harry Fisher, Prosser, Wash.

HAPPY HOME HONEY — ALFALFA AND clover; 60-lb. can, $7.50; two cans, $14.50; case six 10-lb. pails, $8.25. H. N. Paul, Mabton, Wash.

PURE, WATER-WHITE SWEET CLOVER honey; 60-lb. can, $5; two, $9.75. H. R. Bowen, Roberts, Idaho.

EXTRACTED HONEY FOR SALE—WELLS D. Rose, Sunnyside, Wash.

MISCELLANEOUS—FOR SALE 60

SASH AND DOORS—O. B. WILLIAMS CO., 1943 First ave. So., Seattle. Chicken house sash, 20" wide by 25" high, 80c; a dozen different sizes in stock for immediate shipment. Skylights for chicken houses, 36"x40"; price, glazed, $2. This is the size recommended by the Western Washington experiment station. We carry them in stock for immediate shipment. Sash and doors for all purposes at lowest prices. All orders receive prompt attention. Our large illustrated catalog No. 35, showing full line of building material and built-in fixtures for the home, free on request. O. B. Williams Co. Established 1899.

LEAF TOBACCO—FIVE POUNDS CHEWING, $1.75; ten, $3; five pounds smoking, $1.25; ten, $2; twenty, $3.50. Send no money, pay when received. Pipe and recipe free. Cooperative Farmers, Paducah, Ky.

NATURAL LEAF TOBACCO—CHEWING, 5 lbs., $1.25; 10 lbs., $2.50; smoking, 5 lbs., $1.25; 10 lbs., $2. Farmers' Union, Mayfield, Ky.

(Continued on following page.)

The value of the low-priced FISK PREMIER CORD can best be appreciated when it is realized that it is distinctly a Fisk Product—

And that every Fisk Product is built to sustain a reputation.

There are many car owners to whom first cost is a major consideration. They are constantly searching—most often in vain—for a good cord tire at a low price.

The FISK PREMIER CORD is made expressly for them—and the Fisk name branded on it is a definite insurance of good service, good value, and thorough reliability.

There's a Fisk Tire of extra value for every car, truck or speed wagon

FISK
CORD TIRES

FARMERS' WANT ADS

This is the farmers' "want," "sale" and "exchange" department for small advertisements of farmers, including live stock and poultry.

Advertising rates for ads running 1 to 3 times, 10c per word per insertion, with a special rate to Farmer subscribers, as follows: Ads running 4 to 12 times, 9c per word per insertion; ads running 13 times or more, 8c per word per insertion.

All commercial and land advertising, 10 cents per word per insertion. Open also to nonsubscribers.

In using these columns advertisers must observe (1) No advertisement will be accepted for less than $1.00 per insertion. (2) Every word, number and initial, including name and address, must be paid for. (3) New advertisements, changes of copy or cancellations must reach general office, Spokane, Wash., 10 days in advance of publication date. (4) Cash must accompany order.

Above rates include insertion in The Washington Farmer, The Idaho Farmer and The Oregon Farmer, which constitute the Pacific Northwest Farm Trio, 46 Review building, Spokane, Wash.

MISCELLANEOUS—FOR SALE (Continued) 60

CORN HARVESTER, CUTS AND PILES ON harvester or windrows; man and horse cuts and shocks equal corn binder. Shipped by express to every state. Only $25 with bundle-tying attachment. Testimonials and catalog free showing picture of Harvester. Process Harvester Mfg. Co., Salina, Kansas.

LEAF TOBACCO—3 YEARS OLD. NATURE cured. Ever Ready safety razor and six blades, or imported briar pipe free with order. 10-lb. packages, select chewing, $3.50; select smoking, $3; medium smoking, $1.75. Pay for tobacco and postage when received. Farmers' Union, Hawesville, Ky.

PIPE—GET PARTICULARS ON OUR SPECIAL flue pipe, 1¼, 1½ and 2 inch. Big saving on it. We also have all sizes second-hand and new standard pipe at low prices. We also save you on roofing, belting, pumps, engines, cables, etc. Alaska Junk Co., S120 Adams, Spokane, Wash.

SPECIAL—ONE-POUND TIN "SATISFACTION tobacco" and pipe for $1. Smoking, chewing tobacco, cigars, cigarettes and complete line of pipes. Wholesale and retail. Peter M. Jacoy, 3 Washington st., Spokane.

WALL BOARD—WRITE FOR SAMPLE OF Washington plaster wall board; won't warp, won't burn. Manufactured by Washington Building Products company, 6851 E. Marginal Way, Seattle, Wash.

ALL-WOOL HAND AND MACHINE KNITting yarns for sale from manufacturer, 95c, $1.35, $1.60 per lb. Golf and plain socks, $5 orders postpaid. Free samples. H. A. Bartlett, Harmony, Me.

NATURAL LEAF TOBACCO—CHEWING, 5 lbs.: $1.75; 10 lbs., $3. Smoking, 5 lbs., $1.25; 10 lbs., $2. Pay when received; pipe and recipe free. Farmers' Tobacco Union, B19, Paducah, Ky.

TOBACCO—KENTUCKY'S PRIDE: EXTRA fine chewing; 10 pounds, $3; smoking, 10 pounds, $2; 20 pounds, $3.50. Farmers' Club, Mayfield, Ky.

MISCELLANEOUS 61

SECRET OF SUCCESSFULLY CANNING vegetables, fruits and meats. Information free. Write F. G. Alexander & Co., Roseville, Calif.

COYOTE TRAPPERS' QUESTIONS answered; dime each. Trappers' Exchange, Muldoon, Idaho.

PROFESSIONAL'S COYOTE SCENT FORMUla, fifty cents. Trappers' Exchange, Muldoon, Idaho.

MISCELLANEOUS—Wanted 63

WE HAVE THE FEED, WANT TO MAKE A deal with owner of band of sheep to feed on shares. A 4, Washington Farmer, Spokane.

MACHINERY—For Sale. 93

DOLLARS IN YOUR POCKET ON OUR used engines, wood sawing outfits, farm equipment. New sawmill outfits., etc. Fallquist Brothers. W20½ Riverside, Spokane.

FOR SALE—LAUNDRY MACHINERY AT A sacrifice. For further particulars address P. O. Box 544, Salmon, Idaho.

AUTOMOBILES—FOR SALE 112

SEE CHEVROLET FIRST—NEW AND USED cars at prices that will surprise you; stop in or write Inland Empire Chevrolet Cales Corp., 916 2d ave., Spokane. Open evenings. Open Sunday.

AUTO TRUCKS—For Sale 115

WHEAT-HAULING AND TRUCK CONTRACTing season is now on. Use our Ford ton trucks with the six-speed transmission. Power when needed; speed when you want it. National Motor Co., authorized Ford dealers, 1212 First. Phone Main 460. Spokane.

AUTO ACCESSORIES AND PARTS 119

PATRONIZE THE HOUSE THAT CAN GIVE you the best service. Complete stock of automobile repair parts. Wire and disc wheel sales and service. Pacific Gear and Auto Parts Co., 1022 First ave., Spokane, Wash.

NEW AND USED AUTO PARTS—NEARLY all cars. A trial order is all we ask. C. & D. Auto Salvage and Supply Co., 1904 Grand ave., Kansas City, Mo.

STOVE REPAIRING 128

WRITE MYER RUBENS, SPOKANE, ABOUT stove repairs, welding broken parts, nickel plating.

FUR-BEARING ANIMALS 170

SILVER AND CROSS FOXES FOR SALE. William Rambo, 407 Sprague, Spokane.

PETS—Dogs, Birds, Etc. 171

3 FEMALE SHEPHERD PUPPIES; ALL good drivers, snappy. Only $3 each. Sam Gangidino, Lakeview, Idaho.

RABBITS and HARES. 173

MAKE MONEY RAISING RABBITS AND geese. Pedigreed New Zealands, Blue Flemish Giants; at right prices. Toulouse geese. Agnes Brenner, R. 4, Box 49, Tacoma, Wash.

PEDIGREED FLEMISH GIANT RABBITS. C. E. Cockerham, Newberg, Ore.

POULTRY 174

IF YOU NEED ANY PULLETS TO FILL OUT your flocks, we can supply February, March, April and May hatched White Leghorn pullets of Hollywood, Tancred or Tancred-Hollywood crossed strains at reasonable prices. We have about 250 very choice R. I. Red pullets. We ship all pullets with a guarantee of satisfaction or they may be returned to us within three days. We have a large assortment of used incubators which we will sell at very attractive prices. Write for quotation on pullets and incubators. Queen Hatchery, 1430 1st ave., Seattle, Wash.

CERTIFIED WHITE LEGHORN QUALITY chicks for summer and fall months, from selected free range, high egg producing breeding flocks, inspected and accredited by the Sonoma county farm bureau. Send for catalog and attractive prices. Safe delivery and full count guaranteed. Must Hatch Incubator Co., Inc., 445 Seventh st., Petaluma, Cal.

WHITE LEGHORN BABY CHIX FROM flocks mated to males having sire's dam record of 240 to 297 eggs per year. Full particulars and interesting literature on request. We are accredited by Sonoma county farm bureau. The Pioneer Hatchery, 422 Sixth street, Petaluma, Cal.

BUY SONOMA COUNTY ACCREDITED Hatcheries chicks; electric hatched by the man who put electric incubation where it is today. I am the father of electric incubation. Stock the best. Prices right. Write for booklet. White Hatchery, Petaluma, Cal.

JERSEY BLACK GIANTS—YOUNG STOCK for sale, $2.50 and up. E. M. Chambers, Boyill, Idaho.

WANTED—BLACK LANGSHANS. ADDRESS Box 281, Bellevue, Idaho.

POULTRY (Continued) 174

SUMMER SALE "HENACRES" PULLETS; best for fall and winter eggs, $1.25 to $2 each. Hens for breeders, $1 to $1.50 each. High grade stock at reasonable prices. Booking orders now for 1924 baby chicks. Free catalog and price list. "Henacres." Box A, Prosser, Wash.

DOLLARS FOR YOUR EGGS—WE PAY THE top market prices for your eggs and poultry. Daily cash remittances. McClintock-Trunkey Co., produce department, Spokane.

SPECIAL PRICES ON GUARANTEED DAY-old pullets; fall and winter delivery. Write for particulars. Eureka Hatchery, Petaluma, Cal.

ANCONA COCKS AND COCKERELS, $2 EA.; 5 mo. Plymouth Rock pullets, $1.75 ea. Toulouse geese. Peerless Poultry Farm, Sherwood, Ore.

SINGLE COMB MAMMOTH BLACK MINORcas; several large, early cockerels, $2.50 each. Geo. O. White, Dixon, Mont.

LIVE STOCK 177

JERSEY BULL CALF BARGAIN—DROPPED June 14, 1923. Sire, Andrew Hoag, double grandson of Capt. Tristram; granddam half sister to St. Mawes. Dam, Charity's Pogis St. Mawes. She traces 4 times to Rosaire's Olga Lad, four times to St. Mawes, once to Pogis 75th of Hood Farm and once to Octavia's Duke. Very low price, quality considered. S. O. Pool, Malaga, Wash.

WE GUARANTEE TO PAY THE HIGHEST market price for your poultry and live stock. Veal market growing stronger. Owing to the constant changes in the market we are unable to quote prices in this paper from week to week. We will furnish tags and prices when you are ready to ship. Write us what you have to sell. Prompt returns. John Lewis & Co., Spokane, Wn.

FOR SALE—REGISTERED HAMPSHIRES, Romneys and Rambouillets in both ewes and rams. All range raised, strong and healthy. We specialize on stud rams for small flocks. We can also furnish range and farm ewes in small or large lots. Personal attention to all orders. H. Stanley Coffin, Yakima, Wash.

TOP PRICES PAID FOR CREAM, EGGS, poultry, pork, veal, also fruits, berries and vegetables in season. Inland Products company, Second at Cedar, Department E, Spokane, Wash.

WE PAY TOP PRICES FOR YOUR LIVE OR dressed veal, hogs and poultry. Your check by return mail. Shipping tags on request. M. & J. Packing Co., Spokane.

FOR SALE—REGISTERED POLLED SHORThorn bull, calves; herd accredited; inspection invited. Whitla Ranch, Mica, Idaho.

REGISTERED SHROPSHIRE RAMS—FLOCK headers and range rams at reasonable prices. George Armstrong, Corvallis, Ore.

REGISTERED HOLSTEINS—BULLS, HEIFers and cows for sale; accredited herd. Oscar Dunlap, Junction City, Oregon.

REGISTERED BERKSHIRE BREEDING pigs, $16; big type, champion blood. Chas. O. Churchill, Shelton, Wash.

FOR SALE—10 HEAD OF REGISTERED Shorthorns, priced for immediate sale. E. W. Haag, Sandpoint, Idaho.

REGISTERED HAMPSHIRE SHEEP FOR sale; 22 yearling rams, 20 ewes. Perry Smith, Yamhill, Ore.

REGISTERED HAMPSHIRE BREEDING bucks and ewe lambs. Far Niente Farm, R2, Bothell, Wash.

REGISTERED SHROPSHIRE RAMS AND ewes. Write McK. Edwards, Valley, Wash.

FIVE REGISTERED AYRSHIRE COWS FOR sale. Perfection Dairy, Pendleton, Ore.

FINE MILK GOATS VERY REASONABLY priced. Wm. Ehrke, Ashland, Ore.

OXFORDS—RAM AND EWE LAMBS. J. E. McGoran, Valleyford, Wash.

HARNESS and SADDLERY 189

SEND FOR FREE HARNESS AND SADDLE catalog today; cut out the middleman, buy direct from the manufacturer. Lowest prices in the west; satisfaction guaranteed. Established 1881. Write Pierce Harness Co., Dept. T, Spokane, Wash.

HAY FOR SALE. 200

ALFALFA HAY, GUARANTEED QUALITY; prompt shipment; buy direct and save money. Prices upon application. Richard Nyman, Walla Walla, Wash.

HOTELS 306

FAIRMONT HOTEL—RATES $1 DAY AND UP. 319 Riverside, Spokane. Free bus.

FAIRS. 370

HARVEST FESTIVAL, NAMPA, IDAHO, SEPtember 18 to 21. Southwestern Idaho's great fair and live stock show. Premium list free. Write P. W. Duffes, secretary, Nampa, Idaho.

WESTERN WASHINGTON FAIR, PUYALLUP, October 1-7, both inclusive. 133,000 in attendance last year. You are invited to participate. W. H. Paulhamus, manager.

NORTHWEST WASHINGTON FAIR—LYNDen, Sept. 24-29. Don't miss this great farm and livestock exhibition. Premium list free. A. E. Rusco, secretary, Lynden, Wash.

WASHINGTON STATE FAIR—THE GREAT fair and livestock show of Washington, Sept. 17 to 22. Premium list free. Write H. P. Vermilye, secretary, Yakima, Wash.

JOB PRINTING. 372

WEDDING ANNOUNCEMENTS AND INVItations, catalogs, booklets, high school annuals, letter heads, envelopes, cards, butter wrappers, etc. Union Printing Co., 412 First ave., Spokane, Wash.

CLEANING, DYEING, Etc. 420

FRENCH DRY CLEANING BY PARCEL post. Ladies' and gents' suits, furs, hats, etc., prompt service. Address City Dye Works (Dept. A), E422 Sprague ave., Spokane, Wash.

HIDES, PELTS AND WOOL 430

SHIP YOUR MOLESKINS TO W. E. JOHNSON, Uncas, Wash.

TANNING 425

WE WILL TAN YOUR COW OR HORSE HIDE for robes or coats, and guarantee our work. We are custom tanners, manufacturers and taxidermists. Write for prices. Spokane Fur Tanning Co., 7 Pine st., Spokane.

ANY KIND OF HIDE TANNED WITH HAIR on, or for leather. Fur and taxidermy work done to order. M. R. Mohr Co., 321 Sprague, Spokane, Wash.

KODAK FILM DEVELOPING 472

FREE ENLARGEMENT WITH 75C ORDER high gloss print. Spokane Film Co.

FILMS DEVELOPED FREE—KODO, THE PICture King, 815 Stevens, Spokane.

MATERNITY HOMES 497

MATERNITY HOSPITAL; STRICTLY PRIvate; doctor in attendance; prices reasonable. Mrs. Elizabeth Peel, matron. W1324 Broadway, Spokane.

BUSINESS OPPORTUNITIES 516

OWNER OFFERS WHOLESALE AND RETail hay, wood, grain, feed, seed and flour business established four live towns, best grain and dairy section eastern Washington. Owns warehouses, trackage each point. One has hundred car apple storage plant, another fully equipped creamery additional above lines. Main point has modern grain elevator, feed mfg. plant, seed warehouse. Also half interest growing creamery, paying good salary and dividends. All operating good profit and growing. Splendid opening for man with sons to establish in business. Sell all or part. Prices run $5000 to $20,000; ¼ cash, balance five-year contract, 6 per cent. A 3, Washington Farmer, Spokane.

BUILDING MATERIAL 588

FIX BROKEN PLASTER WALLS WITH PERfection plaster wallboard; nailed on like lumber takes calcimine or paint; sample and booklet from Western Wallboard Co., Seattle, Wash.

SEEDS 620

ORDERS FILLED PROMPTLY FOR VETCH, clover, pasture mixtures, gray and black oats, seed wheat and barley; hay of all kinds. Brownsville Warehouses. Chas. Sterling, owner, Brownsville, Ore.

FOR CLOVERSEED, PASTURE GRASSES, vetch, gray oats, etc., get latest prices, stating amount wanted. Lee Hershberger, Hubbard, Ore.

NURSERY STOCK 621

WANTED, AT RIGHT PRICES—A FEW HUNdred pounds of top sets of red winter onions for fall delivery; also ten thousand strong two-year-old asparagus plants for delivery in March, 1924. William Elwick, Goodnoe Hills, Wash.

TREES—NOW BOOKING MAIL ORDERS AT reduced prices for limited time only. Apples, pears, peaches, nut trees, prunes, cherry, small fruits, etc. Live agents wanted. Lafayette Nursery Co., Lafayette, Ore.

NURSERY STOCK—PRUNES, WALNUTS, FILberts, fruit trees of all kinds, gooseberry and small fruits. Buy direct and save 50 per cent. Brooks Nursery, Lafayette, Ore.

FARM LANDS FOR SALE 651

"DALYACRES," CREAM OF THE FAMOUS Marcus Daly estate in the magnificent irrigated Bitter Root Valley, is one place where you can raise all cash crops. The market is at the ranch door. Poultry and dairy products for local cheese factories and creameries; beans, cherries, peas and strawberries for two big local canneries. Big cash returns per acre with monthly income from cows and chickens make success certain. A brand new modern bungalow for you on long time, low interest and such small monthly payments that you can not fail to pay out and make a comfortable, independent living in the heart of the scenic playground of America. Write for free booklet, "Where Farming Is Different." The Bartlett-Bolen Company, 1 Coulter blk., Hamilton, Mont.

CUTOVER LANDS, EASY TO CLEAR; $8 TO $20 per acre; 25 miles north of Spokane; on hard surfaced highway; Great Northern and Milwaukee railways; excellent opportunity for dairying and stock raising with Spokane markets and creamery near at hand. Will help the man who will live upon this land and agree to clear a part each year by giving lumber to help start his buildings, and a pure-bred Jersey bull to groups of farmers. Interest and payments low. Write Milan Farms Development company, Dept. T, Old National Bank bldg., Spokane, Wash.

POTATO, POULTRY, BERRIES, ALL cleared and in meadow. A few feet from paved highway; located a half mile from railroad station, good store and sawmill; excellent neighbors, fine schools, close to several good towns. Priced at only $100 an acre. Sold in 5, 10 or 20 acre parcels. Small payment down, balance in 10 years at 6 per cent. This is the best land at the price that we know of. Write or call for full information. Carter, MacDonald & Miller, 208 Columbia st., Seattle, Wash.

5000 ACRES, NEWAUKUM RIVER VALLEY; highest type level farming land; all rich, productive soil. No gravel. No floods. No crop failures. Well developed district. Near Chehalis, Washington, 20 acres up, $15 to $50, easiest terms. Settlers can get steady employment years to come; good wages; and live at home. See local representative, St. Helens hotel block, Chehalis, or write Graham Land company, American Bank bldg., Seattle.

DO YOU WANT A HOME IN A RICH VALLEY near Spokane, on three transcontinental railroads? Where soil is perfect, rainfall ample. Summers cool, winters moderate? The kind of stump land that pays to clear? Timothy and clover, green eight months in year; natural stock country. Land cheap. 10 yearly payments at 6 per cent. Humbird Lumber Company, Box 00, Sandpoint, Idaho.

240 ACRES, 14 MILES FROM SEATTLE, NEAR paved highway; good soil; ideal dairy proposition; $30 an acre. F. J. Pingry, 6272 21st ave. N. E., Seattle.

60-ACRE FARM, FAMILY ORCHARD, FAIR buildings; creek, two wells. A. Medack, Mt. Angel, Ore.

FARM LANDS FOR SALE (Continued) 651

160 ACRES GOOD SOIL, CUTOVER LAND; 20 cultivated; 90 more could be; abundant water; good bottom land, above first level; grow anything; 2 acres family orchard, 2 potatoes, all kinds vegetables; good house, sleeping porch, good barn and outbuildings; 30 tons good hay; 2 milk cows, 2 heifers, 4 steers, 2 horses, harnesses and wagons, implements; fine family dairy ranch; near Clayton, Wash; good roads, schools. Price $4500, including furniture, chickens, etc; everything goes. Half cash, balance easy; no encumbrance. J. Brown, Box 44, Clayton, Wash.

BIG OPENING SALE OF YAKIMA VALLEY farm land, under an assessed state and government approved irrigation project; best, deep soil; close to town and good roads. Price $25 per acre and up. Very easy terms. Western Lands, Inc., owners, 918 Green bldg., Seattle.

FARM FOR SALE—36 OR 80 ACRES, FULLY equipped; one mile from Libby, Mont.; 12 acres cleared; free from rock; city water for domestic and irrigation use free of charge; orchard, small fruit. Run milk route. A beautiful home. Box 662, Libby, Montana.

$8500—160 A., NEAR SPOKANE; 90 A. GOOD soil, free of rock, now under cultivation; fine creek back of barn; some timber; 5-r. house, other bldgs.; well; alfalfa, grain and vegetables do; good diversified farm, $3000 cash down, Owner, P. O. Box 1373, Spokane.

BIG LUMBER COMPANY LAND SALE—IN Skagit county; 40-acre tracts, $1400; $200 cash, balance easy. Lots work for the settler. Splendid district, roads, schools, towns. Information free. H. C. Peters, 726 3d ave., Seattle.

115 ACRES, EXCELLENT STOCK AND DAIRY ranch, 3 miles from Nespelem and good school; plenty outside range; sell or lease. Also 113 acres, Carki valley, Okanogan, for sale. Write or see A. L. Williams, Nespelem, Wash.

SELL YOUR PROPERTY QUICKLY FOR cash; no matter where located. Particulars free. Real Estate Salesman company, 501 Brownell, Lincoln, Neb.

DAIRY RANCH, 174 ACRES; 1½ MILES FROM Enterprise, Ore.; good buildings, fine meadow; an ideal dairy ranch; will rent, sell or trade. Box 1036, Boise, Idaho.

CUTOVER LANDS, DAIRY RANCHES, $10 acre up; ten years' time. Your own terms. Grosgong Land Co., Deer Park, Wash.

8 ACRES BERRIES, Fruit, buildings, tools. Puyallup valley; great producer. A 6, Washington Farmer, Spokane.

320 ACRES LAND; 25 CLEARED; SPRING house, barn. Particulars, write Box 381, Cashmere, Wash.

FOR SALE—160 ACRES, BUILDING; WATER; good crops always. Write Box 84, Innisfail, Alta., Canada.

BARGAINS IN DRY AND IRRIGATED farms. Oregon Mortgage Co., Paulsen bldg., Spokane.

145 ACRES, 40 CULTIVATED. WRITE FOR particulars. C. M. Weeks, owner, Loon Lake, Wash.

320-ACRE FARM IN CULTIVATION; 10 MILES north Almira, Wash. Box 140, Twisp, Wash.

FARM LANDS—Wanted 654

NO COMMISSION — SELL YOUR FARM through Washington Farm Bureau Exchange, represented in 45 states. Lists of farms for sale by owner mailed free. 312½ Lindelle, Spokane.

I HAVE INQUIRIES FOR FARMS IN NORTHwest. Describe fully and state price. R. A. McNown, 310 Wilkinson bldg., Omaha, Neb.

WANT TO HEAR FROM OWNER HAVING farm for sale; give particulars and lowest price. John J. Black, Chippewa Falls, Wis.

FARM LANDS FOR RENT 657

FOR LEASE—440 ACRES DAIRY FARM; ON Puget Sound; low rent; part cash, part in labor. J. M. Dempsey, owner, 326 East 58th st., Seattle.

80 ACRES; 55 IN PASTURE, BALANCE IN cultivation; good buildings; with or without stock. Thomas Toomey, Vader, Wash.

IRRIGATED LANDS—For Sale 663

YAKIMA VALLEY BARGAIN—40 ACRES, IRrigated; W. I. and supplementary water right paid up; five-room house, in good repair; garage and other outbuildings; all fenced; this land will grow 5 tons alfalfa, ten tons potatoes, 80 bushels corn and fifty bushels wheat per acre; also suitable all kinds of berries and fruit, as well as melons; two miles to station and store; 4 miles from two good towns; on main road; half mile to school; on rural route. Price $5500. Federal loan $3100; $2000 will handle. The water right alone is worth the price asked for this farm. I. E. Foss, Mabton, Wash.

CORBIN ADDITION TO GREENACRES—IN the beautiful Spokane valley; 30 minutes from Spokane paved road; 40 inches of water for irrigation; gravity flow. Ask for booklet with all information.

Return coupon—The Fred B. Grinnell company, Spokane, Wash. I am interested in the Spokane valley. Please send booklet and all information to

Name .....

Address .....

WE OWN 1000 ACRES WESTERN WASHINGton choice irrigated land, and sell in tracts of 5 acres upward; $100 or more down, balance 10 years. $40 per acre, unimproved, to $350 per acre for land in highest state of cultivation. Ideal location and climate for poultry, berries, dairying. Write for information. Washington Colonization company, Sequim, Wash.

FIFTEEN HUNDRED IN FIVE TO TWENTY acre irrigated tracts, on state highway and railroad; send for particulars. J. W. Lindsay, Port Angeles, Wash.

ACRE TRACTS—Wanted to Rent 681

WANTED—TO RENT SMALL ACREAGE; would trade western Montana property. Preston Johnson, Rollins, Mont.

CITY PROPERTY FOR SALE 694

THREE LOTS, SANDPOINT, IDAHO; FIVE blocks from passenger station. Box 262, Harrison, Idaho.

FOR SALE OR EXCHANGE 702

FOR SALE, OR WILL EXCHANGE FOR IMproved or partly improved land, 79 acres, buildings, orchard, running water; good neighborhood. P. O. Box 222, Cottage Grove, Ore.

80 ACRES, WELL IMPROVED; NEAR RUpert; sell or trade for stock or grain ranch, Washington or Oregon. Particulars, write Herbert Sartain, Rupert, Idaho.

40 ACRES, IMPROVED, KENNEWICK IRRIgated land, value $12,000; exchange for income property. J. Jacot, Finley, Wash.

TO EXCHANGE—Real Estate 707

312 ACRES HILL LAND; 20 CLEARED; plenty of timber, water and range; fair improvements; will trade for town property or merchandise. F. O. Russell, Chewelah, Wash.

Cattle Ranch To College

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CHAPTER X.—Continued.

Most of the spectators followed the victor, but some remained behind, not to sympathize and condole, but to jeer at John's defeat and laugh at his discomfiture. It was gall and bitterness to the boy, and he was glad to get away out of earshot. Ben helped him put on his clothes and led him down to the creek to bathe his bruised face.

"What's the matter with your hand?" Ben said suddenly, as he noticed the blood trickling over the knuckles of his brother's right hand.

"He chewed it," John answered.

"What! bit you!" Ben exclaimed.

"My arm was around his neck and he grabbed my thumb in his mouth. He wouldn't have got me so easy but for that."

For a time neither boy said a word. How a man could do such "dirty work," as Ben said, was more than he could understand.

On the way back to the house several fellows stopped to call at John as he went by, for the news had spread. He realized that it would take a long time to live down this disgrace. His heart was sore; it seemed as if this was the culmination of all his hardships; he felt as if his life had been all work and no play, that his efforts to do his duty had not been appreciated, that though other boys might enjoy themselves much of the time (and he had seen them in this very camp) he must work, work, work; he felt, in short, very much abused and at swords' points with everybody—his brother excepted. One more blow of bad luck, he thought, would "cap the climax" and would result in he knew not what desperation.

Before the boys had reached the house the news of his defeat had been made known there, and Mr. Worth, thinking that John had become more or less a bully, determined that the lesson he had received should be a lasting one.

"Hello, John!" he said jovially, as the two boys came slowly in, "you met your match today, I hear. Whipped you well, didn't he?"

John hung his head and tried to hide the tears that would rush out over his swollen cheeks.

"Hold up here, let me see your face," said the father roughly. "Well, he did give it to you: eyes blacked, face scratched, mouth swollen—you're a sight. You'll be more careful next time, I guess," he added.

John turned on his heel and left the room.

"Ben," he said, on meeting his brother outside, "I'm going away."

"Going away?" Ben repeated in wonder. "Where are you going?"

"I don't know; I don't care. I'm not going to show my face in camp again; even father at home laughs and jeers at me. I'm going to leave tonight."

CHAPTER XI.

A Trying Journey.

"I'm glad I'm going, Ben, but I'm sorry to leave you; you'll go back and tell them I've gone—and be good to Baldy, won't you? I'll write to you when I get to Helena."

It was long past midnight, and Ben was starting his brother on his journey to the great city that neither had seen. It was his present objective point; how far beyond he would go he did not dream.

"How much money have you?" inquired Ben anxiously.

"Nearly ten dollars, with your three. That'll keep me going till I get a job."

"But say, John, wait a few days and we can sell a horse or a saddle." Ben hung on to his brother's arm and tried to pull him back; his small, freckled face was full of entreaty and trouble. "Regan will buy the 3-year-old after pay day. You'd better wait."

"Oh, I've thought of all that," said John. "I could ride the colt off, for that matter, but I'm not going to take away a thing—except enough money to last till I get work."

"Don't forget to write, John, will you? They'll blame me at home for not telling about this, so don't make it too hard for me." Ben's voice was not very steady, and the note of appeal in it affected John greatly. "Tell me if work is plenty, for I'm going myself before long—I'll be so lonesome."

They shook hands without a word, each turning his face away, ashamed of the tears that would come despite their efforts to suppress them.

"Goodby."

"Goodby."

Ben turned down the trail toward home and John continued on in the opposite direction. Day was just breaking; the stars still shone above, while the sun's mellow light brightened the east. Neither boy had any eyes for the beauties of the sunrise; it was hard for them to part and neither could think of anything else. They had been not only brothers, but "pardners." Never before had they been separated. Rocked in the same shoe-box cradle, playing with the same rude toys, sharing the same pleasures and the same fears, braving the same dangers, and dividing bread or blanket when need be, they had grown up so closely that they did not realize the bond till it was about to be broken.

Brothers still they would be, but "pardners" never again.

When out of sight, each, unknown to the other, dropped to the earth and cried bitterly. Ben's share of grief was the heavier. No change of scene for him; no excitement of anticipated adventure; no new sights, experiences, or friends; the world was not spread out before him to enter at will and to roam over; none of the delights of freedom were to fall to his lot. Only duty, weary, commonplace, devoid of companionship and boyish sympathy. He went sorrowfully home.

John, his cry over, felt better. The sun was now coming out in his full strength, the birds poured forth melody, the cool morning was refreshing. In spite of the parting wrench he could not help feeling exhilarated, and the thought that, no matter what might happen, he was free, made him almost joyous. He sprang up, dashed the tears from his eyes, and started along the trail, shouting aloud: "I don't care." He repeated it again and again, trying to convince himself that he really didn't care.

It was too late to turn back now, even if he wanted to; he knew his father's character, and he did not fear pursuit. He wished now that he had walked manfully up to him and told him. "But he laughed at me," he said aloud, arguing with himself. "I do not care," this between his teeth: and then he marched on, his head held high, defiantly.

It was 15 miles to the railroad, John knew; but how much further to Helena he had no idea — he had not thought of it before.

The trail he was following led him across the range down to the main road on Savage creek. The mountain walk was fine, the air cool and bracing, the sounds of bird and insect grateful. Before long he reached the creek and drank deeply of its clear waters, washing his bruised face and hands. This he did gingerly, for his wounds were still fresh and his bitten thumb, which no one at home had seen, pained him exceedingly. The danger from a wound by the human tooth is very great, but John realized nothing but the pain.

The slices of bread and meat which Ben had wrapped in an old newspaper for him were eaten with relish. Though he was somewhat tired, and his body still stiff from the hard usage of the day before, he could not bear to sit still and think. At intervals the tears welled up in spite of his efforts to keep them back. "I won't think," he said, and repeated his assertion, "I don't care," to keep his courage up.

A piece of bread still in his hand, munching as he walked, he struck off down the trail at a strong pace, resolved to reach the railroad and get to Helena quick.

After several miles of sharp walking along the Savage creek road he heard the heavy chug-chug and rattle of freight wagons ahead of him. He soon overtook them and hailed the driver.

"Hello, kid; where'd you come from?" called that worthy cheerily, from his perch on the near wheel mule, his leg thrown carelessly over the horn of the saddle, the picture of contentment.

"Up the road a way," answered John evasively. "How far is it to the railroad?"

"What d'ye want of the railroad?" asked the "mule skinner" sharply, bringing his foot down and sitting erect.

John knew that these freighters did not look with favor on the railroads or with any one or thing connected with them, for they declared bitterly that the railroads robbed them of their business.

"It's only a couple of miles to the railroad," the man continued. "But it's 18 miles to a station. A railroad's no good without a station; climb in this and take a ride."

John climbed up as the wagon moved slowly along. He was tired, and the cheerful "mule skinner" was a desirable companion, for the time at least. The man lifted his leg again and turned in his saddle, the better to talk to his passenger.

"I was comin' down the road last month," he began, "and the pesky train half a mile away scared my mules nigh out of their wits. Mules don't like trains; don't blame them, neither. It's thrown the critters out of work and is forcin' me clear out o' business—haw there, you Mag!" he interrupted himself to shout, as the dainty-footed mule swerved to avoid a mud-hole. "Notice that mule?" queried the teamster.

John nodded an assent.

"She's one of the finest near leaders in the country; watch her gee." A long jerk line ran from the driver's saddle to the bit of the near leader of the eight-mule team. He jerked the line gently and the leader swung promptly to the right. He pulled steadily and the intelligent animal swung back into the road.

"You met your match today, I hear."

"See that? Only a touch and she's awake. That mule's a dandy; been offered two hundred for her—she's little, too." John only nodded, but the teamster, glad enough to have a listener, rattled on about his grievances, the all-absorbing railroads and the men who ran them and spoiled his business.

The wagon did not travel fast enough for the impatient passenger, so before long he scrambled down again.

"Must you go?" inquired the teamster. "Well, you leave the wagon road at the third bridge ahead, and if you cut across to your left you'll come to the railroad." The boy thanked him and started off on a brisk walk down the road. "But it's 18 miles to a station, and a railroad's no good without a station," shouted the mule skinner, determined to have one more rap at the iron trail.

"So long," yelled the boy in return, and continued at a brisk pace, in his effort to drown gloomy feelings by rapid motion.

At the third bridge he left the road, struck across to the left, and came upon the railroad. It was a disappointment, though he found all that could be expected when a "station is 18 miles away." The shining rails stretched away, before and behind him, till they ran together in the distance. The journey was a weary one the track rough with boulders, the tie hard and unyielding to his heel, and jus too near together to allow of an eas stride. Momentarily the heat of the su increased, and the track seemed to reflec it back more intensely. There was n shade and the heavens were brazen. H stopped at every brook to drink and bath his blistering feet and cool his achin hand. Though he had eaten nothing sinc early morning he did not feel hunger, ex cept in its weakening effect. On and o he trudged, hour after hour, until swing ing his legs became mechanical and h ceased to feel even weariness. At lengt a cooling rain began to fall, wetting hi thoroughly and arousing him to fain gratitude for the relief it brought.

Just before nightfall an object loome up far down the track; it was the statio at last! The boy struggled on, limpin his mouth open and dry, his bitten han swollen to twice its usual size; and no reaching a water tank near the platform he dropped down by it, cruelly tired.

After a short rest, he raised his hea and looked around. Not another buildin was in sight but the station, and not morsel of food had he eaten since earl morning. "I'll tackle the station peop for something to eat," he said to himsel and, suiting the action to the word, pr sented himself at the door. A woman w there, but in the dusk she took him for tramp, slamming the door in his fa when he asked for food. His only hop now was to catch a train and reach son settlement. The station agent dashed h last hope by saying that the last trai for the night had gone; but noticing th boy's forlorn appearance he spoke to hi kindly, so John plucked up courage say: "Where can I buy something eat?" The man responded by bringi him food, and, while the boy was grat fully eating, told him that he would glad to let him rest on the waiting roo floor during the night, but since the rul of the road did not permit of this t best shelter he could offer was a vaca building across the track. John accept the suggestion gladly, for he was tired every fiber. "Good night; that supp was bully, thank you," he said to t agent.

"Looks like rain," said the other, fo lowing to the door. "Hello, there's a fi in that house already; must be some oth fellows there for the night. You'll ha company, but look out that they do rob you. Good night."

As John approached the outhouse saw through the half-open door a blazi fire and a half dozen tough-looking m seated around it, warming themselves a drying their tattered clothes.

A hesitating knock on the door frar received a chorus of "Come ins." The o door swung back on its leather hing with a jolt and John entered.

The ruddy firelight gleamed on the fa of a slovenly fellow who sat beyond t fire. It was a well-fed face, rounded, a not ill-looking in contour, but grimy a littered with little tufts of whisker; a gr flannel shirt, red neckerchief and greas collared tan canvas coat clothed the upp part of his body, and John cast his e about on four other specimens of the sa type, seated on ties about the blaze.

"Where from, kid?" asked one, as turned to observe the newcomer. All th saw was a weary, hesitating boy. "Co up to the fire," they said cordially, a moved to make room for him. "Whi way you goin'?"

"I'm going west," he answered, glance taking in the whole crowd.

"We're goin' west, too. Did you come on that last freight?" asked one.

John shook his head.

"No? Well, we all got put off here little while ago; the con and other brak got onto us and fired us. We wanted sleep, anyhow—been ridin' two da straight." (John wondered for a ti what "con" and "brakies" meant, but fin ly concluded that the words might translated into conductor and brakema

"I walked in," said the boy innocent

A look of pity showed plainly on e hobo's face as he echoed "Walked?" Th any one would walk, with a railroad ne was beyond the comprehension of th tramps, for tramps they were—the regu tion kind.

"You're green on the road, kid," s one, whose name was Jimmy, as John s learned. "You'll soon get sick of cou ing ties," he continued, gazing curiou at the boy, as did they all. "Why, h I've traveled this country from side to s and from top to bottom in the last years and I've yet to walk a step—exc off one side to get feed," he added in planation.

"But I hadn't money to ride," said Jo innocently.

"Money? Ho! ho! Why I haven't s the color of coin this summer. What d want of money? Beat 'em; we'll sh you." He spoke with a sort of professi al pride, and the expression was reflec on the faces of the other men.

John's bruised countenance had b noticed, but as he had evidently b whipped in some fistic argument it w etiquette not to question too openly, to approach the matter indirectly. degrees they learned that he had trouble and left home.

"I left home just at his age, boys," s

Big Larry, an American-born Irishman.

"That so?" said one encouragingly.

"Yep, 'twas like this. Back in the east——" And Larry launched forth on a recital of the circumstances which led him to "take to the road" and follow it ever since.

Two others had similar experiences. Jimmy, however, frankly admitted that he took to it from choice. "When I was 21," he began, "I was engaged to be married, and expected to settle down and be a family man." This statement seemed to amuse the hoboes, for they laughed uproariously. "My mother—she's a widow," Jimmy continued unmoved, "gave me $500 to set me up in the butcher business in our town in Ohio. Well, things went on fine till pretty near the happy day, when I began to see that the girl was getting offish and I told her so. She got hot and said something about another chap that I didn't like, and I quit her—quit her cold." A grunt of approval went round the circle.

"It cut me up some and I got to drinkin' a little, and soon I was drinkin' harder. The five hundred my mother gave me and the five hundred I had already saved up went in no time, for before long I was drinkin' like a fish all round the town. My mother wanted me to swear off, and said she'd give me another start, but I knew it wasn't no use and told her so and pulled out of the town on a freight train. Been at it ever since."

"Pretty tough on your mother," said Larry.

"You must 'a' had about a thousand, Jimmy," ventured a less t'oughtful one.

"Yes, it was pretty tough on the old lady, but I was no good for that place, and she'd spent enough money on me. Had about a thousand, an' it's more than I've had since all put together, an' more than I'll ever see again,' 'the tramp added, musingly. "I'll never leave the road now; I like it. A man doesn't have to worry about anything, he's better without money an' he gets enough to eat, always seein' new places, and findin' new friends."

Most of his speech was made for John's benefit, and he listened with interest.

"Now, boys, not one of us had seen the other 48 hours ago, and yet here we are round our fire talkin' sociable, spinnin' yarns and hearin' 'em told; and I'll bet we're happier than six millionaries in New York city."

"Yes, we are," they said emphatically, in chorus. John thought much and said nothing.

"People s'pose we don't have to work," said Shorty, another of the group, "but I'd like to see them dudes work from Chicago to 'Frisco on a freight train. Why, them fellers don't know a brake beam from drawhead, to say nothin' of ridin' rods, breakin' seals on box cars, foolin' brakies, and a hundred other of the little fine points of our trade."

"An' then," chimed in another, "if we don't work much, we don't get much, so what's anybody else got to kick about, s'long we're satisfied?"

Everybody agreed, and the group dropped into a cheerful silence.

John had listened, it must be confessed, rather admiringly; the freedom and apparent ease of the life fascinated him, and he had half a mind to become a hobo. He did not realize the degradation that went with it, the dishonest acts that were necessary to secure food without money, the hardship it entailed, and the constant uncertainty of it all.

The thing that bothered him was the food supply, and he finally ventured the question: "Where will you get your breakfast in the morning?"

"Breakfast? Well, we may not get it till dinner time, but we'll get it. There are a few houses at a gravel pit half a mile ahead, where we got supper last night, but they're hard to work and we'll have to get Helena before we chew," explained Larry cheerfully. "But you're all right with that hand of yours," broke in Jimmy. "You can work the sore-hand racket all right; just show that to a motherly-looking woman and she'll fill you up quick."

"I worked the sore-hand dodge myself for a beautiful hand-out last night down at the gravel pit," said Shorty.

John began to realize that it was a pretty precarious and mean way of living, to depend on people's generosity for sustenance.

As the evening passed the talk subsided, and when the suggestion to sleep was given there was not a dissenting voice—from John least of all. All lay down in a row, their feet toward the fire. The coats had been taken off and spread over the row so that each made a covering of two thicknesses.

Toward morning the boy was awakened by a hand that fumbled about his pocket—the one which contained his money. Fortunately he had taken the precaution before going to sleep to put his own hand in and grasp the money. His hand was being slowly withdrawn when he quickly turned over, and then, fearing to sleep again, he rose and sat down by the wall, his head against the rough boards.

At daybreak a freight train came rumbling into the station and stopped. In an instant the tramps were up, and, separating, ran for the train. John was left alone, wondering what to do, but only for a minute, for Jimmy came running back, and with a hurried "I'll help you," rushed him over to a pile of ties. When the trainmen had gone into the station Jimmy took the boy over to a car and pointing under it said: "Never rode a brake beam? Well, I'll show you. See that brake beam?" He pointed out the bar that held the brake shoes and crossed from wheel to wheel under the car. "And those rods running lengthwise from it? Well, you sit on the bar and hold on to the rods. See, like this," and he slipped under the car and sat down on the wooden bar, his legs dangling and his hands grasping the rods. "I see," said John, and in a second had taken Jimmy's place.

"Good, here's my board; I'll get along with my coat wrapped around if I need to," and he handed a board a foot long and eight inches wide, having a slot cut in one end. This John fitted over the rod, and it gave him a safer and more comfortable seat.

"Here they come; keep dark." Jimmy disappeared, and the conductor's lantern came swinging down toward the engine; his feet crunched the gravel as he passed, and John's heart was in his mouth.

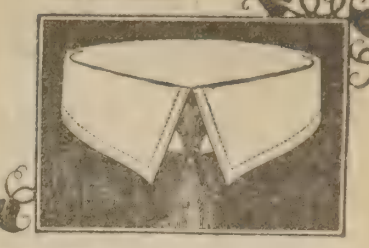
"Pull out at once," was the order, and the engine backed viciously for a start, nearly jerking John from his perch.

"Say, kid, I forgot to tell you" it was Jim alongside again—"look out and don't get pinched in the air-brake rods; they're bad. When the train's stopping, keep low and you'll be all right. I'm on the next car behind."

The train was now gathering headway, and John wondered how Jimmy would reach the wheel trucks between the now fast revolving wheels. A peculiar sensation came over the boy—half fear, half exhilaration. The whirring wheels clacked and thumped the rail joints, the ties flew underneath dizzily, the dust rose like a fog, and the wind of the train rattled the small stones of the roadbed together; the heavy car swayed above him dangerously near, and John, half choked and wholly terrified, wondered if he would come out of this irresistible whirlwind of a thing alive. All he could do was to grip the rods at his head and hang on.

(To be continued.)

"SPENCER"



This is the Fall type of collar that is so very comfortable and that is correct in style and appearance for any occasion.

SLIDEWELL COLLARS

are made with the Graduated Tie-slide Space and Tie-protecting Shield that Save Your Tie, Time and Temper.

If your dealer does not sell them, send us his name, your size and 75c for four.

HALL, HARTWELL & CO., INC.
TROY, N. Y.
Makers of MARK TWAIN Collars, HALLMARK Shirts and HALLMARK Athletic Underwear.

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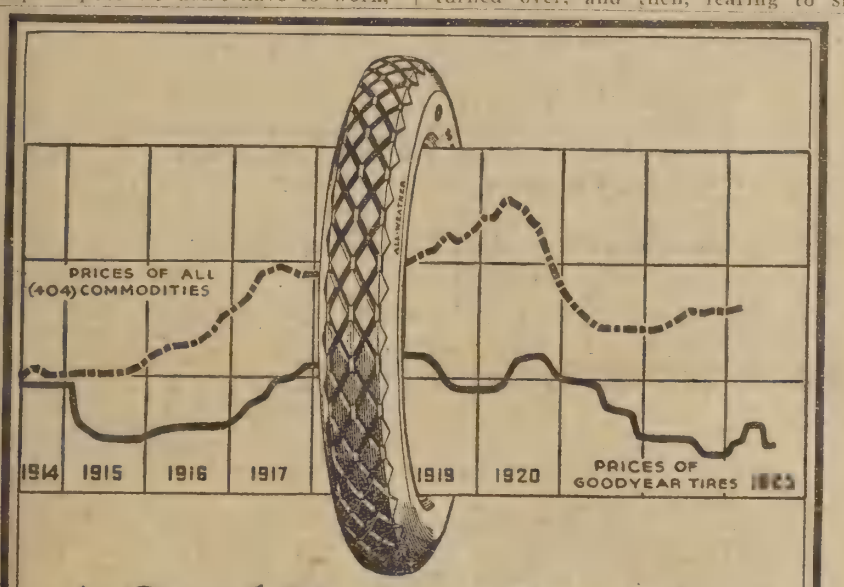
Hundreds of beautiful designs direct from the manufacturer to money-saving prices. Send for your copy today.

ROVIG LUMBER CO.
2201 First Avenue So., Seattle.

In writing advertisers, be sure to say you saw their advertisement in The Washington Farmer.



A Good Time to Buy Tires

The whole story of Goodyear value is plainly shown in the above simple chart.

Over the last ten years, while prices of all commodities were soaring, Goodyear Tire prices have been kept consistently low.

Today, Goodyear prices are 37% below those of 1920, and 30% below those even of 1914.

This is remarkable in itself, but more remarkable is the fact that year after year Goodyear Tires have been steadily improved—in design, materials and construction.

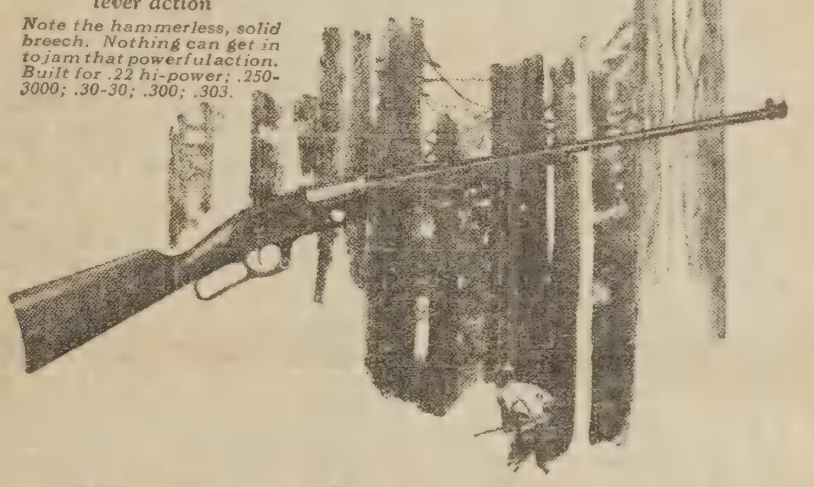
Now is a good time to buy Goodyear Tires. Prices are low, and the tires are the finest and most serviceable Goodyear has ever built.

Made in all sizes for Passenger Cars and Trucks

GOODYEAR

Savage Model 1899 lever action

Note the hammerless, solid breech. Nothing can get in to jam that powerful action. Built for .22 hi-power; .250-3000; .30-30; .300; .303.



That smooth powerful action never fails

When you reach for your Savage, you're *ready*. For your Savage is always ready—that smooth, powerful action never fails.

A Savage is light, too—not an extra ounce anywhere. But so perfect is the balance that a Savage holds steady as a rock.

And your soft-points are *never* dented. You can cram the magazine full without fear of battering a nose. For each cartridge is gripped at the base—recoil can't reach them.

A Savage for every kind of American game

.22 hi-power. The amazing Imp. Ideal for woodchuck, fox and wolf. Accurate at long and unknown ranges.

.30-30. The old reliable—choice of seasoned hunters for deer and medium size game at moderate ranges.

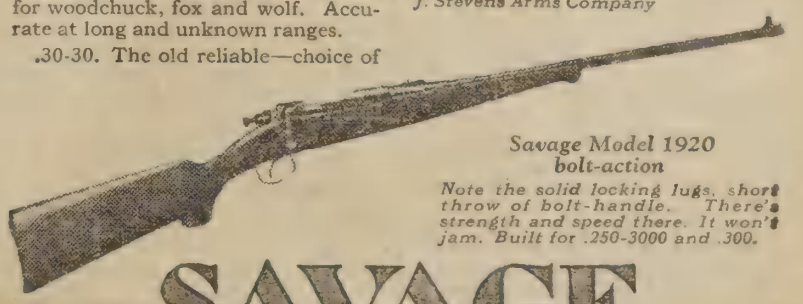
.303. A hard, knockdown hitter—has dropped deer, bear, and caribou for 20 years.

.250-3000. An all-around rifle. Terrific speed and accuracy make it *the* gun for mountain sheep, goats, and deer at extreme ranges.

.300. Delivers a crashing blow. Powerful enough for any American game.

Ask at your dealer's or write direct for our interesting catalog.

SAVAGE ARMS CORPORATION
Department 245, Utica, N. Y.
Owners and Operators of the J. Stevens Arms Company



Savage Model 1920 bolt-action

Note the solid locking lugs, short throw of bolt-handle. There's strength and speed there. It won't jam. Built for .250-3000 and .300.

SAVAGE

FAMILY CIRCLE

ALICE W. BARLAND
EDITORIAL CONTRIBUTOR

SHINE JUST WHERE YOU ARE.

Don't waste your time in longing
For bright, impossible things;
Don't sit supinely yearning
For the swiftness of angels' wings.

Don't yearn to be a rushlight
Because you are not a star;
But brighten some bit of darkness
By shining just where you are.

There is need of the tiniest candle
As well as the garish sun;
The humblest deed is ennobled
When it is worthily done.

You may never be called to brighten
The darkened regions afar;
So fill, for the day, your mission.
By shining just where you are.

Just where you are, my brother,
Just where God bids you stand.
Though down in the deepest shadow,
Instead of the sunlit land.

You may carry a brightness with you
That no gloom or darkness can mar.
For the light of a Christlike spirit
Will be shining wherever you are.
—Author unknown.

Experience Letters

Dear Mrs. Barland: I get a great deal of help from this paper and wouldn't be without it for a great deal. I enjoy the letters of the girls and boys. I had a pretty hard life as a girl, but I never attended dances or skating rinks and my mother's advice to me was this: "A girl's good name is all she has; keep it at any sacrifice."

I would like to ask if any of the readers know of a family or families by the name of Kidder, or of a place called "Kidder Ridge." I wish to find lost relatives who were last heard of 40 years ago and who came to Oregon and settled there.

MRS. CHARLEY COUSINS.
618 North Jersey Street, Portland, Ore.

My Dear Mrs. Barland: For some time I have thought of writing to the Circle to express my appreciation of the many good and helpful letters that I find there. When I read the letter from "A Grandmother," I felt I must write and say that she expressed my sentiments exactly.

I am thankful that I have always considered that my boys were just as accountable to God and man as my daughter is, and have always taught them to believe that they are. I feel as "Grandmother" does, that if all parents would teach their sons this fundamental principle very much suffering would be saved.

I was much interested in the article on testing linens and think it good, but believe it would be much better if there were laws so strict that no dealer would dare to sell cotton for linen.

I have received so many helpful suggestions that I will try to return the favor by sending in a few.

When washing windows use no soap, but try one-half a cup of vinegar in the water and note how clear the glass will be. It is also much easier to dry the panes.

When preparing peaches for canning drop them into a pail of cold water as fast as you peel them and they will not turn dark. When canning sausage, turn the jars bottom side up and the fat will settle on top and will keep the meat better.

When picking berries in the hot sun, fold a damp cloth and place it on top of your head and note the cool result.

MRS. N. S.

Family Circle Girls

Dear Mrs. Barland: I like to read the Family Circle, it is so interesting, but some of the letters make me just plain mad. E. A. B. wants to have fun running around with wild girls, but when he gets married he wants a nice, quiet girl. Mr. E. A. B., you ought to have a hard time finding a good girl for a wife if you run wild while you are single, because nice girls want good men when they marry.

I am a country girl of 17 and I believe that if one knows where he is going and behaves when he gets there, that dances are all right. One can make harm out of any pleasure if he has an evil mind.

SUBSCRIBER.

Dear Mrs. Barland: I think smoking is an expensive, filthy habit for either sex. Men and boys think women should be good and uphold the morals of our race, but do they do their part in the matter? Have they no responsibilities in keeping girls good?

Why should the girls be expected to do all the fighting and resisting? The way the boys write it seems that they think they have a perfect right to tempt and even urge and coax the girls to do what the boys consider so unladylike that if the girls yield to the coaxing, they are thereby unfitted to make good wives for them. This seems very inconsistent.

My mother is away from home and I am getting lots of experience in housework and cooking. I will be a junior in high school next year and when I am through I am going to college. I shall have to work myself through.

Some one asked what recreation others take who do not dance. I go to theaters, horse races, and I ride horseback, play basketball and hike. I think it is much more fun to ride horseback, hike, swim or play ball with a boy than it is to sit on the davenport of an evening and "spoon." I believe the boys enjoy themselves more with a girl as a good pal than with a "musher."

I enjoy the letters of the Circle very much.

A. B. R.

My Dear Mrs. Barland: May I join your interesting Circle? I am a young business woman of 20 and live in the suburbs of the northwest's metropolis—Seattle. This has enabled me to enjoy country life and city privileges, though I did walk two miles to school until recent years.

Of late the Circle has become very interesting, for the topics discussed are of vital importance to all of us. "A Grandmother" has my admiration—why should we girls be judged by a double standard? So many young men in Seattle are so demanding—too many seem to think they own us because we go to shows and dances with them—and, after all few of us are dependent upon them for good times in this age of the independent girl.

Young men will usually treat a girl as she expects to be treated, though it takes the exception to prove the rule, for I had to walk home three miles in a drizzling rain one evening, and I had known the offender since childhood, at that.

I believe a young man is very selfish to expect all a girl's time unless he is engaged to her, and, if he really wants all of it and loves her he should make it plain by asking her for it—with him always.

Let's be real women, girls, and be above the vices all too common in our communities.

L. H.

Family Circle Boys

Dear Mrs. Barland: Dad has taken THE FARMER for several years and I have always read the Family Circle. This is my first attempt at a letter, but I must "pop off." Lucille's letter in a recent issue rather gets under my skin for several reasons.

She says it is more unsual to meet a decent boy than for a boy to meet a decent girl. Perhaps this is true, but, if so, who has caused this state of things? It is the girls.

Speaking from my own experience and judging from what other boys have told me (and don't include the members of the bald-headed row in this), boys hesitate to make the second forward or improper move when the first one is met with discouragement. But when forwardness is encouraged, who can blame the boys?

Don't think that I mean that boys are always encouraged for that isn't so, but when no move to resent advances, well, is that encouragement or not?

Brown-eyed Bell says that the boys demand this sort of free conduct from the girls, but do they? I say they do not, but they don't hesitate to take what opportunity offers. I, for one, like to see a girl stick up for herself and one who doesn't take in petting parties.

I am no stay at home and I know that every time I "step" a girl I rather hope she will prove herself decent. Do the girls want the boys to beg them on bended knee to foreswear these things? It is natural for the boy to take where no resistance is put up. And then "Bell" winds up in a "let George do it" manner, in which I could retaliate; but there's the catch. Let the men and boys raise their morals and vice versa. The only way the morals will ever be raised is for both to stop whining and both get down to the business of raising them.

Perhaps I am prejudiced, but, if so, Bell is also.

Washington JUST ANOTHER BOY.

Dear Mrs. Barland: I have been reading the experience letters for some time and have enjoyed some letters and some I won't give my opinion on.

I have no more sympathy for an extremist than a federal officer has for a bootlegger, so I won't preach or force my opinion on any one.

I am a young man, as some would say. I have danced every time any one would dance with me and I believe there is no harm in going to properly supervised dances. But right here I want to say to you fathers and mothers who have young daughters, do not allow your girls to enter a dance hall till they have attained the age of responsibility and then have them properly chaperoned, for as sure as you do you will weep in sorrow for it.

If your young people must dance it is your duty, and should be a privilege, to provide a decent place, preferably a home, for them to meet and dance.

Dancing is said to make children graceful and easy in manners and my mother has danced from childhood and she says it never harmed her a bit. The danger comes from improper associates.

As to the smoking and drinking: These habits are the result often of the "gang" influence and are supposed (by the indulgers) to denote advance and superior mentality and experience. I couldn't be hired to acquire the tobacco habit, though I have a natural liking for it.

I believe the so-called "petting parties" are the outgrowth of "puppy love," but on this subject I'll admit I can not speak from experience, for I haven't yet fallen in love, but I form my conclusions from my observations.

I may be conceited, but as yet my ideal girl has not appeared. They say the older they are the harder they fall, so perhaps my time is coming.

I go to church occasionally, am president of one of the young people's organizations. I was president of my class last year. I take active, if not leading, part in all school activities, and work in athletics. I act in all the plays and occasionally keep company with a girl and I don't feel a bit wicked.

Lonesome Peggy wonders if boys have problems as well as girls. I think I speak for most of the sterner sex when I say that they do, but I don't believe the average boy likes to speak of them.

Keep to your resolution, Peggy; you have the right idea and I hope you master yourself, for it will have to be done some time.

I believe I understand your position fully and this world would be far better off right now if more young folk would follow suit.

My ideal of a man is one well balanced, who is neither tough nor hypocritically religious, but I would rather write personally on this matter, however.

Am I a hypocrite, a fool or just hard-shelled? I would like to hear from the Circle readers and especially Mrs. Barland.

Idaho. SLIM.

AN AID TO CHEERFULNESS.

A kitchen stool, about halfway between sitting down and standing up, works wonders.

Glance over the bargains on the "Want Ad" page.

"They All Love Its Flavor"

Protect Young Teeth from Grit

THE teeth of every farm girl and boy deserve a fair show. Modern Dental science has shown that proper care of children's teeth builds eager active minds and sturdy bodies.*

Here Are Precautions Thoughtful Mothers Should Take:

1—Choose a safe dentifrice—one that contains no grit.

2—Avoid preparations containing harsh chemicals and strong drugs.

3—Teach children to brush their teeth after meals and at bedtime.

Colgate's Ribbon Dental Cream is safe, for it contains no grit or harmful ingredients. Because of its delicious taste, children use it regularly and willingly.

A tube for each member of the family is a sound investment in sound teeth.

COLGATE & CO.
Established 1806

Large tube—25c.

*Every county nurse and home demonstration agent will endorse this statement. Actual tests conducted in schools at Bridgeport, Conn., show that proper care of teeth reduced backwardness by 50%.

Truth in Advertising Implies Honesty in Manufacture

The Flower Garden

By RUTH GIPSON PLOWHEAD.

In my last article I wrote of starting perennials from seeds. If you wish to experiment a little, there is a great satisfaction in planting a package of mixed perennial seeds. Incidentally, one can get enough plants of different varieties to make a long row. You may not only discover new flowers, but some which are particularly adapted to your soil and locality. In my own garden there are at least a half dozen perennials which first became known to me in this manner.

Fall Planting of Perennials.

While spring is the logical time for transplanting and dividing perennials, there are a few flowers which are dormant in the late summer and fall, and seem better for being transplanted then, unless the spring planting can be done very early. Among these are perennial poppies, iris, peonies and lily of the valley.

Oriental Poppies.

There are few flowers which make such a vivid show of color as a large clump of oriental poppies. One bush a few years old will bear dozens of poppies as large as a saucer, and their flaming color can be seen a long distance. They are very hard to transplant on account of the long tap root. After blooming the plant dies down and becomes dormant in August, and this is the time to transplant, divide or order your new plants. They are most easily raised from seeds, but are several years in making large blooming plants.

Iris.

Each year the iris seems to be growing in popularity, and many new and lovely varieties have been added to the already large number of kinds. One great improvement is the longer season of bloom. That was one trouble with many varieties of iris; they bloomed several days and were gone until another year. Now by careful selection as to early and late varieties and location of planting, one can have iris in bloom a number of weeks. Iris is best planted in masses, such as clumps, rows edging walks or driveways, or near the border of a perennial bed. The plants are always more or less ornamental, as they do not die down and become brown and ragged as do many perennials. Another way of prolonging the season of bloom if you have but one or two varieties is by choosing different localities in your garden. Suppose you have one large clump which you wish to divide. Try placing some plants in a sheltered, sunny corner, others in the open garden, and a third in a cool, shady northern spot; your sunny clump will have bloomed and gone before the others have dreamed of unfolding.

One of my favorite varieties of iris is celeste, almost a sky blue, which is a mid-season bloomer, and has a very long season of bloom, sending up stalk after stalk. Later varieties of large flowered iris which are lovely are Palladia Dalmatia, Mary Garden, Parisana Speckled Aurea.

The Peony.

The peony is one of the most showy and largest blooming plants which we have for the perennial garden. September and October are good months in which to transplant and divide them. Peonies, however, should not be divided often. They seem to resent disturbance and are at their best a number of years after planting. The peony, like many other flowers, has undergone many changes. At a recent flower show in Boise the wonderful decorative possibilities of the peony were shown. The single flowered varieties, with centers filled with yellow stamens, made one think of a water lily, and were much admired. There are varieties as sweet scented as a rose, and the huge double peonies which would fill a five-pound pail. If you buy peony plants this fall do not be disappointed if they fail to bloom for a year or two, or if the blooms are not all that the catalog promised as to shape and color. Before a peony is established it often either fails to bloom or has blossoms which are not in true form and color. One large double cream variety in our yard bloomed with small single flowers the first two years.

When Driving in a City

(Continued from page eighteen.)

between a street car stop and the curb.

When overtaking and passing street cars the city rules vary. Some cities require the auto come to a full stop and wait until the street car has loaded or unloaded and has started again. In other cases, where the city has painted a clearly defined space for passengers to use when boarding or leaving a street car, it is sometimes ruled that the driver may proceed slowly between this space and the curb, but in such a case he should not interfere with the pedestrian's right to pass from the car loading space to the sidewalk. Except for this case, the pedestrian has no right on the street except at the clearly defined crossings at the corners. Don't be a "jay walker" in cities.

The main streets of a busy city are a poor place for a driver who doesn't know where he wants to go. It is well for a stranger to send for a map and become familiar with the main streets before entering large cities. If entering for the first time, the middle of the morning or afternoon are the easiest times, as traffic is less dense.

Be sure your horn, lights, clutch and brakes are in good condition and you will have little trouble driving in any large city. Remember that the traffic officers are there to assist your progress. Without their aid traffic movement in the rush hours would be nearly impossible.

Mail-o-Grams

By State College Specialists

A. B. Crane, Agricultural Engineering: See that all drainage outlets are free, so when the rains set in they will flow freely.

B. A. Slocum, Apiculture: Units weak or queenless colonies, a queenless with a queenright colony. They will not live through the winter unless they are normal colonies.

E. Belle Alger, Clothing: A wise shopper knows that she has only a certain sum to spend and never spends more.

Don G. Magruder, Dairy: Plan now to lay in a supply of feed for the winter. It is better to carry some over than chance running short.

Leonard Hegnauer, Farm Crops: In sections of low rainfall sow at least enough good rye to insure plenty of feed and moisture.

R. N. Miller, Farm Management: Don't let weeds grow in the orchard unless they are legumes. Grow clover, vetch, alfalfa or some legume instead of pig weeds, mustard, water grass and the like.

M. D. Armstrong, Horticulture: Now is the time to plow up the weevil infested strawberry patches for complete eradication.

C. M. Hubbard, Live Stock: The "farmer's hog" farrows a large litter—select your purebred herd boar from a prolific strain.

George L. Zundel, Plant Pathology: Potato storage houses should be thoroughly cleaned and disinfected by spraying bins and walls with a solution made by dissolving one pound of bluestone in 10 gallons of water or using a pint of formaldehyde in 10 gallons of water.

W. D. Buchanan, Poultry: The culling season will soon be over. Have you gotten ri dof your slacker hens?

Spokane Interstate Fair

(Continued from page Sixteen.)

Hubbard, Corvallis, Ore., shared honors fairly evenly. William Riddell & Sons, Monmouth, Ore., and William Riddell Jr. broke about even in the Lincolns, while in the Cotswolds, Riddell & Sons shared the money with D. J. Kirby, McMinnville, Ore. William Riddell Jr. was the only exhibitor of Romneys. Mr. Fox alone showed Dorsets and E. F. Hubbard made the entire Leicester show. Burlingame & Craig of Walla Walla, Bullard Brothers of California and the University of Idaho showed Rambouillets, with the awards well scattered. In a small fat sheep show the University of Idaho and Mr. Hastings competed, the university being principal winner.

The work of the boys and girls' clubs deserves a special story. Space limitations prevent doing it justice this week. Watch for it in a later issue.

Hay Growers Organize

Hay and grain growers of Skagit county have organized the Puget Sound Hay and Grain Growers' association for the purpose of marketing their produce and buying such seed or machinery as are needed in the production of their crops. The organization of the association is practically complete; only the final arrangements remain, such as submitting the contract and bylaws to the director of agriculture at Olympia. A membership campaign has been planned and the organization will in all probability be in running order in time to handle this year's crops, according to a report.

Cream for Shortening

If there is a wee bit of sour cream on hand use it for shortening the crust when baking pies. A half cup for each pie (no other shortening will be needed) will make a delicious crust.

ANNE G. DEMAREST.

PRUNE CROP SHORT.

It is reported that the world prune crop this year is 100,000,000 pounds short of last year's and 60,000,000 pounds below the actual consumption of last year. At the opening of the season last year there were about 460,000,000 pounds of prunes awaiting the world markets.

To Clean Tarnished Silver

"If your silver is tarnished and you would like to clean it with very little effort, put into a bright, clean aluminum pan one tablespoonful of soda and one of salt," says Mrs. Jane S. McKimmon, state agent in home demonstration work in North Carolina. "Pour on this a quart of boiling water and add your tarnished silver. Let the water cover the silver and it will be only a short while before it emerges bright and shining.

"When the tarnish is removed, wash in hot, soapy water and rub with a soft cloth. Silver is tarnished by the sulphur from gas and from burning coal, or more frequently by certain foods which contain sulphur, and is easily cleaned by this method.

"The aluminum pan method of cleaning does not injure the silver in any way," states Mrs. McKimmon, "and is easier by far than the old way of scrubbing. When the silver is put into the pan it rests on an aluminum base, which is to a certain extent like an electrode and action takes place between the metals and the chemicals used. When paste or powder is used for cleaning there is danger of scratching the silver, but it gives a satiny finish that is very beautiful, and frequently the housewife will use a soft cloth with a bit of paste to produce this effect after she removes the tarnish with the aluminum pan process."

Reforestation

By JULIA M. MARTIN.

Oh, beauteous mountain chalices there stand
And richly filled they wait the lips of need.
Make we not, then, the vandal's course our creed;
Be sanctuary true the wooded land.

Replenish we the bowls of rich content
And fill the cup that served our thirst so well.
Let not the plundered hills our story tell,
Nor loveliness that was be wanton spent.

20 MULE TEAM BORAX

PRESERVING POTS, PANS AND UTENSILS

To preserve absolute cleanliness in your preserving utensils is absolutely necessary for a perfect result—and that can be made doubly sure only by using 20 Mule Team Borax—the antiseptic cleanser. 20 Mule Team Borax dissolves out all forms of dirt and grease without any injury whatsoever to metal or glazed surfaces. It should be used with soap wherever soap is used.

20 Mule Team Borax has more than a hundred important farm uses and it is good for the hands. At *all* grocers and drug stores.

20 Mule Team Borax is in all clean farm kitchens—is it in yours?

SEND FOR MAGIC CRYSTAL BOOKLET

PACIFIC COAST BORAX COMPANY

NEW YORK SAN FRANCISCO CHICAGO

NATURES GREATEST CLEANSER

High Points in News of the Week

Great as has been the disastetr which overtook Japan through earthquake, fire and flood two weeks ago, indications are at the present time that both the losses of life and the destruction of property has been overestimated. No definite figures as to either are available up to this writing. Loss of life still is estimated all the way from 100,000 to half a million, but there is reason to hope that final figures will not exceed the lower number. No accurate estimate of property losses can be made. Neither can any worth while estimate be made of the loss of life that will result through exposure and sickness following in the wake of the disaster.

The cities of Tokyo and Yokohama are the center of the devastated area. With the exception of Yokohama which is a leading sea port, the damage industrially is far less than originally reported. Secretary Hoover of the United States department of commerce points ou that industrial Japan is largely outside the devasted area and has been affected but little as far as actual damage is concerned. He says that labor, agriculture and factory organizations are practically intact, except in the two cities mentioned and in the territory immediately surrounding. The financial strength of Japan is fundamentally unimpaired, he says, and his opinion is substantiated by the fact that Japanese securities on the stock exchange following the disaster showed comparatively little depression.

As stated on the cover-page of this issue, the American Red Cross is conducting a campaign for the raising of $5,000,000 in this country for Japanese relief work. The amount is being readily subscribed. The city of New York with a quota of $100,000,000 of the total, oversubscribed to this amount within 24 hours.

Strenuous efforts are being made, by not only the Japanese but the peopies of other nations, to rush relief in the form of medical and surgical supplies, building materials, clothing and foodstuffs to meet the immediate needs. It is reported that 10 days after the earthquake there are still 130,000 persons in Tokyo entirely without shelter. A corresponding number of homeless is reported from Yokohama. Food is being rushed to the scene from outside sources and is being rationed under government supervision. A meeting of President Coolidge's cabinet was held last week for the discussion of this country's participation in the Japanese relief and construction work. It is estimated that at least $20,000,000 will be required for immediate work in the stricken area.

* * *

War between Italy and Greece, which, had it occurred, might have involved all Europe or the entire world in another war, has apparently been averted through the acceptance by both Italy and Greece of the recommendation of the council of ambassadors under the league of nations. This council in its recommendation approved practically all of the points in the ultimatum delivered by Italy to Greece. The latter country is to pay to Italy 50,000,000 lire (equal to a few million dollars) and is to have its navy make formal salute to the flags of the three allied nations—Italy, France and England. The controversy arose over the assassination of the Italian members of a boundary commission on the Albanian frontier while under the protection of Greece. The council of ambassadors holds Greece entirely responsible under the circumstances.

* * *

Settlement of the anthracite coal controversy appears to be about reached. Officials of the mine owners' and the workers' organizations have agreed to the four fundamental points set forth by Governor Gifford Pinchot of Pennsylvania, whom President Coolidge appointed as mediator. The agreement provides for a flat increase of 10 per cent in wages, the establishment of the eight-hour day, recognition of the union and recognition of the principles of collective bargaining. The agreement will be submitted September 17 for ratification by the miners themselves. If ratified, as expected, the mines will be reopened on September 19.

* * *

The internal revenue bureau last week issued a ruling that farmers' cooperative organizations were exempt from income taxes when such organizations hand back to the producers the proceeds of sales on a pro rate basis. The maintenance of a reasonable reserve fund of depreciation or possible losses or a reserve required by state law or a sinking fund or surplus to provide for the erection of buildings and facilities will not destroy the exemption, the bureau stated.

* * *

The International Brotherhood of Firemen and Enginemen at a meeting last week voted to ask a return to the 1921 rate of wages when their present contract expires January 1, 1924. This would mean an increase of over 12 per cent over the present wages paid.

* * *

A conference between United States and Canadian officials is soon to be held at Ottowa, Canada, to take up the question of controlling illicit traffic in intoxicating liquors across the international border.

* * *

Federal Prohibition Commissioner Haynes has requested a government appropriation of $10,000,000 for enforcement of prohibition during the coming year. This is a proposed increase of $1,000,000 over the present year's appropriation.

* * *

Ten thousand veterans of the Civil war, none of whom was under 70 years of age, paraded last week at the national encampment of the Grand Army of the Republic at Milwaukee. Gaylord M. Saltzgaber of Ohio, was elected national commander in chief.

Farm Business and Markets Outlook

(Continued from page five.)

factor last week as the prevailing sentiment was decidedly easier.

Foreign butter markets are a little high to be attractive, but some shipments of Danish purchased at lower levels arrived in New York last week.

Cheese prices retained the level reached a week ago, although trading was slow, as buyers were not interested beyond supplying immediate needs.

Fruits and Vegetables.

Potato prices declined last week under a substantial increase in the carlot movement, which has gained about 50 per cent in the last two weeks. Producing sections will probably ship in increasing volume from this time on up to the middle of October, which usually sees the peak of the carlot movement. Western Irish Cobblers are quoted at $1.65 to $2 per 100 pounds, sacked, in the Chicago market, with Idaho Rurals at $1.90@$2.

The carlot movement of apples is beginning to increase and a rapid gain in shipments can be expected during the next six or eight weeks. Fall varieties are quote at around 75 cents to $1.25 per bushel in city markets.

The peach market declined last week under a sharp increase in shipments from producing sections. Elbertas from the eastern states are quoted at $2 to $3 per bushel and from the central western states at $2.75 to $3.50 per bushel in consuming markets.

The late commercial onion crop is estimated at 12,643,000 bushels, which is 2 per cent less than in 1922, but 34 per cent larger than the crop of 1921. The forecast represents a loss of over 1,000,000 bushels compared with a month ago. Washington yellows are quoted at $3 to $3.25 per 100 pounds in consuming markets.

LATEST QUOTATIONS.

The Live Stock Market.

PORTLAND, Ore., Sept. 8.—Cattle—Choice steers, $7.00@7.50; medium to good steers, $6.50@7.00; fair to medium steers, $5.50@6.50; common to fair steers, $4.50@5.50; choice cows, heifers, $4.50@5.00; choice cows and heifers, $4.00@4.50; medium to good cows, heifers, $4.00@4.50; fair to medium cows, heifers, $3.50@4.00; common cows, $2.50@3.50; canners, $1.50@2.50; bulls, $3.25@4.25; choice feeders, $5.00@5.25; fair to good feeders, $4.50@5.00; choice dairy calves, $9.00@10.00; prime light, $8.00@9.00; heavy calves, $5.00@8.00.

Hogs—Prime light, $10.00@10.35; smooth heavy, 230-300 lbs, $8.50@9.75; do 300 lbs. and up, $7.50@8.50; rough heavy, $6.00@7.50; fat pigs, $9.25@9.75; feeder pigs, $9.00@9.25; stags subject to dockage, $2.50@5.00.

Sheep—East of mountain lambs, $10.00@10.75; choice valley lambs, $10.00@10.50; medium valley lambs, $9.50@10.00; common valley lambs, $8.50@9.50; cull lambs, $7.00@8.50; light yearlings, $7.50@8.00; heavy yearlings, $6.00@6.50; light wethers, $6.00@6.50; heavy wethers, $5.50@6.00; ewes, $1.50@5.50.

SPOKANE, Sept. 8.—Cattle—Prime steers, $6.75@7.25; good to choice steers, $6.25@6.75; medium to good steers, $5.50@6.25; fair to medium steers, $5.00@5.50; common to fair steers, $4.25@5.00; choice cows and heifers, $5.00@5.50; good to choice cows, heifers, $4.50@5.00; medium to good cows, heifers, $4.00@4.50; fair to medium cows, heifers, $3.00@4.00; canners, $2.00@2.50; bulls, $3.25@4.00; light veal calves, $8.00@9.00; heavy veal calves, $6.50@8.00; stockers and feeders, $4.00@5.25.

Hogs—Prime mixed, $10.75@11.00; medium, $10.25@10.75; heavies, $7.75@10.00; fat pigs, $10.25@10.75; stockers and feeders, $9.00@9.50.

Sheep—Prime lambs, $9.00@10.00; fair to medium, $7.50@8.50; yearlings, $7.00@8.00; wethers, $5.50@7.00; mutton ewes, $3.00@5.00.

The Grain Market.

PORTLAND, Ore., Sept. 8.—Wheat—Hard white, Bluestem, Bart, $1.08; soft white, western white, $1.07; hard winter, northern spring, western red, $1.03.

SEATTLE, Sept. 8.—Wheat—Bid quotations: Hard, soft and western white, Big Bend Bluestem, $1.08; hard and soft red winter, northern spring and western red, $1.05.

WALLA WALLA, Sept. 8.—Bluestem, 94c to 97c; club, 94c; Turkey red, 90c.

DAYTON, Wash., Sept. 8.—Club, 95c; red, 92c.

DAVENPORT, Wash., Sept. 8.—Bluestem, 89c; club and Gold Coin, 87c; northern spring and Turkey red, 83c.

ODESSA, Wash., Sept. 8.—Bart and Bluestem, 90c; Fortyfold, 88c; Turkey red and Marquis, 86c; Jones Fife, 84c.

RITZVILLE, Wash., Sept. 8.—Bart, 90c; red, 86c; Fife, 84c.

Hay and Feed Grain.

PORTLAND, Ore., Sept. 8.—Millfeed—City delivery prices: Millrun, $27 per ton; middlings, $39; scratch feed, $47; rolled barley, $39@41; cracked corn, $48; rolled oats, $39.

Hay—Buying prices, f. o. b. Portland: Alfalfa, $15.50@16 ton; cheat, $13@14; valley timothy, $18@19; eastern Oregon timothy, $20@22; clover, $13@14; oat, $14@15; oat at vetch, $15@16; straw, $8 per ton.

SPOKANE, Sept. 8.—Wheat—Feed wheat, $ ton.

Oats—$36 per ton; rolled, $38.

Corn—$44 per ton; cracked corn, $46 per ton.

Barley—$36 per ton; rolled, $38.

Bran—$23 per ton.

Bran and shorts—$24 per ton.

Shorts—$26 ton.

Hay—Alfalfa, $20 ton in ton lots, $16@18 carload lots; new timothy, $21@22 in ton lots, delivered; $19 a ton in car lots f. o. b. Spokane.

General Produce.

PORTLAND, Ore., Sept. 8.—Butter—Cubes, extras, 45c lb.; prices, parchment wrapped box lots, 49c; cartons, 50c. Butterfat, 49c, delivered Portland; average station buying price, 46c per lb.

Eggs—Buying price: White hennery standards, 36@37c; mixed color standards, 32@34c dozen. Selling price, Front street, selects, 42c; candled ranch, 42c. Association selling prices, cash at store, extras, 40c; standards, 38c; bakers, 30c; pullets, 32c.

Cheese—Price to jobbers, f. o. b. Tillamook: Triplets, 28c; longhorns, 29c; loaf, 30c per lb.

Poultry—Hens, 15@25c; broilers, 26@27c; ducks, nominal; geese, nominal; turkeys, nominal.

SEATTLE, Sept. 8.—Eggs—Select local ranch, white shells, cases included, 35c per dozen f. o. b. Seattle; mixed colors, 34c per dozen; pullets, 24c per dozen; checks, 20c per dozen; cases returned to shippers, 1c less; do to country stores, f. o. b., 30c per dozen, loss off; eastern Washington, case count, 28c per dozen f. o. b. Seattle.

Butterfat—F. o. b. Seattle: A grade, 49c per lb.; raw milk, $2.30 per cwt.

Poultry—Hens, 4½ lbs. and up, 25c per lb.; do 3½ and under 4½ lbs., 17c per lb.; springs, 2 lbs. and heavies, 25c per lb.; do 1 to 2 lbs., 27c per lb.; hens, 3 to 3½ lbs., 13c per lb.; do dry picked, 3c above live; capons, live, fat, 6 to 10 lbs., 35c per lb.; do dry picked, fancy, dressed, 38c per lb.; do roosters, 11c per lb.; Belgian hares, 3½ lbs. and heavier, 12c per lb.; geese, fat, live, 15c per lb.; ducklings, live, 3½ lbs and up, 16c per lb.; ducks, young, over 3 lbs., 16c per lb.; turkeys, fat, dry picked, 8 to 10 lbs., 30c per lb.; do live, 25c per lb.; squabs, large, dressed, $4 per dozen; pigeons, $2; guineas, $8 per dozen.

Beef—Steers, fancy, 7c per lb.; cows, fat, 5c per lb.

Veal—Fancy light, 14@16c per lb.; medium light, 12@14c per lb.; heavy, 7@14c per lb.

Mutton—Fat, 9c per lb.; spring lambs, fat, 15@16c per lb.

Hogs—Good block, 90 to 150 lbs., 10@11c per lb.; do heavy, 6@10c per lb.

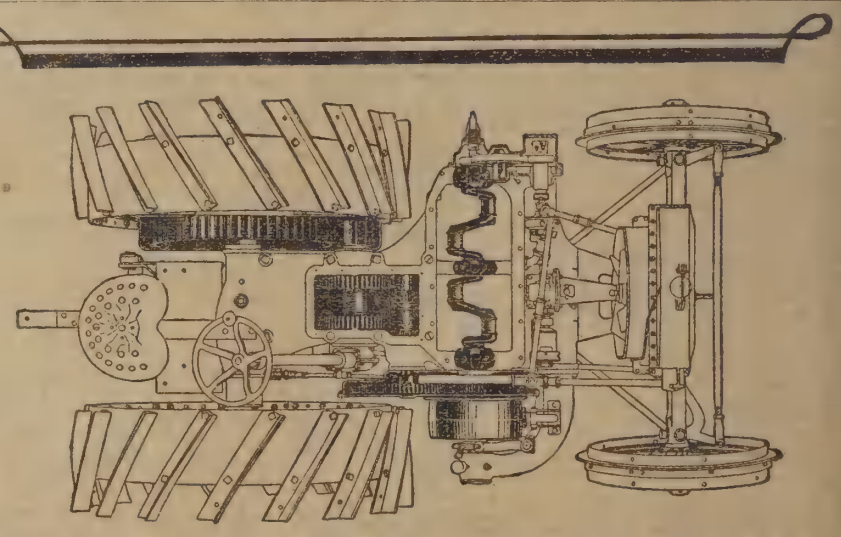
SPOKANE, Sept. 8.—Poultry—Live weight: Hens, 4 lbs and over, 18c; light hens, under 4 lbs., 12c; springs, 18c to 20c; old roosters, 8c.

Fresh ranch eggs—$7.50 to $8.50 case; fancy poultry, farm, $8.50 to $9 case.

Butterfat—47c per lb.

Range of Live Stock Prices for Week Ending September 5

CATTLE.	Chicago.	Spokane.	Portland.	N. Salt Lake.
Choice and prime heavy steers (1100 lb. up)	11.75@13.20			
Good heavy steers	9.85@12.00			
Medium heavy steers	8.00@10.00			
Common heavy steers	6.50@ 8.25			
Choice and prime light steers (1100 lb. down)	11.50@12.75			
Good light steers	9.65@11.65			
Medium light steers	7.85@ 9.85	6.25@ 7.25	6.50@ 7.50	6.25@ 7.25
Common light steers	5.75@ 8.00	4.25@ 6.25	4.50@ 6.50	5.00@ 6.25
Common to choice butcher heifers	4.50@11.15	3.00@ 5.50	3.00@ 5.50	3.75@ 5.00
Common to choice butcher cows	3.25@ 9.25	2.50@ 5.00	2.50@ 5.00	3.50@ 5.00
Bologna and beef bulls	3.75@ 5.00	3.25@ 4.00	3.25@ 4.25	2.00@ 3.50
Canners and cutters, cows and heifers	2.50@ 3.40	2.00@ 2.50	1.50@ 2.50	1.50@ 3.00
Canner steers	3.25@ 5.50	2.50@ 3.50	2.50@ 4.00	
Medium to choice light veals	7.75@11.75	8.00@ 9.00	8.00@10.00	7.00@ 8.00
Common to choice heavy veals	3.00@11.50	6.50@ 8.00	5.00@ 8.00	
Common to choice feeders (750 lb. up)	5.60@ 9.00			
Common to choice feeders (750 lb. down)	4.50@ 8.35	4.00@ 5.25	4.50@ 5.25	4.50@ 5.50
Common to choice stocker cows and heifers	3.25@ 5.75			
HOGS.				
Top of market	9.75	10.50	10.25	8.25
Bulk of sales	7.50@ 9.50	9.00@10.00	8.50@10.25	7.25@ 8.15
Heavy (250 lb. up)	8.00@ 9.40	8.50@ 9.50	8.00@ 9.75	
Medium (200-250 lb.)	8.55@ 9.75	9.20@10.00	8.50@ 9.75	7.50@ 8.25
Light (150-200 lb.)	7.75@ 8.75	9.35@10.50	9.00@10.25	7.55@ 8.25
Light lights (130-150 lb.)	7.60@ 9.65	8.75@10.00	9.00@10.25	
Smooth packing sows (250 lb. up)	7.15@ 8.10	7.25@ 8.00	7.50@ 8.00	6.00@ 6.50
Rough packing sows (200 lb. up)	6.90@ 7.60	6.50@ 7.50	6.00@ 7.50	5.50@ 6.00
Medium to choice pigs (130 lb. down)	7.00@ 9.25	8.00@10.00	9.25@ 9.75	
Stock pigs		8.75@ 9.25	9.00@ 9.25	
SHEEP AND LAMBS.				
Medium to prime lambs (84 lb. down)	11.00@13.65	9.00@10.00	9.50@10.75	9.50@11.15
Culls and common lambs	8.50@11.00	7.50@ 9.00	7.00@ 9.50	8.00@ 9.50
Medium to prime yearling wethers	8.00@11.25	7.00@ 8.00	6.00@ 8.00	6.00@ 7.00
Medium to prime wethers	5.25@ 9.75	5.50@ 7.00	5.50@ 6.50	4.25@ 5.75
Common to choice ewes	3.75@ 8.25	3.00@ 5.00	3.00@ 6.00	3.00@ 4.50
Culls and common ewes	1.00@ 4.50	1.00@ 3.00	1.50@ 3.00	1.00@ 3.00
Feeder lambs	11.00@13.60			



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Your Health

By Royal S. Copeland, M. D., F. A. C. S.

Yesterday I started to write an article on uraemic poisoning, and landed right in the middle of hope. I wonder if I can do better today.

Dr. Copeland.

The kidneys carry away an enormous amount of the body waste. Their function must be uninterrupted or trouble results. You see, the waste products are very poisonous. If some of the chemicals which are generated within the body and expelled as waste were recovered and injected into the blood, death might occur at once.

Because these waste products are so poisonous and because there is room in the body to store up material which is supposed to be eliminated daily and hourly, there must be no interference with their escape.

Sometimes there is discovered a state of "renal insufficiency." This is merely the scientific term to describe the failure of the kidneys to operate fully and completely. They do not carry off the waste turned over to them for disposal. Then the poisons are absorbed into the blood and the body suffers.

At first there is a mild toxemia—this means there is just a little poisonous effect. Usually, the first symptom of kidney toxemia is headache. You should find out why you have a lot of headaches.

Needless to say, uraemic poisoning—as this condition is called—demands accurate and immediate treatment. The milder symptoms, due to partial retention of waste material, may pass away of themselves, but the severe cases require energetic attention.

In the country, hot bricks covered with wet towels may be packed around the patient, taking extreme care not to burn him. Hot packs made of field corn are excellent. Drop a dozen big ears of corn into a wash boiler of boiling water. Take them out, one at a time, and wrap each in a square of cloth. Pack these steaming rolls around the patient. He will break out in profuse perspiration very quickly. Be careful not to burn him. If he is unconscious he can't tell you he is being burned.

Give the patient quantities of hot drinks. When the doctor arrives he will tell you what more you can do to aid.

Just Folks

This morning I read of the accidental death of a promising son, one who recently graduated from college and who had already entered into business with his father. I know his father and I know his crushing grief, although I have not yet seen him since the blow struck.

There is something crushing in the grief of a father over the death of a promising son. James G. Blaine vied with Henry Clay as the idol of the nation. All the fame and prosperity and brilliancy of statesmanship could not bridge over the death of his favorite and promising son, Emmons Blaine. That was a crushing blow. He was never the same "plumed knight" afterwards.

One Sunday evening, years ago, I listened to a reputable preacher. While he was in nowise parading his sorrow, yet his every word was saturated with an overpowering grief. Not long before he also had lost a most promising son.

Only a few days ago I met a man who has left his mark upon the development of the Pacific northwest—a man of force, courage and accomplishment. He is bravely filling out the measure of his days, not in idleness, but in work, and yet there is an emptiness in the spirit of his work which can not evidently be overcome. He, too, has lost a son for whom he had dreamed a brilliant future.

These terrible facts of life come home to all fathers of sons and beget a more intimate comradeship which may not always exist between father and son.

E. A. S.

A DESIRABLE GOAL.

Every farm home should work with a view to having hot and cold water in the house.

Latest High Class Patterns for the Home

Please order the patterns you desire at least two or three weeks before you wish to use them. Desiring to obtain the latest high-class patterns for its readers, THE FARMER has made arrangements to have them sent direct from the east, and under present mailing conditions it takes about that time for them to reach you.

4219. Misses' Dress. Cut in 3 sizes: 16, 18 and 20 years. A 18 year size requires 3 1-4 yards of 54-inch material. The width at the foot without gathered part of front is 2 1-4 yards. Price 10c.

4510-4512. Lady's Costume. Blouse 4510 cut in 6 sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. Skirt 4512 cut in 7 sizes: 25, 27, 29, 31, 33, 35 and 37 inches waist measure. To make the costume for a medium size will require 3 1-4 yards of 40-inch material. The width of the skirt at the foot is 2 yards. Two separate patterns, 10c for each pattern.

4217. Lady's Dress. Cut in 6 sizes: 36, 38, 40, 42, 44, 46 and 48 inches bust measure. A 38-inch size requires 3 7-8 yards of 54-inch material. The width at the foot is 3 1-8 yards (with plaits extended). Price 10c.

4293. Boy's Suit. Cut in 5 sizes: 6, 8, 10, 12 and 14 years. A 10 year size requires 2 7-8 yard for the blouse and 1 3-8 yard for the knickers, of 36-inch material. Price 10c.

4164. Lady's Apron. Cut in 3 sizes: Small, 34-36; medium, 38-40; large, 42-44; extra large, 46-48 inches bust measure. A medium size requires 2 yards of 36-inch material. Price 10c.

4315. Child's Play Dress. Cut in 4 sizes: 2, 4, 6 and 8 years. A 6 year size requires 2 yards of 32-inch material. Price 10c.

4117. Girl's Dress. Cut in 4 sizes: 6, 8, 10 and 12 years. A 10 year size requires 3 1-2 yards of 32-inch material. Price 10c.

4496. Girl's Dress. Cut in 4 sizes: 8, 10, 12 and 14 years. A 12 year size requires 3 1-2 yards of 36-inch material. Price 10c.

4490. Lady's Combination. Cut in 4 sizes: Small, 34-36; medium, 38-40; large, 42-44, and extra large, 46-48 inches bust measure. A medium size requires 2 1-2 yards of 36-inch material. For belt of elastic or webbing 5-8 yard 2 1-2 inches wide is required. Price 10c.

4485. A Stylish Morning Dress. Cut in 7 sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. A 38-inch size requires 4 1-2 yards of 36-inch material. The width at the foot with plaits extended is 2 1-4 yards. Price 10c.

4509. Lady's Blouse. Cut in 6 sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. A 38-inch size requires 2 5-8 yards of 32-inch material. If made with short sleeves, 2 1-4 yards will be required. Price 10c.

4505. Junior's and Misses' Dress. Cut in 5 sizes: 12, 14, 16, 18 and 20 years. A 16 year size requires 3 5-8 yards of 40-inch material. Price 10c.

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"Here's what I'll weigh when I eat these KELLOGG'S CORN FLAKES"

Kellogg's Corn Flakes ring true with every member of the family because they are not only delicious in flavor and crispness, but because they satisfy hungry appetites.

It takes more than the annual crop of a 450-acre farm to supply the raw corn used in the "million packages a day" made in the Kellogg factories.

And another thing: Kellogg's Corn Flakes are ready to serve—no bothersome cooking and scraping afterwards!

Kellogg's are extra delicious with the family's favorite stewed fruit, and with bananas or other fresh fruits in season.

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Kellogg's CORN FLAKES

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Mabel Parnel, also a new cousin living in Lewis county, Wash., writes about their flock of 19 guineas, four cats and two dogs. She is glad to become a member of our Corner and we are just as glad to have her with us. Mabel will be 12 October 31. She has two brothers and three sisters.

We are pleased to receivev a nice letter from Jessie Mikkelson, aged 7 years, and her little brother, Martin who is 4. Jessie's birthday is December 5 and Martin's is November 16. They live with their grandmother in eastern Washington.

Ths is the first time we have heard from Bertie Rochester, Okanogan county, Wash. Bertie is 11. Her pets are a black kitten and a tabby-colored kitten. School commences October 4 and Bertie says she likes to go to school. December 28 is her birthday.

"May I join the Corner?" writes a little girl in eastern Washington. "I am 11 years old and in the sixth grade. My birthday is August 13. I have three brothers and one twin sister. I live on a farm. My name is Iva Ida Schrag." We shall be glad to get another letter from Iva Ida.

Birthday Greetings

THURSDAY, September 13—Berlin Hiser, 10 years old; Gerald Stover 9.

SATURDAY, September 15—Edna Huovinen, 10 years old; Pauline Klundt, 11; Mabel Medsker, 11; Wayne Reeder.

SUNDAY, September 16—Martha May Jenkins, [illegible] years old.

MONDAY, September 17—Bennie Greenwaldt, 11 years old; Bessie Huovinen, 11; Tyyne Salmela, 10.

WEDNESDAY, September 19—Floyd William Beardslee, [illegible] years old; Doris Nelson, 10.

LETTERS WELCOMED BY AUNT NELLIE.

Among recent letters received by Aunt Nellie are those from cousins whose names follow. A few of these will be published each week in the regular edition of THE FARMER and others will appear from time to time in The Junior Farmer:

Nelda Jackson, Ruth Johnson, Hilda Pietila, Alice Thomas, Marguerite Duffy, Dorothy Timm, Esther Boos, Martha Wurgler, Martha May Jenkins, Thordis Fjerlie, Alice Herndon, Freddy Billingsley, Lenea Rise, Herbert Raddtke, John Van Py, Marjorie Cuyle, Stella Newbold, Bertie Rochester, Mabel Parnel, Verna Wenneberg, Virginia Teague, Elsie Stark, Freeda Dittmar, Verna Stevens, Hannah Wells, Dorothy M. Bower, Dora Sherwood, Archie Moe, Jessie Mikkelson, Martin Mikkelson.

BEDTIME STORIES

By THORNTON W. BURGESS.

THE BIRDS HAVE A BUSY TIME.

"There's nothing," so the Quaddies say,
"Like helping others every day
To fill you with a pleasant pride
And make you feel so good inside."

To be sure, the help they were giving Farmer Brown's boy brought its own reward and naturally made them feel good inside because it filled their little stomachs, and you know and I know that a full stomach, if it isn't too full, is a very good feeling indeed. But that wasn't the kind of a good feeling that they meant.

Drummer the woodpecker went all over the tree trunks.

Oh, my, no! No indeed! It wouldn't be fair to those hard working little birds to even think so. What they did mean was that it gave them that tickled-all-over feeling which comes only with the knowledge of having done a good deed.

You see, just as soon as old Mr. Toad said that catching bugs and worms in the old orchard, the garden and the berry patch would be doing something for Farmer Brown's boy in return for all the nice things he had done for the little people of the green forest and the green meadows fussy little Jenny Wren had jumped up excitedly and announced that she was going to hurry around right away and tell all the other birds who ate bugs and worms and ask them to join her in trying to get every bug and worm in the old orchard. And she was just as good as her word. She hurried about among her neighbors and they agreed that they would help her.

So just as soon as jolly, round Mr. Sun began his daily climb up in the blue, blue sky the next morning the birds gathered in the old orchard and began work. There was Tommy Tit the chickadee, Jenny Wren, Welcome Robin, Winsome Bluebird, Drummer the woodpecker, Mr. Mocker the mockingbird, Kit the catbird, Brownie the thrush, Tiny the warbler, Chippy the chipping sparrow, Twitter the marten, Skimmer the swallow, Little Friend the song sparrow, Bubbling Bob the bobolink, Cresty the flycatcher, Goldie the oriole, and a lot more. Even Sammy Jay came over to help.

Skimmer the swallow and Twitter the marten sailed back and forth over the treetops, and in and out among the trees, catching the insects that flew. Drummer the woodpecker went all over the tree trunks and the big branches with his head cocked to listen for the sound of worms boring in the wood under the bark, and whenever he heard one he hammered with his stout bill and made the chips fly until he had reached it. Then he speared it with his barbed tongue and swallowed it. Tommy Tit searched the bark and all the little twigs for the tiny eggs hidden there by the insects. Tiny the warbler and Chippy the sparrow flitted here, there and everywhere, picking the green canker-worms from the leaves. Jenny Wren fussed about, her tongue going so fast that Welcome Robin wondered when she ever had time to catch bugs, but she did. In fact, no one was busier than she.

Little Friend the song sparrow likes bushes better than trees, and so he went over to the berry patch and there he was joined by Kit the catbird and Brownie the thrush, and they soon found all they could attend to in clearing the berry bushes of the worms. Over in the garden old Mr. Toad was just as busy as the birds and he did hope that they would come over to help him when they were through in the old orchard. Jimmy Skunk happened along, and when he found out what was going on he got busy and dug out worms and beetles which were hiding in the ground.

And all the time Farmer Brown's boy didn't once suspect what was going on. That was the best part of it. It was to be a great surprise for him.

COMPLETE DISPERSAL
WILLIAMS' JERSEYS
Sherwood, Oregon, Tuesday, September 18, 1923

Twenty-six head gold and silver medal cows, show prospects, young stock and the great herd bulls. Entire herd, including five daughters of Rosaire Olga Lad, four daughters of Captain Tristram and others close up to the world's heaviest producers. Among the cows are St. Mawes Boise Rosaire, gold medal cow, record 891.54 lbs. fat at 3 years 7 mo., she also has been a winner in the show ring and sold at auction in 1919 for $5100. Edithe Oxford Rosie, St. Mawes Boise Queen, etc. Be sure and be there. Catalogs now being prepared. If your name is not on my 1923 catalog list, send name to sales manager and one will be mailed as soon as published.

E. A. RHOTEN, SALE MANAGER, Salem, Ore.
R. C. WILLIAMS, Sherwood, Ore., Owner.

All Kinds of Farmers
- Endorse Their -
State Farm Paper

THE WASHINGTON FARMER is strongly indorsed by stock breeders, dairymen, fruit growers, market gardeners, wheat farmers, in fact by every class of agriculturist.

It deals with all sides of farming, not in some distant field, but in the very state whose soil you are cultivating, and whose citizens you are associating with.

Special departments covering various branches of farming make this magazine valuable to the producers of stock, fruit, milk and poultry; while constant efforts for the upbuilding of agriculture have won the good will of all classes.

Furthermore, this paper's cooperative subscription plan is widely approved throughout the state. It aims at the elimination of the subscription agent. The reader sends in his renewal direct and gets the benefit of every penny which would ordinarily go to the traveling agent. Our readers are also asked to include some friend's or neighbor's order with their own. Please attend to this matter without putting us to the expense of sending you a notice. The subscription rate is only $1 for five years.

$1.00 for 5 Years
50 cents for three years. 25c for one year.
THE WASHINGTON FARMER 1923
Review Bldg., Spokane, Wash.
I desire to take advantage of your Cooperative plan in securing new and renewal subscriptions.
I enclose herewith $.... for a .....year subscription to THE WASHINGTON FARMER.
Name .....
R. F. D. .....Box.....State .....
If your subscription is already paid in advance it will be extended from the rate to which it is paid. Sept. 13, 1923.

News for Breeders

Twenty-two head of registered Jerseys were sold at auction at the V. H. Berkey farm, near Delphi, in Thurston county. While there were a number of out-of-town buyers at the sale, there were only six of the 22 animals that were taken out of the county. The average for the 10 cows, seven heifers, two bulls and two calves was $134, which was considered a reasonable price.

The buyers included: Ernest Neat of Olympia, who acquired four cows and one bull; M. D. Coleman of Mayfield, Lewis county, four cows; L. G. and Joe Nelson of Little Rock, three cows; Guy R. Taylor of Olympia, two cows; Cloverfields farm, one cow and one bull; John R. Martin of Elma, one cow; Martin Steinberger of Olympia, one cow; Charles H. Young of Little Rock, one cow; R. Trenckman, Elma, one cow; C. E. Beckwith, Olympia, one cow, and I. Sherwin of Little Rock, one bull.

ANGUS HERD WINS CUP.

J. A. Scollard, best known as the head of the United Dairy Associations of Washington won the $50 silver loving cup donated to the owner of the Lewis county herd of cattle that should win the most first prizes at the Southwest Washington fair. Mr. Scollard, whose home is at Chehalis, is an owner and exhibitor of a very fine herd of Aberdeen Angus, as well as a dairyman. In competition with the Gongdon & Battle herd of Yakima, generally considered one of the strongest herds in the United States, Mr. Scollard's "doddies" won 13 blue ribbons, which was the largest number won by a Lewis county breeder. At that, he had only one more than N. C. Sears of Winlock won on his Jerseys, and Mr. Scollard had steer classes, besides his breeding herd, and won two blues therein. The cup was donated by Morris Burnett, an enterprising Chehalis jeweler.

MORRIS BUYS HERD BULL.

A new herd bull has been secured by William J. Morris, Guernsey breeder at Buckley, Wash. This youngster is Rose City Khedive, from the Rose City herd, owned by W. A. Goodin at Cornelius, Ore. The bull is a son of Langwater Khedive, whose 12 nearest dams average 710 pounds of fat. His dam, Yeksa Forgetmenot, has a double letter record of 484 pounds of fat in 10 months. A half brother to Rose City Khedive is owned by the Ben Ridgeway farm at Sequim, and won junior champion at the Pacific International last fall.

Beth's Linda of Few Acres, one of the cows in the Morris herd, recently made roll of honor for the state. She is out of a junior 4-year-old. In her first 16 days on test she made 37 pounds of fat.

BUYS SHORTHORN HERD.

J. E. Huntington of Kelso, Wash., recently purchased the entire herd of Shorthorns from T. M. Meikle of Castle Rock. Mr. Meikle had sold his farm, which is on the Cowlitz river, near Vader station. He was the pioneer breeder of the "red, white and roans" in western Washington, having bought foundation stock from Ladd & Reid and Alex. Chalmers 30 years ago. Age alone induced him to give up the business of farming and breeding his favorite cattle. Mr. Huntington purchased a ranch of 250 acres, near Olequa station, in June and decided to stock it with Shorthorns.

CHAMBERLAIN SELLS GUERNSEYS.

During the Southwest Washington fair R. N. Chamberlain decided to sell at auction the three Guernseys he had exhibited. Practically no preliminary advertising was done, except to post notices for one day. Under these circumstances the prices received were very satisfactory to Mr. Chamberlain and to the Guernsey fanciers. Pattie Jewel, first prize senior heifer calf, was sold to George L. Seifert of Winlock for $275. Mythop's Sequel Dorothy, grand champion cow, went to Mrs. Hart of Centralia for $370, and Mrs. Hart also bought the bull Prim's Emigrant to Noble Farm for $280.

HAS A 24-YEAR-OLD COW.

Miss Catherine Crawford of Mount Crawford ranch, Kelso, Wash., has a Red Polled cow 24 years old that is still giving milk and seven months ago had a healthy bull calf. The cow was purchased from L. K. Cogswell of Chehalis, Wash., when 2 years old and has been a steady breeder and milk producer ever since. She is pointed to by both Miss Crawford and Mr. Cogswell as just one more evidence of the longevity and general usefulness of the Red Polled breed.

In writing advertisers, be sure to say you saw their advertisement in The Washington Farmer.

1923 PACIFIC INTERNATIONAL Livestock Exposition, Nov. 3-10, bigger than ever. $20,000 in premiums. Entries close Oct. 10. Write for Premium Lists. O. M. Plummer, General Manager, 211 N. W. Bank Bldg., Portland, Ore.

It's NATURAL for a hog to wallow

Provide a wallow and add

DR. HESS DIP and DISINFECTANT

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1. Your hogs will be free from lice.
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If you do not have a wallow, use the sprinkling can freely. Sprinkle the animals — the sleeping quarters and pens.

Sprinkle the cow barns to keep them healthful and clean-smelling—

The poultry-house to kill the mites and lice.

Use it about the house—in the closets, sinks and drains. Excellent for the sickroom.

Standardized Guaranteed

DR. HESS & CLARK, Ashland, Ohio

SAV-A-CALF

(TRADE MARK REGISTERED)

Will Get Your Cows With Calf

If any cows in your herd fail to get with calf or come in heat you are losing money. If one cow has the disease it will soon spread to the whole herd. Start to make every one of your cows a producer. Begin by using SAV-A-CALF. Feed it to both dairy and range stock. You'll get a 100 per cent calf crop and your cows will produce big when milk and butterfat prices are high. It is easy to feed—just mix it with the salt or feed.

READ WHAT USERS SAY.

Gentlemen:

Have used your Sav-a-Calf and found it all you claimed it to be. Can conscientiously recommend it. Had I known of it before it would have saved me thousands of dollars.

ALEX CAMPBELL,
Portland, Oregon.

EVERY COW CAUGHT.

Dear Sir:

After feeding Sav-a-Calf to 9 cows that would not breed, all of them caught after the first treatment. I gave it in the feed and am now using the salt.

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BOISE, IDAHO.
Manufacturers and Distributors.

.....Cut Here.....

Babbitt Brothers, (Check what you want)
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( ) Please send pamphlets and information.
( ) I enclose $5. Send 5-lb. can SAV-A-CALF.

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Breeders' Dept.

Milking Shorthorns

FARMERS! Why not diversify, work from both ends? Produce beef as well as milk at a minimum cost. We are offering bull calves from profitable milking cows of approved Shorthorn type. Herd headed by Gretna Challenger, grand champion Washington state fair and Western Royal, 1922. Visit the herd or write

NORTHWOOD FARMS, Redmond, Wash.

Red Polled Bargains 20 females, 10 bulls, all registered, well bred, health test always perfect. Choice Morgan mares and colts.

L. K. COGSWELL, Chehalis, Wash.

Linn County Holsteins

Cows, heifers, bulls and calves.

LINN CO. HOLSTEIN ASSOCIATION.
GEO. A. McCART, Sec. Harrisburg, Ore.

Holstein Bull Calf, Born Aug. 25. Sire's dam, 1276 lbs. butter. Test 4.1 per cent. Good individual, light in color. Priced low.

EUGENE FINLAY, Jefferson, Ore.

70 Holstein Heifers 70

At Auction

Thursday, Sept. 27

Parma, Idaho

28 are three years old. Ten of these have been milked one year. The remainder are big, strong heifers about ready to drop their first calves.

42 are long two-year-old, all to calve early this fall, none later than November 10. All the above heifers are in calf to our young herd bull, a son of Carnation McKinley Segis. They are nicely marked and were selected from the best Holstein dairies in the Boise valley. The above named herd bull will also be sold.

MARY D. ROCKWOOD, Parma, Idaho.
COL. AMOS J. MILLER, Caldwell, Auctioneer.

P. S.—Make a note of this advertisement. It will not appear again. Come to the sale. It will pay you.

Fort Steilacoom Holstein Herd

Where the high records are made. Several exceptionally well bred bulls for sale at most reasonable prices, sired by Chimacum King Korndyke Sadie Vale or Carnation King Matador Mutual, son of a world record senior yearling.

WESTERN STATE HOSPITAL,
Ft. Steilacoom, Washington.

Holstein Bulls One yearling and few calves, high percentage fat strain. Tested dams. Priced to sell.

ED CROSS. Oakville, Wash.

Jerseys for Sale or Trade

Pool Farm Offers 10 Cows

Besides these, 3 yearling heifers, 1 heifer calf, 3 bulls ready for service and 3 bull calves. All are richly bred, with register of merit and show records behind them.

S. O. POOL, Malaga, Wash.

Jersey Bull and Cows

Cicily's Golden Tiger, yearling, by Julia Winkle Lad; rich in blood of Holger and Gertie's Lad. Full sister made 437 lbs. fat on show circuit in 305 days, as junior two-year-old. Is show bull. Cows of St. Mawes breeding. All priced low.

A. E. LUNDEEN, Rochester, Wash.

Registered Jerseys

Cows and heifers of true Jersey type and proven production by register of merit records for generations back. These with some serviceable young bulls, we will be glad to show and price to you at Oregon state fair. St. Mawes-Oxford Lad-Majesty blood lines.

STANLEY A. RICHES, Turner, Ore.
RICH LEA FARM.

Fauvic Prince Jersey Blood

Bull calf sired by son of Theater Cup Prince and out of Washington state record senior two-year old, 1921. Only $100.

JOHN R. MARTIN, Satsop, Wash.

Jersey Type and Production

Two medal sires in service. Young bulls out of dams of heavy producing families.

J. M. DICKSON & SON. Shedd, Ore.

Jersey Bull Bargains

One to 9 mo. old; out of register of merit dams and by St. Mawes Intense.

GEO. W. TAYLOR, Sumner, Wash.

Out of Tested Jersey Dams

Four young bulls of good conformation and rich breeding. Priced to sell.

PARKER ASKEW, Montesano, Wash.

Have you glanced over the farm bargains on the "Want Ad" page?

Our Purebred Guernsey Herd

has reached the size where we can sell the increase or its equivalent. Foundation stock producers. We offer calves of both sexes, heifers open and bred, at prices real farmers can afford to start a purebred herd. Descriptions and photos upon application.

NOBLES BROS., Bow, Wash.

Ayrshires

The Perfect Cow.

A few registered bull calves, suitable to head any herd; also baby and heifer calves. Federal accredited herd No. 19073.

All animals sold subject to 90-day retest t. b., and guaranteed breeders.

C. McCLURE. Jerome, Idaho.
Breeder of Registered Ayrshire Cattle.

Registered Ayrshire Bull

Yearling of excellent breeding, $100. Ready for light service.

J. U. SMITH, R. 1, Box 135, Newberg, Ore.

American Hampshire Sheep Association

has a valuable booklet with illustrations telling you the superiority of this breed. We believe the Hampshire to be the best all round sheep in the world. Also have list of breeders; some near you. This literature is free. Write

COMFORT A. TYLER, Secretary.
72 Woodland Ave., Detroit, Mich.

Shropshires, Oxfords and Dorsets

Fitted show rams for good registered flock headers; range rams in lots to suit.

20 Shropshire ewes, sired by imp. Brewin 92; 20 Oxford breeding ewes, 40 Dorset breeding ewes and ewe lambs. All priced according to value.

FLOYD T. FOX, Silverton, Ore.

Lincoln and Cotswold Sheep--Angora Goats

Range or stud rams and ewes, from one to a carload. Angora bucks and does. Priced for quick sale.

WM. RIDDELL & SONS, Monmouth, Ore.

Oxford Downs I have 21 registered yearling rams for sale, well kept and large for their age. Can also spare a few choice ewes.

DAVID H. LOONEY, Jefferson, Ore.

Poland China Boars

About 25 "tops" out of 100 head, sired by Kin-Son Fashion, full brother of The Monarch, and by Paramount, the boar whose get has never been defeated, from 800 pound sows, every one a breeder. Every one of these is a herd boar prospect. Priced so that farmers or breeders can buy them. First come, first served. KIN-SON LIVE STOCK CO.

A. L. Wilson, Mgr., Route 5, Nampa, Idaho.

Whitman County Poland China

Breeders' Association, offers you real big type boars or sows, young or matured stock of the very best blood lines obtainable. Satisfaction guaranteed or money back.

A. H. HALLING, Secy., Colfax, Wash.

Spotted Poland China Hogs

Registered, either sex, any age. Purebred. Good blood lines. Satisfaction guaranteed. Buy in the west and save express.

HOWARD H. TUCKER & CO., Boise, Idaho.
Route 1.

Pioneer Herd Hampshire Swine

Lookout and Cherokee breeding. Nonrelated stock at all times. Twelve years a breeder and exhibitor of Hampshire swine. I will attend the fairs at Spokane, Salem and Yakima. See me if attending any of these fairs.

J. M. FRUITTS, Cambridge, Idaho.

Quarjo Hampshires

for sale now. Bred sows and gilts; spring pigs.

W. B. LINDSAY, Quarjo Ranch, Merlin, Ore.

Choice Duroc Jerseys

Gilts, bred to farrow in September. Service boars. Sensation breeding.

GEO. DEBOK. Oregon City, Ore.

Double Your Money in Less Than a Year

$7000 Cash and 6 Pairs Foxes from 2 Pairs of Our Breeders in 15 Months

This was done by one of our purchasers. Ask about it. Raise ROOSEVELT STRAIN Mormon Foxes and you can do as well. All breeders purebred, registered, guaranteed.

UNITED STATES SILVER FOX FARMS CORPORATION
200 Hutton Building, Spokane.

Hollywood Holsteins

Our show herd will be exhibited at

Chehalis, Spokane, Lewiston (Idaho), Yakima and Salem (Oregon.)

Remember that none of these animals were purchased for show purposes, have all been in the herd three years or over, and with only two exceptions, the whole herd was bred at Hollywood Farm.

Hollywood Farm Hollywood, Wash.

The New Overland

Touring $495 f.o.b. Toledo

All-Steel Body With Baked Enamel Finish

Tough steel of ample thickness to withstand hard usage around the farm. Enamel, baked on—literally fused into the steel body at a temperature of 450° F.—a process that is possible only with an all-steel body—guaranteeing permanence to the lustrous finish of the Overland touring car.

Triplex springs (Patented) which give great riding ease, an immensely strong rear axle, a powerful, dependable engine that returns 20 miles and more to the gallon of gasoline—

These are *added* values which combine to make owners call the Overland "the most automobile in the world for the money."

WILLYS-OVERLAND, INC., TOLEDO, OHIO

Willys-Overland Ltd., Toronto, Ont.

Roadster $495, Red Bird $695, Coupe $750, Sedan $795; f. o. b. Toledo.
We reserve the right to change prices and specifications without notice.

SEPTEMBER 20, 1923. Washington's Great Farm Magazine EVERY THURSDAY

THE WASHINGTON FARMER

ESTABLISHED 1894

SPOKANE. SEATTLE.

AGRICULTURAL LIBRARY

Experts Discuss Poultry Problems at County School--Page 6

Knew Nothing About Cows, But--

"No, neither of us ever had any training in farm management. Father was a railroad man for years back in the middle west and I graduated from just an ordinary university—not an agricultural college, I mean. I didn't know anything about cows when we came out here."

Miss Bee Morris of Buckley, Pierce county, Wash., invariably chuckles at the astonishment expressed by strangers over the fact that a father and daughter, both highly inexperienced in the business of running a farm and both advocates of the most dangerously reactionary theories of how it should be done, have brought anything but chaos and general ruin out of the experiment.

"Oh, no, we haven't any help, and we wouldn't think of using a milking machine on them. Why, of course, I help milk. Father's going it alone while I'm away (the interview took place at the A. B. Flint sale near Beaverton), but I have milked as many as eight or nine. We're figuring on cutting down some, though; we have too many, which may seem queer to some people who would say that 10 purebreds and 16 grades isn't much of a herd. We believe in quality rather than quantity—fewer cows and more milk from each of them. We were milking 11 in May, and the nine grades averaged 42 pounds each, one purebred on test making 60 pounds and another 76. They're bringing in $20 per head—$130 more than they did two years ago with the same number of cows."

It may be seen that Miss Morris knows very definitely why she thinks a dairy can be made to pay on a 46-acre farm, and she is equally definite on why she selected the two animals she bid in at the Flint sale. Pet of Midvalley, the 2-year-old for which she paid $320, and Queen of Midvalley, which cost her $250, are maternal sisters whose dam carries the May Rose breeding the Morrises seek. Furthermore, Pet of Midvalley is by a sire line bred from Golden Prince of Oregon, the bull

that did the best work for D. H. Looney, and there are already three half sisters carrying the blood of this bull in the Morris herd; while Queen of Midvalley is by a sire bred along the same lines as the herd bull, out of Yeksa Forget-Me-Not, which they recently purchased from W. A. Goodin of Cornelius.

"You can't talk line breeding to everybody, though," Miss Morris laughed. "We recently tried to sell one of our neighbors a bull that was by the same sire as one he was discarding, one that had better backing and would have made good in line breeding. When the man found out that the animals were related he wouldn't even consider a purchase."

The accompanying picture shows Miss Morris (center) with Mr. and Mrs. Goodin at the Flint sale. The latter were heaviest buyers at the dispersal, paying $820 for four head.

Irrigation Not Needed

While there were some berry growers in the Puyallup valley last year who have experimented with irrigation of their crops, there are practically none who are attempting it this year, due to abundant rainfall. David Hawes of Buckley claims that there is no season dry enough to warrant irrigation in western Washington, but that cultivation will conserve enough moisture to grow a good crop of berries. He had 2 1-2 acres of Cuthberts last year, which was an extremely dry season, and he kept them cultivated with an A harrow during the driest part of the season.

"I found that by using the harrow every day I could prevent a large part of evaporation which would otherwise have taken place," said Mr. Hawes. "I ran the harrow with the teeth sloped back slightly, which was just enough to make a surface mulch. I had no bad effects from drought at all in the fields which were cultivated in this manner, but on some rows which I left uncultivated there was a noticeable difference and the canes showed the lack of moisture. The berries also were much larger where the rows had been cultivated with the harrow.

"I have always practiced burning the brush on ground adjoining the berry fields in order to save what potash was in the canes. I noticed that oats grows much taller on this ground than anywhere else, which shows that there is a slight lack of this mineral in the soil. I usually raise oats for hay, since it grows very abundant and makes a fair quality of hay. I have tried millet for a short season crop, but find that it does not do as well in this climate as does oats or other hay crops."

Mr. Hawes keeps only one cow, but has 75 White Leghorn hens. At one time he had as many as 250 birds in his laying house and found that they were a good source of income. He said that he believed poultry made a good combination with berry farming, and it would also be a good plan to keep as many cows as the farm would allow in order to get a good supply of stable manure for the crops. A great danger, he said, is of a man getting more than he can handle himself, and trying to operate a farm which should really be handled by two men at least part of the year. A small farm properly handled would give one man plenty of work both summer and winter, and it should return sufficient income for the support of himself and family.

TURNIPS COME LATE.

Turnips planted as late as August usually do well.

SMUT In Wheat Can Be Prevented

by dusting 60 lbs. seed wheat with 2 ounces of our pure

Copper Carbonate

specially prepared as wheat fungicide. Much more effective than formaldehyde. Easy to apply. Saves seed. Write for particulars.

Mountain Copper Co., Ltd.

332 Pine St., San Francisco, Cal.

OFFICIAL TRAPPERS GUIDE

VALUABLE BOOK FREE

You cannot afford to be without this free book—tells you the best and easiest way to trap—then the correct way to skin and handle to bring most money and also teaches you how to correctly grade and value furs of all kinds.

We Pay More for FURS and sell Supplies for Less

TRAPPER'S SUPPLY BARGAINS

Don't buy or order any trappers' supplies until you have received your copy of our Supply Catalogue. It contains some real bargains that you cannot afford to miss. Guns, Rifles, Traps, Night and Camp Lamps, Clothing, Boots, Baits and Smoke Pumps—in fact, everything you need on the trap line. Write Today.

Abraham Fur Co.

346 Main Street — 46 YEARS IN BUSINESS — St. Louis Missouri

TRAIN to be an AUTOMOTIVE MECHANIC

We have high grade Automotive Mechanics for teachers. And we offer a Six Months' Complete Automotive Course that gives you all the knowledge of Automobiles and all the skill in handling and repairing parts that can be crowded into 26 weeks of hard study and earnest, intelligent effort. The equipment is ample for thorough training. The classes are small and the teachers give you plenty of individual attention. The course includes: 250 hours mastering facts and principles of automobile construction and operation; 120 hours taking apart and assembling automobile equipment; 120 hours working with Electrical Equipment; 180 hours actually repairing automobiles; 175 hours operating the machine tools used in the up-to-date repair shops.

We want you to have the fullest possible freedom in investigating this course, first, to determine whether it gives the training you require, and second, whether the opportunities for Y. M. C. A. graduates measure up to your expectations. Come and see the school for yourself. Take a few days' absolutely free trainnig if you wish. Talk first hand with the large employers of Automobile Mechanics in Seattle who give first preference to Y. M. C. A. graduates.

YMCA

UNITED Y. M. C. A. SCHOOLS.
Fourth and Madison,
Seattle, Wash.

Avoid Motor Oils

containing paraffin, asphalt or any other non-lubricating substance. Aristo Oil is refined by the most advanced processes, designed to remove everything in the crude which has no lubricating value.

Fluffy Not Flint-Like "Carbon"

All motor oils deposit some carbonaceous residue called "carbon," as all makers of oils know.

But different oils deposit different kinds of "carbon."

A hard, gritty, flint-like "carbon"—hard enough to score your cylinders and scratch pistons, rings and bearings—causes these four motor troubles which you can eliminate.

Due to the abrasive action of this flint-like "carbon," cylinders and pistons are scratched and worn.

Parts of this hard "carbon" become incandescent and cause premature firing—pre-ignition results in "knocking."

Spark plugs become coated with the hard "carbon." Thus the spark plug is short-circuited and the motor misses.

The gritty accumulation around the valves prevents proper seating, so a loss of compression results.

You avoid such troubles by using an oil which leaves a soft, fluffy residue instead of the flint-like kind.

Fluffy, Light, Non-Clinging

Aristo Motor Oil leaves but a little—half to a third as much of this other kind of residue.

Soft and fluffy, most of it blows out with the exhaust. It has less tendency to cling than hard "carbon."

It is softer than cylinders, pistons, rings and valves, so can not score or wear them.

It doesn't become incandescent. Ends the missing.

No grit around the valves, so compression isn't lost.

Motors run thousands of miles farther and tractors months longer without cleaning. You save expense.

Made by the lubrication engineers and specialists of the Union Oil Company, equipped with every facility for the most exhaustive research, this oil is a pure, sure lubricant as fine as knowledge and experience can make.

Famous race drivers have tested it under conditions more severe than any that your car will ever know.

End "carbon" troubles with it. Have a smoother-running, longer-lasting car.

For sale at all first-class garages and service stations.

ARISTO MOTOR OIL

Union Oil Company of California

ARISTO Motor Oil

Copper Carbonate to Control Smut in Wheat

Summary of Experiments in Eastern Washington-Results in Less Smut and Better Stands

By GEORGE L. ZUNDEL

Extension Specialist in Plant Pathology, W. S. C.

Since the work with copper carbonate was started in the state, it has grown to very large proportions, as was indicated in a recent report issued by the extension service of the State College of Washington. The general conditions were all against copper carbonate in that no machines were available in some parts of the state and the farmers used various means of applying the powder to their grain. In order to get the best results it is absolutely necessary that a closed machine be used.

A summary of the work done in eastern Washington shows that when seed is treated with copper carbonate there is an average of 8.4 per cent smut, while bluestone gives an average of 13.6 per cent smut. Together with this, there is a possibility of saving seed by reducing the amount of seed sown per acre from one-fourth to one-half bushel.

Fewer Weeds Grow.

General observations have shown that there are better stands of wheat where copper carbonate was used. These better stands also are valuable in that fewer weeds grow. It is not an unusual thing to go into a field where part of the wheat is treated with bluestone and the other with copper carbonate and find the stand so thick in the copper carbonate part that few weeds were found, while there are weeds in the bluestone side.

From a practical standpoint everything is in favor of copper carbonate. It must be remembered that these results are taken in a year when there is an abnormal amount of smut in the wheat belt of eastern Washington.

While there have been a few complaints, it is astonishing to know that wherever these were investigated that it was in favor of copper carbonate. Just a mere observation of a field without actual counts is not enough. Since we have larger stands of wheat there would naturally be more smut heads per unit area. For instance, if in a certain unit area we had 1000 heads of wheat which had 8 per cent smut, that would then give 80 heads of smut per unit area. If now we had a 50 per cent better stand in that same area it would mean that we had 1500 heads of wheat. If this wheat had 8 per cent smut it would mean that 120 heads of smut were present in the copper carbonate treated area, while if we reduce that percentage to 6 per cent we would still have 90 heads per unit area, which would be 10 more than would be actually counted in the bluestone stand. If the farmers just went out and casually looked at their fields without making actual counts the decision would be against copper carbonate.

Three Ounces Better.

Based on field observation and experimentation at the state college we now recommend that three ounces of copper carbonate be used for each bushel of wheat planted in the smut area, this copper carbonate to be of standard strength or, in other words, must contain at least 50 per cent metallic copper; be fine enough so that at least 95 per cent will pass through a 200-mesh sieve, and be of such a quality that it will stick to the kernels of wheat.

In experiments carried on this year at the state college by Dr. Heald, two ounces of copper carbonate gave 19 per cent smut, while three ounces of copper carbonate per bushel gave 10 per cent smut. A complete statement of the experiments will be issued shortly.

The smut counts in Adams county were made in the eastern part, where six fields were visited, since very little smut is found in the western part of the county. It was the object of the people making the survey to get into as many copper carbonate treated fields as possible. Since formaldehyde and bluestone fields were not visited to any extent the averages are not comparable. At the Lind station, as will be noted, untreated smutty wheat gave 25.3 per cent smut, while that treated with bluestone, formaldehyde and copper carbonate gave about equal results.

In Franklin county 15 fields were visited. The highest percentage of smut was found in a bluestone field, where 16.6 per cent smut was present on Jones Fife wheat. The highest percentage found in copper carbonate treated fields was 8 per cent, where a man had used a low-grade product. In one field at Connell there was no smut in copper carbonate or formaldehyde fields, but in the copper carbonate field there was a 100 per cent stand, while there was but a 50 per cent stand where formaldehyde was used.

Forty-One Fields in Grant.

In Grant county 41 fields were visited. The work done in this county was very thorough and the averages are reliable. From the bluestone fields we find that there was an average of 7.5 per cent, while in the formaldehyde and copper carbonate fields the average was 0.

In Spokane county 10 fields were visited. No field was taken in this survey except it had both copper carbonate and bluestone treatments. It was found that the average of smut in the copper carbonate fields was 10.2 per cent, while in the bluestone it was 11.2 per cent.

In Walla Walla county 22 fields were visited. No formaldehyde treated grain was found in the area surveyed. In the copper carbonate fields it was found that there was an average of 7.7 per cent smut, while in the bluestone treated fields there was an average of 11.7 per cent smut.

In Whitman county 78 fields were visited, which give an average amount of smut in the copper carbonate treated fields of 14.5 per cent; in the formaldehyde treated fields, 14.7 per cent, and in the bluestone treated fields, 20.7 per cent smut.

The figures contained in this report supersede all other partial reports that have been issued this year.

At the state college experiment station at Lind, Adams county, it was found this year that Early Bart wheat seed, treated with copper carbonate, resulted in 1.2 per cent of smut; with formaldehyde, 1.4 per cent of smut; with bluestone, 1.0 per cent of smut, and untreated, 25.3 per cent.

E. A. Beikle of Connell, Franklin county, had 100 per cent stand of Early Bart wheat seed treated with copper carbonate, and only a 50 per cent stand when treated with formaldehyde.

F. E. Lloyd of Peone, Spokane county, had 11 per cent of smut in his Hybrid 128, when treated with copper carbonate, and 13 per cent when treated with bluestone; 8.7 per cent of smut in his Jones Fife with copper carbonate; 9 per cent when treated with bluestone; 19.6 per cent of smut in Hybrid 128 with copper carbonate, and 25.8 per cent with bluestone.

E. Pintier of Latah, Spokane county, had 30.4 per cent of smut in his Fortyfold wheat when treated with copper carbonate, and 22 per cent when treated with bluestone.

A. F. Schuntz of Spring Valley had 6.2 per cent of smut in his Fortyfold when treated with copper carbonate and 8.2 per cent of smut when treated with bluestone; 4.7 per cent of smut in his Triplett with copper carbonate and 5.7 per cent with bluestone.

At the Spokane county farm in Plaza, the copper carbonate treatment of Fortyfold resulted in 1.5 per cent of smut and the bluestone treatment in 5.9 per cent.

A. D. Johnson of Sunset, Spokane county, had .3 per cent of smut in his Fife when treated with copper carbonate, the same per cent when treated with bluestone and 2 per cent of smut with his untreated seed.

Thomas Copeland of Russell Creek, Walla Walla county, had 8.6 per cent of smut in his Jenkins Club treated with copper carbonate and 9.9 per cent treated with bluestone.

T. J. Gilkerson of Mill Creek, Walla Walla county, had 4.3 per cent of smut in his Jenkins Club, treated with copper carbonate, and 4.8 per cent treated with bluestone.

F. M. Benson of Prescott, Walla Walla county, had 5.6 per cent of smut in his Hybrid 128 when treated with copper carbonate, and 7.4 per cent treated with bluestone; in his Triplett wheat he had 10.6 per cent smut, but 100 per cent stand when treated with copper carbonate, and 8.8 per cent with 30 per cent stand when treated with bluestone.

Henry Copeland of Mill Creek, Walla Walla county, had 9 per cent smut in Jenkins Club treated with copper carbonate, and 16 per cent treated with bluestone.

C. N. Eaton, Waitsburg, Walla Walla county, had 17.1 per cent of smut in his Jenkins Club, treated with copper carbonate; 14.5 per cent treated with bluestone. M. C. Walker, also of Waitsburg, had 9.6 per cent in his Jenkins Club treated with copper carbonate, and 15.9 per cent, treated with bluestone.

M. E. Schreck of Lacrosse, Whitman county, had 5.7 per cent of smut in Hybrid 128 treated with copper carbonate; 8.1 treated with bluestone.

Peter Solem of Lacrosse, Whitman county, had 9.2 per cent of smut in his Hybrid 128 treated with copper carbonate; 13.4 per cent treated with bluestone.

Phil Howard of St. John, Whitman county, had 19.7 per cent of smut in his Triplett wheat treated with copper carbonate, and 53 per cent in his untreated seed.

Dan Lathrum of Oakesdale, Whitman county, had 5.1 per cent of smut in his Fortyfold treated with copper carbonate, and 17.1 per cent treated with bluestone.

R. V. Perringer, Belmont, Whitman county, had 9.3 per cent of smut in his Turkey Red treated with copper carbonate, and 15.4 per cent when treated with bluestone.

C. E. Chase of Tekoa, Whitman county, had 24 per cent in his Fortyfold treated with copper carbonate, and 20.8 treated with bluestone.

H. H. Clark of Tekoa had 52.2 per cent of smut in his Hybrid 128 with copper carbonate treatment, and 31.4 per cent with bluestone.

A. H. Clark, Tekoa, had 44.6 per cent of smut in his Fortyfold when treated with copper carbonate, and 44.4 per cent with bluestone.

Kittitas County Holds Successful Fair on Its New Grounds

A rodeo was the colorful feature of the Kittitas county fair at Ellensburg this year, and to advertise it scores of business men and departmental superintendents wore colored silk shirts and stockmen's hats during the week and it added much to the effectiveness of the event. The attendance was heavy during the three days and it was rumored that the indebtedness was cleared from the receipts of the first two days of the fair. This fair was held on the new grounds built in June through community cooperation.

Both the location and plan of the new fairgrounds were ideal. Only one exhibit building had been erected for this year's fair, but the sale of space in the first building is going for the payment of the second twin structure, which will be erected next year. The grandstand and track will be leased to the state normal and high school for athletic use during the year and the rest of the grounds will serve as a city park. The live stock buildings are temporary structures, but this part of the grounds will be built up later and there will probably be a need of additional ground at this corner for expansion.

The entertainment program was interesting and clean. The grandstand was full to overflowing the first day. Miss Anna May Carlat of Ellensburg was chosen queen of the rodeo by a ticket-selling contest and was crowned in front of the grandstand during the first day. The live stock parade was held on the grounds the last day and the downtown parade of roughriders and the band opened the fair.

Agricultural Show.

All of the agricultural exhibits were displayed in a large tent which was set up on the spot where the other main building is to be erected at some future time. At the main entrance was a pleasing display of seasonal fruits in trays and plates. While over half was made up of apples and pears, there was a varied collection of other fruits, all of which were high class.

A booth made up by the agricultural class of the Ellensburg high school showed a large variety of sheaf grains, vegetables, fruits and flowers grown or collected by the boys. A fertilizer trial was illustrated by a minature field which pointed out the advantage of using sulphate of potash over superphosphate or manure for the soils of Kittitas county.

There were six booths devoted to the schools of the county and they showed large collections of class work and drawings. Three of the high schools, Ellensburg, Kittitas and Cle Elum, put on a manual training exhibit that would have been hard to surpass. The workmanship on the cedar chests was excellent and the hardwood tables and chairs were as durable and neatly made as if made by experienced hands. The girls brought out cooking and sewing displays.

The woman's department was made up of several booths which showed different kinds of work. The clothing booth included exhibits from seven home economic clubs in the county and was a complete display of dresses, coats, hats and other articles. The display of quilts and rugs was unique and there were some quilts that were family relics, one being 93 years old. The fancywork was as fine a display as the one shown last year and included more novelty work, such as colored embroidery and other kinds that are more modern than have been shown heretofore. The baking and canning entries were not as well represented as in the past, but the quality of the entries was high.

Beauty and Utility.

The flowers made a very pleasing display and were largely asters and dahlias, while a large variety of other seasonal flowers and house plants added greatly to the collection. They were all from home gardens in Ellensburg and from farm homes about the county.

The art department filled an entire booth and was made up of oil and water color paintings and there was a neat display of china which had been hand-decorated.

Miss Maud Wilson of the state college extension service judged the sewing and cooking classes, while Mrs. E. Peterson of Tacoma judged the flowers.

The general vegetable exhibit was made up of practically all vegetables and there were some seeds, such as corn, beans and seed potatoes, that were entered for competition. George Michels of Ellensburg fitted an interesting booth showing the value of using certified seed for planting and the difference of the resulting crop. Models of a potato storage cellar and a ventilated pit were demonstrated as a part of this display.

The hay exhibit was made up of both alfalfa and timothy, which was displayed in bales. F. P. Hutchinson took first on alfalfa and G. B. Harvey second, both of Thorp. Lawrence Mellergaard won first on timothy and R. W. Waite second, both of Thorp. Mellergaard won the special timothy prize and first on mixed hay, with William McGrath second in the latter class.

The judges of these departments were Theodore Alberts, state horticultural inspector, of Chehalis, and F. H. Zentner county agent, of Douglas county.

The Horse Show.

Kittitas county is noted for its farm horses and there have always been heavy turnouts in all of the classes. This year, however, the classes were not so well filled, but the number of registered horses was greater than it has been at any previous show. The champion stallion was a Shire, Prince Rockwell, a 2-year-old, owned by Lou J. Richards of Ellensburg. The horse was a sorrel of splendid type and was sired by Rockwell Forester, at one time in the herd of George M. Wilson at Wilbur. The champion mare was also by the same sire and owned in the same herd. She was a wonderfully fine brood mare, out of Colonel Activity, one of the Wilson prizes. There was a good showing of Belgians, but only two Percherons and three grade mares came out.

George M. Wilson of Wilbur judged the classes.

Beef Cattle.

All of the showings in this department were made by the boys of the two baby beef clubs, but many of them entered the open class of fat steers. In this Erling Hanson of Ellensburg won first and third, while Thomas Newton took second and Roger Pays fourth. The two latter came from Cle Elum and were members of the Aberdeen Angus club.

For the Shorthorn Breeders' special prize Erling Hanson won first and second; Philmore Wilson third and fifth; Carol Robinson, fourth and sixth; Eugene Wilson, seventh and eighth, and Walter White, ninth and 10th.

Those winning in the Aberdeen Angus special were: First and fourth, Thomas Newton; second, Roger Pays; third and fifth, Harry Newton; sixth, Alva Pays.

Duncan Dunn of Wapato judged all of the beef classes.

The Swine.

The Berkshires made a fine showing and were shown by the hog breeders and by club members who entered the open classes. Those who showed their animals were John Tjossen, Harold Wilson, Helen Wilson, J. Alva Bull, Erwin Billiter, George Mills, Erwin Mills and Gilbert Mills, all of Ellensburg. The champion boar was Sunset Demonstrator and the champion sow Grapewild Bernice, both owned by J. Alva Bull. C. M. Talmadge of Sacramento, Cal., who judged the classes, said that both champions were exceptionally good examples of the new type Berkshires and worthy of the placings.

The Chester Whites had a fine turnout and included two contestants for the tonlitter contest, Florence Robinson and Steve Woodhouse, while Gilbert Mills made the third with Berkshires.

The breed made a show that was a credit to the community and the large number of the entries was partly due to the club members who came out and many of them entered for the open classes. The junior and grand champion boar was Beaverwood Sensation, an under 6 months boar, and a strong individual with splendid quality, owned by Steve Woodhouse. The senior and grand champion sow, Yakima Queen, was from the same herd. She is a western bred animal and has farrowed some fine pigs in the three years she has been in the herd. Florence Robinson won first with her sow and litter and also with the fat barrow.

The Poland Chinas were not so well represented in numbers, but the grand champion sow was another young animal, a senior yearling owned by Howard Mason.

(Continued on page six.)

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Room for More Sheep

"It is the opinion of almost every one that we need more sheep in Whitman county," says Secretary Burford of the Whitman county farm bureau. He calls attention to the fact that the amount of lamb and mutton produced in 1922 in this country was 21 per cent less than the 15-year average. "Since the bulk of city population has increased more rapidly than that of the country and since the bulk of slaughtered sheep and lamb is consumed by the cities, the production of lamb has been below normal," says Mr. Burford.

There is always a question as to the advisability of a general increase in the production of any live stock or field crop. However, there can be little doubt of the advisability of the farmers of a grain-growing country like the Palouse section having hogs, sheep and other live stock as side lines to consume the waste products of the farms. Undoubtedly, as Mr. Burford suggests, there is room for more sheep on the grain-growing farms of his county and the neighboring counties.

"Purebred, but Not Registered"

A lesson actually startling in its significance in reference to the use of good bulls is given in the experience of a Thurston county dairyman. He keeps well bred grade Jerseys. Some years ago he secured a bull closely related to the great bull, Chief Engineer, sire of the still better known Golden Glow's Chief. All the daughters of this bull proved to be better producers than their mothers. One of them, 14 years old, produced 329.4 pounds of fat in 11 months, authenticated by the Thurston County Cow Testing association. Another, at seven years old, had 493.9 pounds to her credit. Others did nearly as well, and the highest record is 518.2 pounds of fat in 12 months, made by an eight-year-old cow.

This bull was followed by a son of the gold medal cow, Golden Massypolo 4th, that has a record of nearly 900 pounds of fat. The daughters of this bull, in turn, proved to be better than their dams. Three of them, at three years old, produced 401.7, 435.3 and 341.3 pounds of fat in 11, 10 and 12 months, respectively. One five-year-old cow produced 510.5 pounds of fat and another of the same age, 495.2.

But now comes the sad part of the story. The next bull this good dairyman bought was "a purebred, but not registered." The result promises to be very disappointing, if not disastrous. Heifers are now on test as two-year-olds. One of them, a daughter of one of the best cows, has been on test seven months and has credited to her only 152.9 pounds of fat. As she was just going into the season of dry pasture when that report was made, it can hardly be hoped that she will produce much more than another 100 pounds of fat. Or, to put it another way, she is not near as good a cow as her mother was at the same age and can not be expected to develop into as good a one. Another daughter of this bull without papers, "but just as good," has 103.3 pounds of fat for four months. The period is not quite long enough to make as certain an estimate as of the other, but only about 250 pounds of fat are indicated for her year.

One case is not positive proof, but here certainly is evidence that one should make sure of the breeding of his dairy sires. And registration papers are the best evidence obtainable.

Beginning to Get Results

A New York commercial paper, in a news item, says: "Announcement is made at the New York offices of the Dairymen's League Cooperative Association, Inc., that the price of class one or fluid milk for September will be $2.98, an increase of 25 cents."

The most interesting feature of this announcement is not the price quoted. It is the fact that the announcement was made by the offices of the cooperative organization. That is not where the prices of milk used to be fixed. Not long ago it was the custom for the dairyman to take his product to the creamery or the distributor and accept what the latter offered. Cooperation, however, is beginning to make the dairyman able to assist in placing a price on his own product.

The New York instance is but one of a large number that indicate the growing power of agricultural cooperation. These instances should give courage to farmers, who are now going through a trying period of price depression. Cooperation offers more in the way of improved conditions for the future of farming than any other thing or combination of things in which the farmer might play a part.

Combating Wild Morning Glory

The wild morning glory is an especially difficult weed to eradicate because of the root system, which enables it to start a new growth even though the top and most of the root itself be destroyed. A piece of the root, covered up in soil with any perceptible amount of moisture, will start a new plant. Therefore, in cultivating a patch of this pest with a view to eradicating it, one should be extremely careful that no pieces of root cling to the plow or cultivating implements to be carried and dropped in other parts of the field. In localities where this weed is known to exist farmers should watch carefully for it, so that in case stray plants have appeared or small patches exist it will not be spread by means of the plow or weeder. Absolutely clean cultivation is probably the best method of combating this pest. This cultivation must take place so frequently that the plant is allowed no growth whatever above the ground. Any foliage above the ground serves to replenish the food material in the roots, and this food material enables the root to live longer, thus increasing the difficulty of eradication.

The Straw Ballot

The question of straw ballots on prohibition was taken up at a meeting of the masters of the state granges at Syracuse, N. Y., some time ago.

At least a dozen of the delegates said they had made an investigation in their own states and had found almost no farmers who had taken part in a straw ballot on prohibition. It was the opinion of all present that votes of this character do not represent the true opinion of the voting public.

Seed Wheat

Picking out the best wheat in your field for seed is well and good, but Leonard Hegnauer of the state college says something more is needed to get the best seed, which is to thresh it separately after the machine has been thoroughly cleaned.

The immigration figures for the last fiscal year show a remarkably large number of Mexicans coming into this country, 62,709, only exceeded by the Germans, 65,543. English immigrants for the year numbered 60,524.

Washington State Gleanings

WALLA WALLA TO SHIP ONIONS.

Walla Walla county this year will ship over 900 cars of onions.

TO STORE PEARS AT YAKIMA.

One thousand cars of pears are scheduled to go into cold storage in the Yakima valley.

BEE AND HONEY LOSS BY FIRE.

Twenty-six bee stands and 1000 pounds of honey belonging to William Highlands were destroyed a few days ago in a prairie fire at South Union, near Elma.

FARM BUREAU HEADS TO QUIT.

H. L. Hull and N. H. Massie, president and secretary of the Yakima County Farm bureau, have announced that they will not be candidates for reelection, but will devote their time to cooperative marketing.

WILL CAN PRUNES AT YAKIMA.

Libby, McNeill & Libby are attempting a new venture in the cannery at Yakima. They will can prunes instead of drying them, according to Harry Mathison, manager of the green fruit purchasing department. Packed prunes are bringing about 50 cents a box, which is about 2 cents a pound, and the cannery is offering to take tree ripened prunes at $25 a ton.

INSPECT CERTIFIED SEED WHEAT.

Farmers of the Walla Walla valley went to Pendleton a few days ago to inspect Umatilla county certified seed wheat. A. W. Kaston, county agent, who arranged the trip, says there are 13,720 acres of certified seed wheat there. In Walla Walla county there is a sufficient quantity in only one variety, Turkey Red.

SHIP SHEEP FROM FORESTS.

Sheep are being shipped from the Chelan national forest to market, the forest office at Okanogan reports. Two bands of lambs were shipped from Pateros and others will be shipped until October 15.

The ranges held out exceptionally well this year. There have been 42,000 sheep on the forest this year, with 120 per cent lambs, a slight decrease from last year.

TO INSPECT PROJECTS.

E. F. Benson of the Northern Pacific railway reports that during state fair week D. W. Davis, reclamation commissioner; F. E. Weymouth, chief engineer, and Miles Cannon, field engineer, will spend three days inspecting the Tieton and Sunnyside projects and proposed Yakima-Benton highline, for one unit of which Mr. Davis has included an appropriation in next year's budget.

PACKING APPLES AT WALLA WALLA.

Apple packing in the Baker Langdon orchard, the largest commercial orchard in the Walla Walla valley, began September 10. H. P. Moreland of Upland, Cal., will supervise packing of 300,000 boxes of apples. Moreland had charge two and three years ago. Twenty-five experienced California packers have arrived to form the nucleus of the packing crew which has been enlisted.

WALLA WALLA FRUIT CROP.

Walla Walla fruit growers expect to ship a total of 2400 cars during the present year. In 1922, a record year, 2112 cars were handled. Prunes are contributing a big portion of this total. Up to August 30 896 cars were sent out, according to a statement issued by the Walla Walla Valley Prune Growers' association. About 300 more loads are expected to conclude prune shipments from the district.

BERRY PLANTS MUST BE INSPECTED.

All berry plants shipped into the state of Washington must be accompanied by a certificate of inspection showing them to be free of cane gall or strawberry weevil, under an order recently promulgated by E. L. French, director of agriculture. The former quarantine, which was revoked, required inspection certificates only on shipments within the state. Under the new order plants from slightly infected fields may be sold if properly fumigated under the direction of an inspector.

GRAPE DEMONSTRATION AT PASCO.

The third annual grape demonstration was held September 7 on the farm of J. W. Shoemaker of Pasco and 70 grape growers attended. The methods of training and trellising grapes were discussed and demonstration of the erection of a trellis was a feature. Cooperative marketing was discussed. The instruction was carried on by County Agent Harold Simonds and W. S. Kirk, an experienced grape grower.

HAY GROWERS ORGANIZE.

Reports coming into the office of the Northwest Hay association at Yakima give encouraging accounts of 19 district meetings held in Kittitas, Yakima, Benton and Walla Walla counties, in a whirlwind campaign to sign up 75 per cent of the hay tonnage of these four counties in this cooperative organization of hay growers. Delegates were selected in a majority of the meetings for the general meeting to form the signers into a legal corporation as soon as the campaign is closed.

PRUNE GROWERS SIGN UP.

Seven hundred and fifty acres have been signed in Clarke county by the California Packing corporation, which is offering two-year cost-plus contracts to prune growers, according to I. E. Allen, manager of the prune office of the corporation at Vancouver. This constitutes more than 12 per cent of the prune acreage in Clarke county. The contracts allow an advance of 2 1-2 cents a pound on all deliveries of dried prunes to the corporation's packing plant, providing the prunes are 60s or larger.

TO DREDGE RIVER CHANNEL.

An increase in port of Vancouver expenditures from $16,500 in 1922 to $66,992 in 1924 was indicated by the budget filed with the Clarke county auditor at Vancouver. The port proposes to dredge the Columbia river channel from the mouth of the Willamette to the interstate bridge to a depth of 25 feet at low water, and will contribute $15,000 toward this next year. The federal government is expected to aid in the project. Ten thousand dollars will be spent in tearing out the ways of the old Standifer shipyard site to make way for the new industries. Ten thousand dollars in bonds issued in 1917 for the purchase of the port property in West Vancouver will be redeemed and interest payments will amount to $8787.

Three Billion Dollars!

That Is the Price of a Year's Supply of Dairy Products

There are now more than 30,000,000 dairy cattle in the United States, distributed on about 4,500,000 farms, or approximately 70 per cent of all the farms in this country. The big importance of the dairy industry in the United States is more fully grasped when the fact is considered that the consumers pay more than $3,000,000,000 a year for dairy products, or about $30 per person.

Here is an industry that looms large from every consideration—the health of the people, the very lives of the children, and the welfare of millions of our citizens engaged in the industry.

It is worth guarding; it needs constant attention and study. Our senators and representatives, the members of the state legislatures, the administration at Washington, the newspapers of the country, should give it constant and friendly consideration.

The dairy industry, moreover, must be considered in its relation to world conditions. The World war changed the dairy map. Old dairy countries, such as Holland, Sweden, France and Switzerland, are finding themselves face to face with new competitors. As one observer puts it, the southern hemisphere is engaged in a struggle with the northern hemisphere for the control of the international dairy market. Argentina, in South America, New Zealand and Australia are being supplemented in the struggle by South Africa. All these countries have great herds of cattle and small human population, and have turned to dairying for the purpose of producing for export. It is said that these countries of the southern hemisphere, through producing tremendous amounts of dairy products, already are only in the infancy of their productivity.

Some idea of the curious economic features of the international dairy situation, says a New York market report, may be gained from the fact that in 1922 South Africa, the newest dairy country, shipped 50,000 pounds of butter to Holland, for years one of the foremost butter producers and exporters of the old world, and that "the few hundred thousand pounds of butter shipped to this country by Denmark last year kept our producers of 1,780,000,000 pounds of butter constantly worrying about prices."

Eastern market reports record the arrivals of foreign butter in New York in one week of more than 2000 casks from Denmark, 200 boxes from Ireland and 200 casks from Holland. A car of Canadian butter was imported and sold so well that others are expected. The report of the purchase of 500 boxes of French butter, to be shipped from England, added a new name to the list of importing countries. The present tariff law lays an import tax of 8 cents a pound on imported butter. The foreign product is coming in and paying that tax, a fact which confirms the declarations of representatives of the dairy associations, when the tariff bill was under consideration, that 8 cents a pound was not sufficient protection.

When this industry is considered in all its aspects the conviction comes strong that cooperation is essential to its life. Cooperation through the Dairymen's League Cooperative association in New York state and adjacent territory has saved the industry there. This association has just taken the initiative in increased difference in price on carload and less than carload lots of evaporated milk. An authority on the dairy trade, writing in a New York market report, says the trade is agreed that this step should have been taken long ago for the good of the industry. What the country most needs is a decrease in the cost of distribution. The small difference in the price of carload and less than carload lots of evaporated milk has made it cheaper for the wholesalers to buy in small lots than to buy in carload lots and store. All this increased the freight and handling and warehouse costs, resulting in a higher price without the attendant profit.

The same authority reports that the evaporated milk business has long been on a basis where nobody made a profit. High costs of production made it a costly commodity to the producers and the selling price made it without profit to the wholesaler and retailer. It is predicted that this reform step by the Dairymen's League Cooperative association will be cheerfully accepted by the trade and that it will work as a fine tonic for the dairy industry.

Dairying is indeed a big and vital industry. It is estimated by the United States department of agriculture that 98,862,276,000 pounds of milk were produced in 1921 and that about 46 per cent was used for household purposes, chiefly for direct consumption as milk; 47 per cent used in the manufacture of products, a little more than 4 per cent was fed to calves and the balance of about 3 per cent was either lost, wasted or included in unspecified uses. In the manufactured products a little more than 36 per cent was used for the making of butter; nearly 4 per cent for condensed and evaporated milk; more than 3 1-2 per cent for cheese and about 3 1-3 per cent for ice cream.

WOULD AID SAN JOAQUIN FARMERS.

Congressman H. E. Barbour of California writes to W. D. Mitchell, president of the Valley bank of Fresno, that there is a likelihood that raisins, dried peaches and dried figs will be included in the schedule of farm products on which loans can be made under the national rural credits act. Hundreds of thousands of dollars of government bank funds would thereby be made available in the form of loans for San Joaquin valley farmers.

Spirit That Quickeneth

Persuasion a Spiritual Weapon to Be Used or Perverted

It is the spirit that quickeneth.—John vi:63.

Take the words courage, pluck, mettle, prowess, daring, backbone, exploit, heroic, chivalrous, dauntless, lionhearted, fearless, adventurous, valorous, doughty, unterrified—the spirit giveth light to every one of these words. No amount of mere knowledge or preparation, or prolonged work, or opportunity, or privilege, or any circumstance of birth or environment can give life to these words. Having the spirit of these words born in you, all these other things may come into play.

"The spirit of man is the candle of the Lord."

"Uphold me with thy free spirit."

"Renew a right spirit within me."

But the power of the spirit can be used to deceive as well as to enlighten.

"Beloved, believe not every spirit, but try the spirits whether they are of God; because many false prophets have gone out into the world."

Societies galore, religious and secular, are built up on the power of the spirit of man to do and to dare. Persuasion is a spiritual weapon to be used or perverted.

Hence, it is wise to beware.

"All the ways of a man are clean in his own eyes; but the Lord weigheth the spirit."

"Create in me a clean heart, O God, and renew a right spirit within me."

ON THE DEATH OF LINCOLN.

Henry Ward Beecher: Have not thousands of soldiers fallen on the field of battle by the bullets of the enemy? Is being killed in battle counted to be a dreadful mode of dying? It was as if he had died in battle. Do not all soldiers that must fall ask to depart in the hour of battle and of victory? He went in the hour of victory. There has not been a poor drummer boy in all this war that has fallen for whom the great heart of Lincoln would not have bled; there has not been one private soldier, without note or name, slain among thousands and hid in the pit among hundreds, without even the memorial of a separate burial, for whom the president would not have wept. He was a man from the common people that never forgot his kind. And now that he who might not bear the march, and the toil, and the battle with these humble citizens has been called to die by the bullet, as they were, do you not feel that there was a peculiar fitness to his nature and life that he should in death be joined with them in a final common experience to whom he had been joined in all his sympathies?

FARM BUSINESS AND MARKETS OUTLOOK

PROSPECTIVE yields and volume of sales of the principal farm products in the present crop year indicate a moderately larger net farm income than last year. The American Farm Bureau federation has issued a tentative forecast of cash returns, which compares with the estimate for the last year as follows:

	1922-1923.	1923-1924.
	(In millions of dollars.)	
Crops	5523	4725
Live stock	2256	2225
Animal products	1700	1760
Total	8479	8710

The wheat market has been showing some stability. Rye is beginning to come out of the doldrums and corn has held at a high level for two months. From present appearances the capacious maw of feeding demand this fall and winter will not be easily filled, which should justify good prices for all surplus coarse grains and hay.

Much better prices than last year promise to offset the smaller potato crop and the recent upturn in cotton has been a great deal larger than the reduction in forecasts of yield.

Beef, pork and lamb are disappearing at a tremendous rate at better prices, on the whole, than in 1922. Hogs may not bring quite as much return as last year, but in view of the wide outlets recently discovered, there is less apprehension on this score than three months ago. Wool prices show no sign of crumbling.

Butter, cheese and whole milk all are selling on a higher level than last year, with a reasonably smooth sea ahead. Eggs and poultry have kept off the bargain counter in spite of heavy production.

The general business outlook on which hinges the prospect of continued employment and of large consumption of foods and extensive use of such raw materials from the farm as cotton, wool and hides is hopeful. Financial sentiment has grown more confident in the last month, orders for goods are reaching the principal industries in larger volume, commodity prices have begun to stiffen, and fall trade promises to be well above average. Such adverse influences as the Greco-Italian imbroglio, the anthracite strike and the disaster in Japan have not caused more than a temporary chill.

Barometric readings of those conditions which usually terminate periods of urban prosperity do not indicate an approaching storm. Bank credit is not overextended, stocks of goods are not excessive and business men have not made large commitments for the distant future. The business structure appears to be fairly well braced for the time being to such strains as are brought by disparities in prices of different products, by the inequalities in income of different classes, by the impoverishment abroad by high taxes and transportation costs.

Cattle Markets Resume Advance.

Prices upon all grades of steers retreated early last week, even long-feds losing some ground and the decline in intermediate grades, which arrived in largest volume, was about 75 cents. But strength has returned and prices at Chicago are higher than a week ago, although western markets still show some loss.

Hogs Again at High Level.

Hog prices became top-heavy on the recent advance and declined sharply, but receipts have shrunk slightly and values are again near the year's high mark. The advance in the last six weeks was remarkable in view of the large volume of receipts and heavy storage stocks of hog products, so that spells of weaknes are not surprising. Spring pigs are arriving in increasing numbers at all markets. Prices may have another spurt before September is over, but readjustment to the new pig crop basis is scheduled for the next 60 days.

Upturn in Lamb Markets.

Although receipts of lambs last week were the largest in nearly a year prices advanced, reaching the $14 level at Chicago once more. Weak spells may recur in the next month, but thereafter a definite upward trend should be established. Feeders are good buyers, taking many lambs already fit to kill at prices 25 cents above packer bids, but the total movement to the country is only about the same as last year.

Wool Market Remains Dull.

The wool auction at London remains firm, heightening confidence in our markets, but the volume of business is small, as mills are not receiving orders for cloth in the volume needed to keep up the present rate of operations. Mills are gradually using up their stock of raw wool, however, the flood of imports has ceased, prices in this country are 5 to 6 cents under an importing basis and goods accumulated in distributive channels are gradually being worked off. More activity is expected in the wool market in the next 30 days. Some of the spring clip in Texas is still to be moved and the fall clip will come off soon.

Canada Has Record Wheat Crop.

In spite of unfavorable conditions in the later stages of growth of the Canadian wheat crop, estimates of yield have been more optimistic recently and the Canadian government has put on the cap sheaf by its September estimate of 471,000,000 bushels, which is 71,000,000 bushels above the record crop of last year and perilously close to the 500,000,000-bushel yield forecast, over which so much ink has been spilled.

This estimate for Canada with the September estimate of 789,000,000 bushels for the United States, a loss of 4,000,000 bushels from the August forecast, gives a total of 1,260,000,000 bushels for North America, which is only 2,000,000 bushels less than in 1922. Since the carryover in both countries is moderately larger than a year ago, the exportable surplus should be up to last year, when it reached 475,000,000 bushels, except as it may be cut down by feeding of low grades.

With the Canadian estimate 100,000,000 bushels in excess of expectancy, the wheat market outlook darkens once more. Prices seemed to have become adjusted to the situation as it existed before, but it is an open question whether the supply now in sight can be distributed at this level.

The movement of spring wheat is enlarging, so that total primary receipts are holding up well and the Canadian movement is getting under way. Part of the Canadian accumulations will be hedged in our markets, so that, whatever the ultimate course of wheat values, no rapid advance seems likely to take place.

Corn Nearing Safety Zone.

More and more of the corn crop is maturing ahead of frost, although some damage has been done in the northwestern states and there is still a rather large acreage which will not be safe before October 1.

The government's September forecast was 3,076,000,000 bushels, or practically 200,000,000 bushels above last year.

Oats prices have discounted the effect of the new crop movement. Primary receipts are holding up and the visible supply is gaining. The percentage of low grades is rather high, due to recent rains.

The range of cash grain prices for the week ending September 12 was as follows:

CHICAGO—Wheat—No. 2 hard, $1.05@1.13; No. 3, $1.03 1-2@1.10; No. 4, $1.00 3-4@1.05; No. 2 red, $1.04 3-4@1.07 1-4; No. 3, $1.03 1-4@1.05 3-4; No. 4, $1.00 1-2@1.04 1-4. Corn—No. 2 mixed, 88 1-2@90c; No. 2 yellow, 89@90 1-2c; No. 2 white, 88 1-2@90c. Oats—No. 2 white, 39@43c; No. 3, 37 1-4@40 1-2c; No. 4, 36 1-2@39 1-2c. Rye—71@74 1-2c. Barley—52@72c.

Seed and Feed.

The official estimate on the clover seed crop is 1,292,000 bushels, compared with 1,875,000 bushels harvested last year and 1,411,000 bushels in 1921. The advance of 15 to 25 per cent in prices which has already taken place has discounted much of the loss in yield.

The feed market continues fairly firm, although buying is of small volume. Wheat feeds have advanced again to a new high for the season, as mill offerings are small.

Hay Markets Strong.

Hay markets are reported firm, with prices practically unchanged to 50 cents higher. The movement from surplus sections has fallen off once more. The southern demand is active. Rains have freshened pastures, thus reducing fall hay requirements.

Egg Market Prospects Look Brighter.

Shortage of fine fresh eggs again was responsible for unchanged price levels last week and toward the close, trading continued good, many dealers predicted further upturns.

Butter and Cheese.

Butter prices scored new advances last week, as supplies of fine butter continued light, consumptive demand was good, production reports indicated that the make was only holding steady rather than showing the increase anticipated by many dealers, and foreign markets were too high to be attractive.

Trading in the cheese market last week was in small lots only, as it was impossible to interest buyers beyond filling immediate needs.

Fruits and Vegetables.

Potato prices declined last week under the increasing weight of the late crop movement, which will be relatively heavy for the next six weeks. In some sections producers are withholding shipments for a better market, as prices offered are unattractive. Idaho Rurals are

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Poultry Questions Are Asked and Answered

By RALPH ERSKINE

The poultrymen of Snohomish county, in common with those elsewhere, realize that their success lies not entirely in hard work about the plant, but in a knowledge of the problems of production and marketing that confront them. Proof of this is found in the attendance at the Snohomish county poultry school, held at Everett September 3 and 4, and in the fact that every one showed a live interest in all subjects taken up. The attendance was never below 45 and reached a total of 90 during the second afternoon. The program was arranged and carried out by Arnold Z. Smith, the county agent, and every one was much interested to listen to such speakers as W. D. Buchanan, poultry specialist of the state college, and Dr. W. T. Johnson of the western Washington experiment station, who discussed many vital problems.

The greater part of the forenoon of the first day was taken up with a discussion of the accredited hatchery rules as drawn up at the Seattle meeting in June. Mr. Buchanan gave a short explanation of what the plan would mean for the poultrymen of the state. Many questions were asked and answered and many of the breeders expressed themselves as being in favor of some such plan, inasmuch as it would assure the production of a first-class grade of chicks that could be depended on.

There was some difference of opinion as to the best plan to adopt in the county, as there were some that favored the central hatchery, while others favored the hatching of chicks by a number of plants located at different points throughout the county. All were agreed, however, on the point that such a plan, if taken up, would be one of the greatest benefits that could come to the small flock owner who could not afford to produce his own hatching eggs.

Many Take Part.

The needs of the poultrymen were discussed in a few 10-minute talks by some of the leading breeders of the county in which nearly all present took part.

The value of advertising the western Washington egg was emphasized by M. T. Hokenstad of Snohomish, who pointed out the increased business that any industrial institution could realize by an extensive advertising campaign and suggested that the poultrymen take up some such a campaign through the present egg association and employ the necessary specialists to carry the work over.

The need of a first-class chick was emphasized by T. Blake of Sultan, who pointed out that if the western Washington people could produce the best eggs on the New York market and get a premium on every case shipped, there was no reason why the same people could not produce the best chick on the market. This, he said, could be accomplished by the present accredited hatchery plan. He said that it rested in the hands of the poultrymen to perfect the movement that has already been well started.

C. E. Westlund of Getchell spoke of the need of educational work among the poultrymen, either through the cooperative association or by increasing the present capacity of the extension service.

A number of others expressed their opinion that the greatest need of the egg producers was to be assured of getting dependable chicks in their own territory and they admitted that this could be accomplished by the accredited hatchery.

How to Get It.

Mr. Buchanan was given the task of telling how the people could get what they wanted and he immediately told them that such results could be accomplished by a stronger and more unified type of organization of the poultry business. This, he said, had already been started, but when it came to real possibilities in cooperative organization, the people of the west were merely taking their first steps. "Greater and better results can and will be realized if the present pace is kept up, provided the movement gets the aid of a greater percentage of the producers," he said. We have tried to work together on one line or another, but we never got anywhere until we organized into a strong cooperative association that could work for the benefit of all its members. The rest is all clear sailing and the members can accomplish almost anything they undertake to do that is within reason."

The Disease Problem.

One of the most interesting talks given during the two days' school was by Dr. W. T. Johnson of the western Washington experiment station at Puyallup. He mentioned three diseases as being most important to the mature birds—chicken pox, tuberculosis and contagious white diarrhoea.

"While there is some trouble with white diarrhoea in western Washington, there is very little tuberculosis, with the exception of cases in farm flocks where they are allowed to run at large about the farm. Chicken pox, however, is a more vital question to the western Washington commercial poultrymen," said Dr. Johnson, "but it is nothing to be alarmed over. It is easy to secure chicken pox vaccine that will relieve the trouble and keep it from spreading to the entire flock. There are a few drugs on the market that are sold to prevent chicken pox and other troubles as well, but since none of these have been tried at the experiment station, we are not recommending them.

"The symptoms of chicken pox are blisters or scars on the combs or wattles. It is best to remove such fowls from the flock as soon as they are detected, and the scabs may be treated with tincture of iodine. If not separated from the main flock, the disease will spread to healthy fowls, and the entire flock becomes affected in time."

As to contagious white diarrhoea, Dr. Johnson said that the best means of handling it was to prevent it by eliminating any birds that have it, and thus prevent its spread to the flock. This is especially true in the breeding flock, since it is then possible to secure eggs from healthy hens only, and thus secure chicks that are free from the disease. This is a disease that is spread from soil contamination. Giving the fowls clean runways will help to avoid the trouble.

"Tuberculosis is found oftener in the smaller farm flocks where the birds are allowed the range of the entire farm," he said. "There is more apt to be unsanitary conditions for such birds on the general farm. The development of tuberculosis can be avoided by use of concrete or wood floors in the henhouse, which can be covered with clean straw at all times and weeding out the infected birds. By keeping them under healthy conditions and eliminating any fowls that have a sickly appearance the disease may be greatly curtailed.

"Leg weakness in small chicks is not due to infection, as is sometimes thought," he went on, "but rather to a lack of the proper nutrition, together with a lack of sufficient exercise. By giving the birds plenty of runway and proper feeds for maximum growth there should be no trouble of this kind. The fact that this trouble is more common with early chicks than with late hatches proves that exercise is an important factor in keeping it out. Cod liver oil added to the ration has been found to be a help in preventing the disease, but it will not entirely make up for the lack of the right kind of nutrients.

At Moulting Time.

"When we consider the feed and care of a flock of hens during the moulting period we must first find out what birds we are going to feed," said Mr. Buchanan in a second address. "We must remember that out of every 1000 chicks 120, on an average, will die; 200 will be culls which will lay 120 eggs or less in a year; 380 will be medium layers, producing from 120 to 150 eggs yearly. The remaining 300 are usually good layers, producing 150 eggs and up, each. When we consider the cost of keeping hens through the winter we realize that we can only afford to carry the 300 good ones over.

"The next question that arises is what are we going to do with the remaining 580 birds. There is no question about the culls. Every one has agreed that they should go to market as soon as they can be weeded out from the flock, or as soon as they start to moult. Careful analysis has proven to us that 95 per cent of the culls will moult early, while 5 per cent will moult late. Here is where our culling system catches the 5 per cent of the late moulting culls.

"Among the medium layers there will be 35 per cent early moulters, and 65 per cent late moulters. This gives us something to go on, and we find that by feeding a good egg producing ration during the fall months we are able to get the maximum eggs from them. As soon as any one of them begins to moult we assume that her usefulness has passed and that she should go to market as soon as possible. This will mean that we must market a few hens every week, and not keep any one over that has started to moult during the early part of the season.

"Since we are after eggs only, we feel justified in pushing these medium layers

(Continued on page ten.)

Kittitas County's Successful Fair

(Continued from page three.)

of Thorp. Elmer Smith of Thorp had the senior and grand champion boar. The other entries were made by Glenn Mason and six club members.

The Jerseys.

Although the turnout was not a large one, it was a very creditable showing and the quality of the different classes was unusual for a county fair. Charles M. Talmadge, who judged the classes, said that it was a better show than he had seen anywhere for the size of the show. There were six exhibitors: Nichols and Plunket of Ellensburg, who brought out 12 head and won the senior and grand championship ribbon on Majesty's Cowslip Noble, a 5-year-old bull, with excellent quality and type. The senior and grand champion female was also in this herd. She was Brown Lad's Cowslip, a half sister to the grand champion bull. She, like her half brother, shows the characteristics of Cowslips Oxford, their sire, who was once owned by Bert Pease, a veteran Jersey breeder of the county.

Joseph Tornay of Ellensburg won the junior champion ribbon on an unnamed calf sired by Pansy's Colonel Jack. The other exhibitors were Roy Brunson, who showed a senior yearling heifer; Joe Tornay Jr., who showed two heifers; Verna Woods, with a bull calf and a mature cow, and Marie Tornay, with a senior yearling heifer.

There were three head of Guernseys owned by Fred C. Drake of Ellensburg, who showed an aged bull, an aged cow and a senior heifer calf. The heifer was made junior and grand champion, since she was so much more outstanding than the older female. The heifer was unnamed, but is sired by Chicona Lover Bold, the H. E. Angel herd bull, at Mabton.

The Holsteins were shown by two exhibitors, A. B. Goodwin and R. L. Rutter, both of Ellensburg. The latter won senior and grand champion bull with Sir Cascade Blossom Fayne, while the junior and grand champion female was a senior calf sired by the champion bull.

Two Breeds of Sheep.

Although there are few sheep in the Kittitas valley that are not either purebred or grade Hampshires, but this year there was an entry of Shropshires entered by Clarence Wipple of Ellensburg. He brought out seven head which nearly filled the classes and won all awards.

Paul Wipple entered six head of Hampshires and won the champion ram honor and was also first place in the club awards. The champion ewe was in the S. P. Wipple & Sons herd, who entered all their seven head in the open classes only. They also won first on breeder's flock. Ernest Wilson entered eight head of his Hampshires.

Prof. O. M. Nelson of Oregon Agricultural college judged the sheep classes.

Poultry Show.

The poultry show was housed in a permanent building in the live stock section of the grounds. A few changes may be made in the building later, but at present it is large enough for all comers and there were more entries than came out last year. The greater part of the show was made up of the heavy breeds, namely the White Wyandottes, the Rhode Island Reds and the Barred Plymouth Rocks. The Leghorn classes showed for both show and utility and, in fact, all judging was done on that basis.

The Cove-Damman Poultry club came out with a good display of poultry, ducks, geese and turkeys. The champion cock of the show was a yearling owned by F. W. Munz of Ellensburg, who also won champion hen and the best hen in the show. The champion cockerel was one of Roy Castor's entries and the champion pullet owned by Paul Birr of Ellensburg.

Harry Collier of Tacoma judged the poultry.

Two banquets were held during the three days of the fair. One was a breeders' banquet where C. C. Churchill, Mayor of Ellensburg, presided as toastmaster. A number of the outside breeders and live stock judges were called upon for their opinion as to throwing open the show to breeders from out of the county as well as the local people. The sentiment was unanimously in favor of such an improvement, which they said would help to enlarge the fair each year.

The club banquet on the second night was for the members of the county clubs who could attend. Howard Barns, the county club leader, acted as toastmaster and called on many of the members for an expression of their views on the year's work and Charles M. Talmadge added some interesting pointers for the young stock breeders to consider. Feeding, he said, is only half of the game, and it is equally important to look to getting the proper animal in the beginning and feeding at regular intervals. The breeder must also learn to carry with him a mental picture of a good animal so as to make comparisons when necessary.

Woman Manages 26-Acre Farm

Twenty-six acres of general farm crops and a house lot filled with gorgeous colored flowers of many kinds, all managed by a woman, is what a representative of THE FARMER found at Keyport, Kitsap county, the home of Miss M. Richardson. While cows and hogs might be called her main line, Miss Richardson also receives a portion of her income from her flowers, fruit and chickens. The many kinds of crops keep her time well divided, since she hires no help except during the haying season.

"In fact, my time is too well divided," said Miss Richardson, "and I have planned on renting the farm or working it on the share basis in order that I may put more time on the flowers. The whole farm is too much for one person, even for a man. There are so many phases of the garden game that could be developed and I think there is an excellent opportunity to raise flowers on a larger scale.

"I have some new varieties of primroses that promise to do exceptionally well and there seems to be a good demand for the roots on the general market. One of these is the 'Sunshine,' an orange-colored bloom, with a very fragrant scent. I have been getting $1 a root for all I could supply.

"The gladioli grow well here and I have some odd varieties that add to the collection. There is one from England. I have never planned on selling any of the cut flowers, since we are a little too far from the markets, and then it is better to have the flowers to show what we have for sale. People come here in the summer and order the roots and bulbs for fall delivery.

Flowers in the Shade.

In the case of most garden flowers it is better that they have some shade," continued Miss Richardson. "I have all my flower beds in the orchard and it makes about the right amount of shelter. I have found it a good plan to plant three kinds of bulbs in the same bed in separate rows. In this way the blooms will come at different times and there will be no bare spots in the garden at any time.

"I am starting a rock garden," Miss Richardson went on. "Seed plantings are becoming more popular every year and there is a strong demand for plants that will grow in such places. I have made a large collection and find that many of our native plants will thrive in such a garden. Some of the points in favor of such a garden are that cultivation is unnecessary and the weeds cause very little trouble. Rock gardens are used largely for steep terraces and mounds that can not be cultivated without excessive erosion of the soil."

Miss Richardson has also started a collection of nursery shrubs and plants which she keeps growing about the house. As the time affords she will propagate new stock from these plants and go into the game on a larger scale. There is a large bunch of Pampas grass that has become so thick that it will have to be blasted out in order to get it separated in sizes suitable for marketing.

In another garden Miss Richardson has a large number of ferns growing. Many of the plants are odd varieties that are difficult to obtain from the average florist and others come from the wilds of the Puget sound district. Ferns are a desirable plant for the house garden and also for window boxes and Miss Richardson finds a ready sale for them.

"I don't believe in putting all my eggs in one basket," remarked Miss Richardson. "I have always kept a few cows, some hogs and a pen of chickens. At one time I had over 25 cows and did most of the work myself, but it was too much with the flowers and the rest of the farm, so I had to sell off all but seven. It pays to keep a few cows to keep a cream check coming in every month, and then the skimmed milk is a valuable feed for the chickens.

"The hogs are Chester Whites. I plan to keep about five brood sows and as many feeders as can be kept with what garbage can be had from the United States torpedo station. I have had good results with this plan and have not had to buy any grain except for the brood sows. At present there are 16 feeders and I will butcher them and send them to market as soon as they are ready."

Miss Richardson started in with some Barred Plymouth Rock hens and gradually increased her flock until it numbered over 100. At this point she decided to secure some new blood and purchased stock from Minnesota and Indiana. With these additions the flock now contains some good layers. There are between 250 and 300 birds in the flock. They are allowed to run over the entire farm after the crops have been taken off, but during the summer they are kept up.

The crops raised on the farm include many kinds, such as hay, corn, vegetables, berry and fruit crops. One Royal Ann cherry tree produced nearly a ton of cherries. It was an old tree and well loaded. All the soil on the Richardson farm is lowland and very productive. It is near the salt water inlet, but high enough to miss the extreme high tides.

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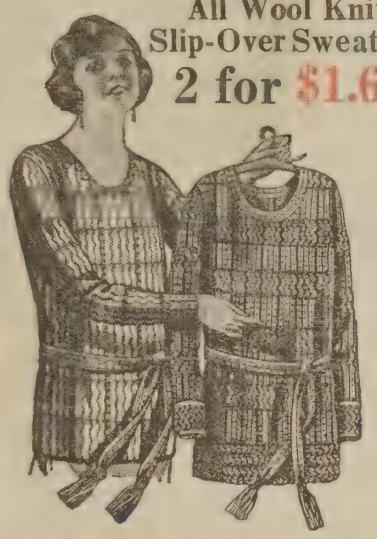

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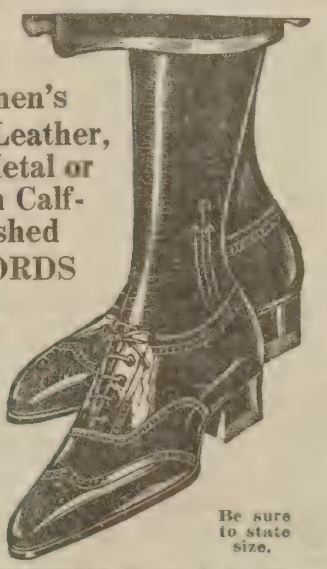

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LIVESTOCK AND DAIRY

Major Honors

Fall to Oregon and Washington

To the two northwest states of Oregon and Washington fall the major honors in the cow-testing association report for July, covering 11 western states. Oregon had the highest average of pounds of fat per cow, 38.36 pounds for 3530 cows, and by far the largest percentage of 40-pound cows, over 40 per cent. Washington had the second highest average, 33.90 pounds for 4239 cows, and the second highest percentage of 40-pounders, about 25 per cent. Moreover, a Tillamook herd, one of grade Jerseys owned by Durrer & Sons, led the entire territory for average production by herds of 15 or more cows, reporting 54.9 pounds each from 29; and a Thurston county (Washington) herd, one of Jerseys owned by L. B. Nelson of Olympia, led the entire territory for average production by herds under 15 cows, reporting 58.4 pounds each from eight. Gus Peterson of Tillamook had his herd in fifth place among large herds, and J. S. Mantle of Sequim and H. S. Allen & Co. of Duvall, both Washington dairymen, were among the first 10. Homer Mason's Tillamook Guernseys were second and W. P. Walker's Tillamook Holsteins third among small herds; and Ray Dillinger of Jerome, Idaho, J. O. Conville of Westport, Ore., and Aloys Schuler of New Plymouth, Idaho, were among the first 10 in this column.

The list of leading cows for the district included one in the Durrer herd which was third, one in the Allen herd which was fifth, and one in the Dillinger herd which was sixth, all producing 90 pounds or more of fat for the month.

Root Crop for Sheep

"There are a number of root crops that might well be grown exclusively for sheep in the Yakima valley," according to George Prior of Yakima. "Roots are one of the best feeds for lambs, especially when fed with a little grain.

"There are many farms that have small plots of ground that are best fitted for some kind of a row crop, and it seems to me that more of these, as well as fence corners might be utilized by growing roots. In that way very valuable succulent feed might be produced.

"Mangels are the best, although turnips might be grown. Carrots are too expensive to handle. Mangels may be grown successfully here and large yields may be realized. Roots are very generally grown in England for feeding to stock. I remember that my father used to haul out mangels and scatter them on the grass meadows and the ewes would scoop them out and later the sows would be turned in to finish them.

"We also grew kohl rabi there and used hurdle fences to confine the lambs to a small patch at a time. They would eat the entire plant.

"Roots would help out a great deal in lamb feeding here, for as much water is needed where roots are fed. Suitable locations for lamb feeding are not very common on account of lack of water in winter, but with roots available the water problem would not be so pressing."

Dairy Cattle Congress

Cattle, horses, poultry and industrial exhibits are to be more numerous than ever before at the 14th annual Dairy Cattle Congress and Industrial Exposition which opens in Waterloo, Iowa, September 24 and continues through the final day of the month. Word has already been received at Waterloo from as far west as Spokane, Wash.; as far south as Falfurrias, Texas; as far east as Patterson, N. J., and as far north as Ottawa, Canada, that the finest dairy cattle in those districts will be their representatives at the Waterloo show.

Grain and Hay Show

For this year at least the Northwest Grain and Hay show, which has been an annual event at Pendleton, will be transferred to Portland and will be held in connection with the Pacific International Live Stock exposition. Announcement to the effect that tentative arrangements for a lease covering the one year had been agreed to by officials of the two organizations was made here today by Fred Bennion, secretary of the Grain and Hay Show association, who will manage the show in in Portland.

Premiums aggregating $4000 will be offered, Bennion said, by the Portland Merchants' association.

VETERINARY

By DR. S. B. NELSON.

Stiff Legs—I would like to know what is the matter with my horses. They get stiff in their front legs and when they walk they act like they always want to lie down.
Douglas, Wash. A. K.

Probably your statement in the diagnosis of the trouble with your horses, "When they walk they act like they always wanted to lie down," means that they bend their knees. That is an indication of sore tendons at the back of the fetlock. What should make a group of horses sore like that, I do not know. Suppose you try trimming the toes, which will leave the heels high, and see if that will help.

Warts.—I have a cow that was fresh in May and the left hind quarter of her udder swelled and she does not give very much milk from that quarter. Another cow has her teats full of seed warts.
Bellingham, Wash. J. P. T.

Apply the following liniment to the udder after milking: Tincture of iodine, 6 ounces; soap liniment, 10 ounces. Continue applying it for some time.

For the second cow: If the seed warts on the teats have a small neck, cut them off with a dull pair of scissors. Apply tannic acid to the raw stump.

If, however, they are flat, I would suggest that you apply the following, morning and evening: You can use a small brush to apply it with: Chloral hydrate, 1 1-2 drachms; acetic acid, 1-2 drachm; salicylic acid, 1 drachm; spirits of ether, 1 drachm; collodion, 4 drachms.

Sweeney—I have a mare with a colt that was in good condition and is in fairly good condition yet. About two weeks ago I noticed her left hip sunk in. She is not lame. If this is sweeney, can anything be done for it? J. R. R.
Creston, Wash.

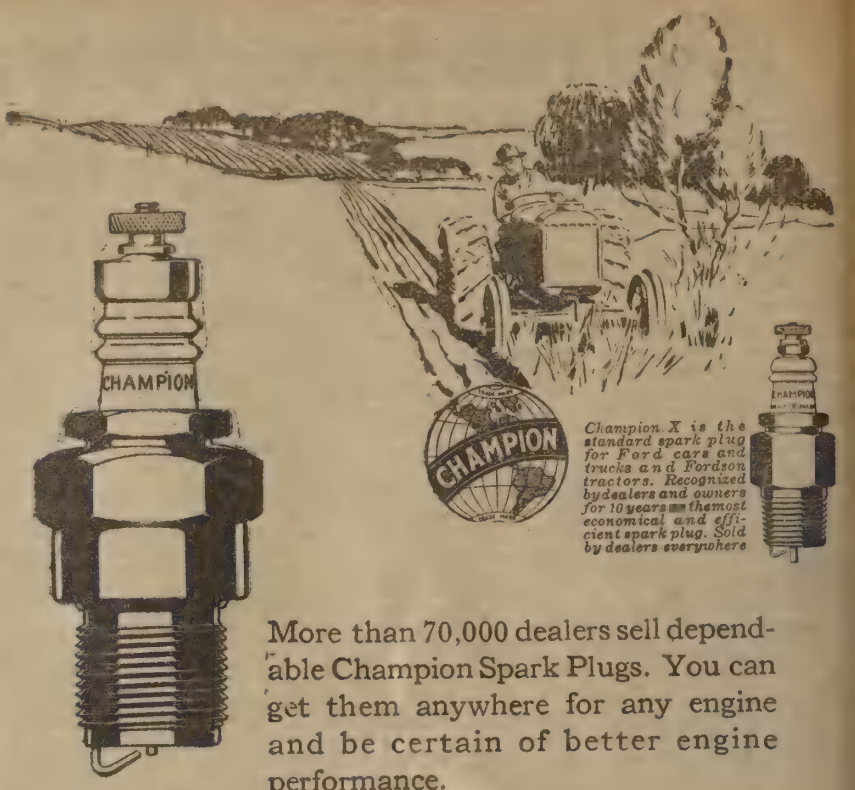
It is rather astonishing that your animal is sweenied and isn't lame. It must be that there has been some injury to the muscles of the hip. I would suggest a light blister composed of one part of red iodide of mercury, one part powdered cantharides, 10 parts of lard, one part of beeswax. Rub the preparation on the sweenied part with a little friction, and try to keep the animal in such a position that she can not rub the blister either with her mouth or up against a fence or partition. This treatment can be repeated in three weeks if necessary.

Feeding a Pup—Will you tell me how to feed a 2-months-old pup no longer with its mother? I have been feeding cow's milk, but he seems constipated. He will not eat bread. He has sore eyes which gather pus. The lids are swollen. Washing with boric acid seems to give relief for a time. M. G.
Mt. Vernon, Wash.

Add a little lime water to the milk—a teaspoonful to each meal. Feed him three times daily for the present; later feed him twice daily, and then later feed him once daily at night. That should be done when he gets to be eight or nine months old.

A pup two months old could have chicken bones to chew on at least once a week, also a beef bone for the same purpose. He could have a little raw meat once or twice a week, and if he gets exercise he should have some bread. Maybe he will eat the bread if it is put with the milk with just a little bit of salt in it.

Try dropping a few drops of a 2 per cent solution of argyrol in water into the eyes morning and evening and see if that will give you a little better results than boric acid.



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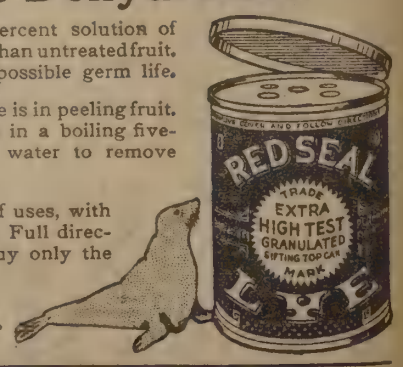

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Hard Red Spring Wheats

Twenty-Four Distinct Varieties Are Grown

SECOND ARTICLE.

The following is the second and concluding article on Hard Red Spring wheats:

Ruby.

Ruby is about five days and sometimes a week earlier than Marquis. It also can be distinguished from Marquis by the purple straw at maturity. The grain of the two varieties can scarcely be distinguished. Ruby was originated by Dr. C. E. Saunders, Dominion cerealist, at the Central experiment farm, Ottawa, Canada. It is the result of a cross between Red Fife and a hybrid wheat known as Downy Riga. It was first distributed in 1917. Ruby was grown to a slight extent in North Dakota in 1921 from seed imported from Canada. As a rule it has produced low yields and is distinctly inferior to Marquis in this respect. The agricultural department experts say that unless future trials with this variety show it to be more promising than past results have indicated, it should not be distributed further in the United States.

Kinney.

Kinney (known also as Noah Island, Odessa and Surprise) is classed as a hard spring wheat, although it differs widely from the varieties so far discussed. It is a late wheat, having square heads and rather a soft, wide kernel. The stems and leaves of this variety have a distinct bloom or white, waxy covering, such as occurs on sorghums, plums, etc., just before ripening. Kinney was introduced into the Willamette valley of Oregon from France during the late '60s or early '70s by Albert Kinney, who at that time was associated with his father in the milling business. It was distributed by Mr. Kinney to farmers in the vicinity of the mill. Kinney, as far as known, is grown only in six counties in the Willamette valley of Oregon, where it is sown in both spring and fall. It is not grown in the northern hard spring wheat region, and because of its late maturity it is not adapted there. Kinney is one of the leading varieties of wheat in the district where it is grown, but experiments have shown its yields to be less than those of several other varieties. Outside of this humidhumid section section of Oregon, Kinney is not adapted.

Huston.

Huston (known also as Bulgarian, Early Wonder, Grass, Little Red, Ninety-Day, Red spring and Swamp) differs from most other varieties mentioned in having small heads and rather soft kernels. The straws show a faint tinge of purple at maturity. The kernels show a characteristic pit or opening in the crease. Huston was obtained by a Mr. Belshaw in 1876 from the Centennial exposition, Philadelphia, where it was on exhibition as Bulgarian Red spring. It was introduced into the vicinity of Eugene, Ore. After increasing the seed the crop was given to a Mr. Huston, who grew and distributed the variety. Huston is now grown only in seven counties in western Oregon and apparently it has not been successful or not tried elsewhere. None of it is grown in the northern hard spring wheat region. This variety succeeded well on the foothill lands in the Willamette valley of Oregon and has been one of the best spring wheats for that district. It is doubtful, however, say the department specialists, whether it is equal to Marquis for this and other sections.

Bluestem Group.

The Bluestem group of hard red winter wheat are identical in appearance and very similar in yield and quality. They are greatly different from the varieties called Bluestem in eastern, southern and western parts of the United States. The kernels of these Bluestem wheats are slightly longer, have longer hairs on the tips than the Fife varieties, and have rounded rather than sharp edges. The grain is hard and red, although not quite as hard as some of the wheats included in those given above. The varieties are from three to 10 days later in maturity than Marquis and very susceptible to stem rust. These varieties originated from a wheat which is reported to have been grown in the eastern United States as a winter wheat as early as 1855. This so-called Bluestem became a leading variety in the northern spring wheat region by 1890, but much of it was replaced later by selected strains. The name Haynes Bluestem is now applied to the original Bluestem as well as to the selected strain known as Haynes Bluestem. Other names applied to the variety are Bolton Bluestem, Marvel Bluestem, Minnesota No. 169, and Velvet Bluestem. Haynes Bluestem was selected from the bulk Bluestem variety in 1883 by L. H. Haynes of Fargo, North Dakota. This wheat was first distributed about 1892 and soon became widely grown in Minnesota and the Dakotas. Haynes Bluestem under one or another of its names is grown to a considerable extent throughout the northern spring wheat region. About 1,500,000 acres of this variety were grown in 1919. The bulletin declares that if the Haynes Bluestem were entirely replaced by Marquis, the production of hard red spring wheat would be considerably increased.

Dakota Bluestem.

Dakota, or Dakota Bluestem (known also as Select Bluestem and North Dakota No. 316) is identical in appearance with Haynes Bluestem, from which it was selected about 1898 at the North Dakota agricultural experiment station. Here again, the advice is given that, under present conditions, its production should be entirely discontinued.

Another division of the hard red spring wheat includes several distinct and probably unrelated varieties. They are mostly early or mid-season in maturity. The kernels vary but in general are rather plump, heavy in weight per bushel, of dull red color and of less angular appearance than the wheats described in the beginning of this article. In texture they vary from almost soft to very hard and in size from small or short to very large or long.

Preston.

Preston (Velvet Chaff, known also as Bearded Fife, Blue Ribbon, Climax, Golden Drop, Johnson, Johnson's Early Fife, Minnesota No. 188 and Red Fife) has bearded, tapering heads about three and one-half to four inches long and midsized hard red kernels. The kernel can be distinguished from that of the wheats of the Fife and Bluestem groups by the dull red color and the rather narrow V-shaped crease. The exact origin of the spring wheat commonly called "Velvet Chaff" in this country is somewhat uncertain, although it is identical with the Preston wheat of Canada. Velvet Chaff is grown throughout almost the entire northern spring-wheat region. The sections of heaviest production are the Red River and Minnesota River valleys. It is estimated that 2,245,200 acres were grown in 1919. In most of the northern spring wheat region Preston or Velvet Chaff has given lower average yields than Marquis.

Java.

Java (Early Java, known also as Black Tea, China Tea, Early Iowa, Siberian, Swedish and Tea Leaf) is a mixture of several kinds. Java is probably one of the oldest spring varieties grown in the

(Continued on page twelve.)

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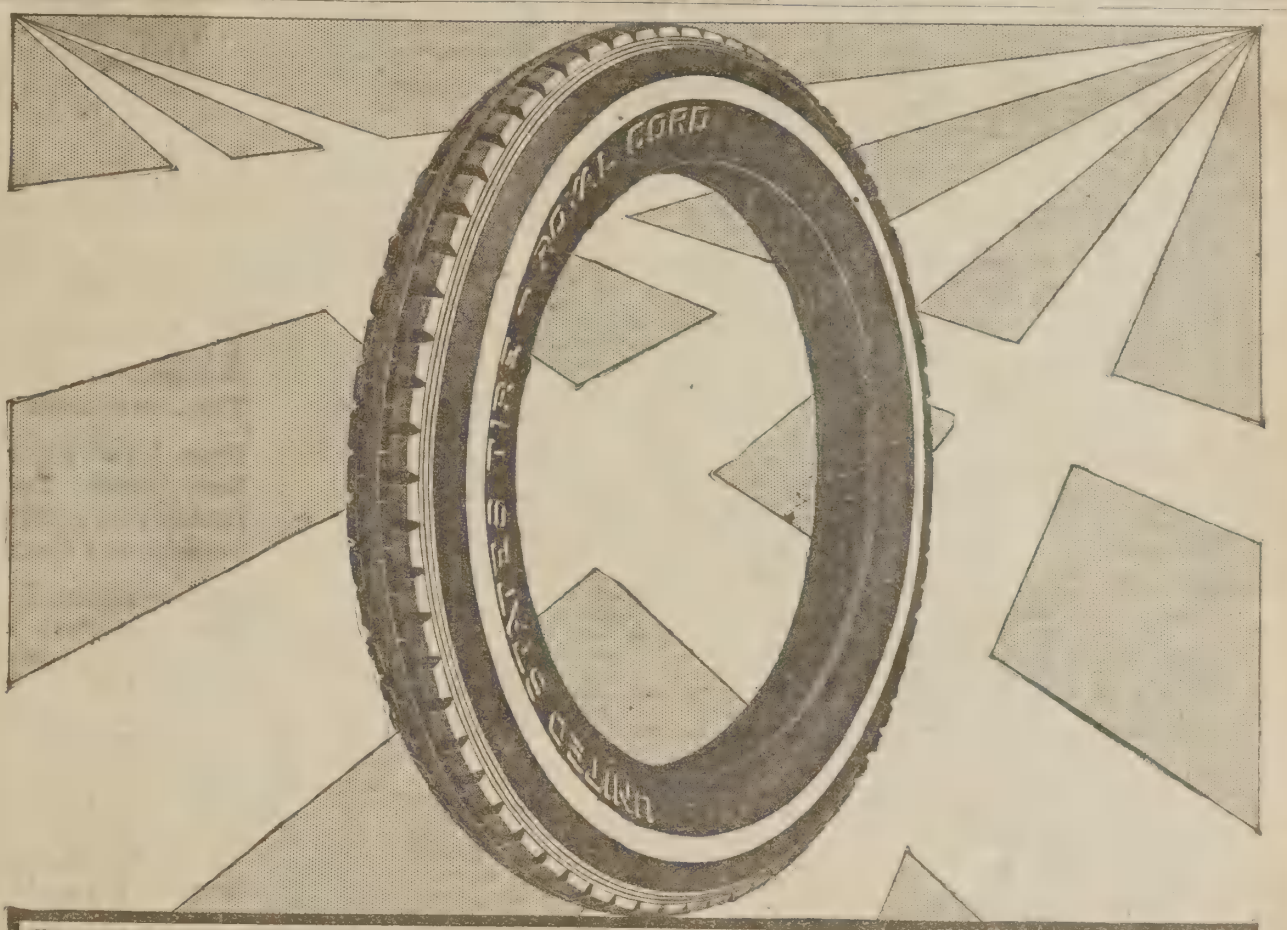

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POULTRY AND RABBITS

Chickenpox

Affected Birds Should Be Isolated

Chicken pox, tuberculosis and white diarrhea were mentioned by Dr. W. T. Johnson of the West Washington experiment station as three of the most important diseases of mature flocks. Of the three, however, chicken pox was emphasized as effecting many of the common flocks of western Washington.

"It is not as serious a disease as it might be," he said, "since it can easily be controlled by vaccination. When such treatments are applied to a flock the trouble soon clears up and there should be no serious danger from it if the flock is carefully watched. There are some drugs on the market that are claimed to have a satisfactory effect when used in a diseased flock, but the experiment station is not recommending them because we have not tried them out, and feel that they are only in the experimental stage as yet.

"The birds that have contracted chicken pox will soon have blisters and later scabs showing upon the combs or wattles. These birds can be treated by separating from the rest of the flock and the scabs treated with tincture of iodine. The other birds in the flock may take the infection from these sick birds and it is for this reason that they should be watched carefully to keep such trouble from getting a start.

"It is a mistake to kill off the hens that show up with chicken pox, since they can be successfully treated and put back with the laying flock. There are commercial vaccines on the market and at times the experiment station has attempted to put this out, but the call has been so great that we have not been able to supply the demand.

"It should be remembered, however, that the vaccine put out at the station is made for chicken pox only and is not for the prevention of other troubles as well, as is the case with some of the others that are being put out."

Poultry Questions Asked

(Continued from page six.)

for all they are worth and therefore put lights on them to work them as much as 14 hours a day. They must be kept working and not allowed to loaf at any time or there is danger of their moulting too soon. A hen will do one of three things: She will lay eggs, moult or get fat. We must, therefore, keep her laying as long as she will hold out, and then send her to market. Give her plenty of litter to keep her scratching and also supply an abundance of green feed early in the day. A light breakfast in a deep litter is best. It is also important not to crowd them in the laying house, as they will lay better if they have plenty of room.

"We must now consider the good hens, or the remaining 300, which we intend to carry through the winter, and hold for our next year's flock. Three per cent of these will moult early, according to our best experience. I prefer to put these birds with the culls, because they are almost sure to have less vitality and will therefore not be able to stand up as well as the rest of the good layers. This leaves only the birds that are known to be good producers, and will have a tendency to moult late in the season.

"It is therefore up to the poultrymen to see to it that they moult at a certain time, preferably late during the winter months. This can be done in several ways, but it is usually accomplished by changing feed. If they have been feeding on hard wheat, they can be changed onto a ration of softer wheat. Even a change from a light breakfast to a heavy breakfast will usually throw a flock into a moult. There are other ways of doing it, as most poultrymen know, but some of them are detrimental to the birds.

"After the moult has been well started, the next problem is to get the birds back onto the job again. Since they are all good layers, they will have a tendency to get back on the job before the end of the 90 days, and will lay some eggs during this time. Keep them scratching in a light fluffy litter, which will give them sufficient exercise to keep them in good health and not allow them to become lazy. This will also prevent them from becoming fat.

"It is a good plan to leave an opening at one corner of the house so they can have outside range at any time they desire during the moult. The poultrymen should not try to decide which is the best day to put them out, but give them an opportunity to go outside at any time, even if there is a heavy snow. It may be necessary to go out and bring some of them in on an extremely bad day, but this will be worth while and will even do them good if they don't stay out too long.

"An abundance of green feed should be supplied during the moult, but at least 50 per cent of their feed should be grain, and 60 per cent is even better. Keep the ration low enough in protein that they will not come back in laying too soon after starting to moult. They should have at least 90 days of partial rest for their moult, and should not come back into a heavy lay until this time is up. Good layers usually moult quicker than poor layers, and often shed as many as four wing feathers at a time, while the body feathers are discarded almost as rapidly. For this reason they need good feed to supply the rapid growth of feathers, and we must not forget that this takes almost as much nourishment as it does for the production of eggs. We should not, however, make it too easy for them, but keep them exercising enough to properly digest their grain, and not induce them to lay until ready."

Keep Pullets From Laying

In accordance with the plan to enlarge all branches of farming at the Irrigation branch experiment station at Prosser, they two have a flock of White Leghorn pullets. The birds were placed in a new house and fed in such a way as to curtail egg production until they were mature.

"But even with best of care they will often lay before reaching maturity," said R. B. Bean, superintendent of the station. "For something more than 10 days there have been from 15 to 20 eggs gathered daily. The pullets are from a hatch which came off the latter part of February. The feeds which are designed to promote laying had been withheld from the pullets, but they are bound to start laying in spite of it.

"The straw loft is a valuable feature of the laying house," continued Mr. Bean. "It keeps the house cooler than is the case with houses built in the customary manner. The floor of the loft is made up of narrow boards spaced three inches apart.

On this is spread four inches of straw, which is just enough to allow some circulation of air and act as a medium of insulation. By this means the temperature of the house is kept down several degrees lower than in a house constructed in the usual manner."

Mr. Bean already has a small dairy herd and expects to get enough milk to furnish cream to the families who live at the station farm and what skimmed milk is left over will be more than enough to feed to the laying hens. The combination is about the right kind for the ordinary irrigated wheat or fruit farm, and is being carried on to show what can be done in the way of keeping live stock in this section of the state.

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ORCHARD AND GARDEN

Pruning Berries

By C. L. VINCENT,
Department of Horticulture, State College of Washington.

In previous articles Prof. Vincent has discussed the pruning of raspberries and blackberries.

CURRANTS AND GOOSEBERRIES.

Of all the small fruits, the currant and the gooseberry are the ones most likely to have their pruning neglected. These fruits must be treated in an entirely different manner from that described for the brambles. The fruit bearing habits for the currant and that of the gooseberry are essentially the same, and are therefore pruned practically in the same manner. Hence they will be treated together.

In the case of the currant, the fruit is borne on three types of wood. First, new canes or suckers, which are of light gray color, having long nodes, come up near the crown of the plant and bear the finest fruit at the base of this wood the following year. Next, a large portion of the fruit is borne on short spurs. These are found on two types of wood; the very old canes, from four to five years and older, which is indicated by the rough, black back, produces a small amount of fruit on spurs; however, the larger portion of the fruit is borne from short spurs on two and three-year-old wood, which are strong, vigorous side shoots, that grew the previous season from older wood. Currant canes have passed their best fruiting after the third crop.

The gooseberry fruits the same as above, only the plant tends to send up fewer suckers, the bush branches more freely, hence is denser, and the old canes bear well for a longer length of time.

Systematic annual pruning from time of planting should be followed. If the root system of the currant and gooseberry is extensive it may be reduced somewhat at planting time to make the planting operation easier, but is not necessary. All weak canes should be removed and the strong ones cut back to two or three buds. After the first year of growth the chief item in pruning is to remove canes which have passed their best fruiting and to replace them with new canes. Whether this is done in the fall or spring makes very little difference. It is important to keep in mind the fact that both these fruits start growth very early in the spring and all pruning should be over by the time growth starts.

In commercial patches it is a good plan to remove a certain number of old canes each year and leave a like number of new canes to replace them. It is customary to leave from eight to 10 canes to a bush and remove all the rest. J. G. Moore of the University of Wisconsin has worked out the following interesting and practical plan for pruning these fruits. He says a three-year pruning plan, leaving six or nine canes to a plant, can be operated as follows: "At the beginning of the second season leave six strong canes. At the beginning of the third season remove two of the canes from the previous season and leave five strong new canes. At the beginning of the fourth season, remove one two-year cane, two one-year canes and leave three new canes. Thereafter the three oldest canes, those in their fourth year, should be removed and three new canes left to take their place. This will give a plant composed of three one-year, three two-year and three three-year old canes." If the canes left are too tall they should be cut back from 1-4 to 1-3 of their new growth. Also in removing the extra canes, take out close to the crown all small, weak and low growing canes. The fruit on the low growing canes becomes dirty by rains and is therefore unsalable. Dense, upright, growing plants can be opened up some by removing the new canes at the center.

Apples, Pears and Peaches

"I have found that extra fancy pears stand up better in long shipments when packed in half boxes," explained Peter Erickson of Vashon, King county, who has seven acres of Anjou and Comice pears on his farm near town. "If the fruit is packed so as to make a neat looking box and handled carefully so that there is no bruising, there is a better chance that the shipment bring a good price on the London markets.

"This, of course, does not apply to the second class fruit, as that is all sold here on the home markets and I always use the full-sized boxes, which weigh around 50 pounds. The only reason that I have attempted to ship to the London market is because I can supply a quantity of fruit that is all of a uniform quality and they have brought fair returns so far."

Mr. Erickson explained that he would have a still larger crop of pears this year, since the orchard is now 10 years old and will have a greater crop than last year. In fact, the yield is nearly doubled each year and the only thing that could bring down the production would be a failure of the fruit to make the right size.

"Peaches also do well here on my place," continued Mr. Erickson, "and I lay it to the fact that the orchard is on a ridge where there is very little danger from frosts or heavy fogs. I have never failed to get a crop of peaches and even when other orchards have failed, my trees have had a good crop on them.

"I plan to have the earliest varieties, as they will bring better prices on the local markets. The ones that do best are the Greensboro, the Wixon and the Dewey. The first two always come on when the prices are good, but the latter will often come when the market is filled with peaches, either from outside or from other growers in this district.

"The later varieties, such as the Carmons and the Maimie Ross are excellent peaches, but they come too late to catch the early prices and they are therefore not a paying variety here. The Belle of Georgia is another good peach for this climate and is a good producer, but it comes at a time when it has to compete with the Elbertas from eastern Washington and it is for that reason a hard one to sell."

Mr. Erickson told of the possibilities of competing with the peaches from other sections of the state, and explained how the growers here can put their peaches on the market in a ripe condition and they will hold a better flavor for canning than those that are shipped here after being packed partly green. The reputation, however, has much to do with the selling of the fruit that is now sold for canning purposes and that would have to be overcome.

As for apples to be grown in this part of the state, Mr. Erickson recommended the Winter Banana as being a good yielder and also an apple that will sell well on the markets. They are often hard to get colored right, but with the sunshine that there is on Vashon island, there has been little difficulty in getting red cheeked apples. The two trees that are growing on this place have yielded better crops than have some of the Gravensteins, which are said to be shy bearers.

In addition to pears and peaches, Mr. Erickson has one acre of blackcap raspberries which has just been set out this season. He felt that there was a good demand for the fruit and that it would justify a trial of this size. It was necessary for him to send to one of the nurseries in the middle west in order to get plants.

Hard Pan in Orchard

By O. M. MORRIS.

Is hard pan from 12 to 18 inches below the surface an absolute bar to orchard? Is it a bar to berries? How old should orchard be before seeding to clover for cover crop? Can you tell me where I can obtain seeds of maple, catalpa, elm, oak or similar trees so I can raise my own trees? A. M. F.

Hard pan 12 to 18 inches below the surface of the soil is not an absolute bar to an orchard growth. It is a great handicap, however. If this hard pan is in a thin stratum of earth, subsoiling or blasting and immediately filling the land with a crop like alfalfa, clover, or vetch will obliterate it. If, however, the hard pan is one or two feet thick, it will be a very difficult task to overcome it and to grow a successful orchard on the soil. The same is true in regard to berries.

If you have water for irrigation or an annual rainfall of 30 inches well distributed through the summer, you can grow a clover cover in your orchard and plant it as soon as the orchard is planted, but leave cultivated strips of land along each tree row. If you do not have an abundant rainfall or water for irrigation, it will be necessary for you to use some form of cover crop that can be planted in late summer or early fall and be plowed under in early spring.

Apples Cost Less

According to estimates prepared by several competent authorities, the average cost of producing a box of apples in the Wenatchee district will be a little less than $1.30 per box for the present season, compared with $1.35 last year. This includes all possible expenses, such as labor, supervision, depreciation of plant, taxes, supplies, materials, etc.

Labor, supplies and materials are all higher than last, but the crop will average 25 per cent more per acre, which cuts the total cost per box, according to such authorities as Earl Barnhill of the American Fruit Growers, F. C. Nielson, district horticulturist; O. B. Shay, orchardist, and others who keep in touch with the situation. Boxes cost 5 cents, or 25 per cent more, spray materials 50 per cent more, and paper about the same.

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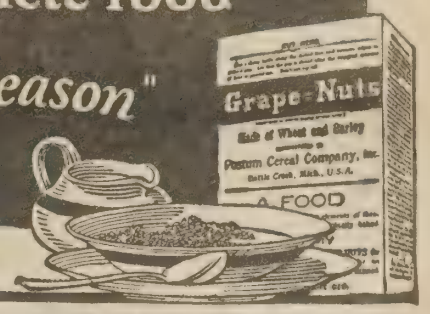

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Hog Raisers' Prospects

By GILBERT GUSLER

HOG PRODUCTION A GOOD BUSINESS.

While the prospect for the hog grower is not very rosy for the next year, the condition is a temporary one because of the overdoing which follows undue prosperity in the business. But the business is still a good one. Always there are low cost producers who can weather such periods of low prices as the present without much loss. Barring severe economic changes which would affect other branches of agriculture and industry as well, hog production will get back on a profit-making basis again and if the usual cycle is followed, a mild hog shortage may develop in about two years. At any rate, the movement in the northwest for a brood sow on every farm to produce at least the pork and bacon needed for home use and some for market is one that should be carried out. Just how deeply to go into the hog business, however, may be a matter of question.

In broad outlines the present hog market situation involves record production and record domestic consumption, large exports, a low ratio between prices of corn and hogs, and hog growers about to cut production. At the moment, the market is going through the season when supply invariably is the lightest of the year, but when hog meats and lard stored earlier in the season partly fill the gap in current receipts. Prices have had a welcome upturn to the highest point since the end of last October.

Somebody is producing too many hogs. Such was the conclusion of the committee of economists called by Secretary Wallace of the department of agriculture to report on the agricultural outlook. Their statement of the case was that "Neither the corn situation, the prospective European demand, nor the domestic industrial outlook warrants the maintenance of the very heavy hog production of the last year."

Convert Corn Into Pork.

The present excess of hogs goes straight back to the so-called corn surplus which started with the crop of 1920 and shows how, in the long run, extremely low feed prices fail to be of much advantage to the live stock producer. In the last dozen years the average farm price of 100 pounds of live hogs has been about equal to the average farm price of 11 bushels of corn. Late in 1920 this ratio changed so that corn could be sold for considerably more in the form of pork than it would bring at the elevator. As the relationship continued, producers began to breed more sows. By the time the early increase reached the marketing stage demand for pork had expanded enough to absorb the supply at higher prices. Corn was still depressed, however, and the corn-hog price ratio rose to around 18 bushels toward the end of 1921 and early 1922. After that time the ratio began to go against the hog producer and by the summer of 1923 only eight bushels of corn were required to equal the farm price of 100 pounds of hog.

Producers, speaking of them in the mass, do not live up to the saying that "it is the first of all things to see events in their beginnings and to perceive tendencies beforehand." They continued to expand production after the handwriting appeared on the wall. About 1 per cent more pigs were raised in the six months ended June 1, 1923, than in the corresponding period a year previous and on that date the number of sows bred or intended to be bred for fall litters was 28.3 per cent more than farrowed last fall.

Supply and Demand.

The accompanying chart shows the chief elements in the hog market situation by calendar years since 1907, when the federal government first began to inspect the slaughter of meats in packing houses whose products entered interstate commerce. Pork slaughtered under federal inspection is practically equivalent to the commercial supply. Domestic consumption and exports represent the demand side of the market.

In 1922 more hog product was slaughtered under federal inspection than ever before. For the first six months of 1923 the output was 27 per cent greater than in the same period in 1922. The same proportionate gain is unlikely during the last half of the year, but it is reasonable to expect that for 1923, as a whole, the poundage of inspected hog products will be about 20 per cent greater than last year. This is a remarkable gain to take place from one year to the next, especially since last year itself was a record breaker.

During the hog year, which in trade circles is counted as starting on November 1, domestic consumption and exports together must practically equal production. A look at the chart will show that domestic consumption of federally inspected meats and lard has been hanging up new records each year, beginning with 1920. In the first six months of 1923 the American public consumed 24 per cent more hog product than in the same period of 1922. For the year as a whole an increase of not far from 20 per cent is probable.

Since federally-inspected meats are consumed primarily in the cities and towns, the present era of urban prosperity has made it possible to market this enormous increase in the supply of pork without as large a decline in prices as would otherwise have taken place. Whatever the attitude of the city consumer may be toward long hours and high production in his own field, when it comes to consuming he is a wonder. Employment and wage conditions have made it possible for all the porkchop eaters to gratify their tastes.

The cotton belt provides a market for some of the federally-inspected hog products and the prevailing high level of cotton prices has broadened that outlet measurably. At the same time, two short cotton crops in succession have reduced the supply of cottonseed oil for the manufacture of lard substitutes.

Exports of hog products and lard, as shown on the chart, are much less uniform from year to year than domestic consumption. Outside of war periods, they represent the surplus of hog production over domestic demand at current prices. From 1920 to 1922 exports were about 50 per cent above the pre-war level. In the first six months of 1923 they were 43.6 per cent larger than in the same period of 1922. They have tapered off since, but the total for the calendar year will probably exceed 1,800,000,000 pounds, which is 80 per cent above the pre-war level.

What of the Future?

Looking ahead from this point we are justified in expecting that the number of hogs reaching the market in the next 12 months will be larger than in the last 12. The corn belt alone, which furnishes most of the commercial supply of hogs, raised nearly 6 per cent more spring pigs this year than last, according to the government's findings. The western states, as a group, reported an increase of 18 per cent, but the east and the cotton belt reported a smaller pig crop. Moreover, every state in the Union reported an intention to breed a larger number of sows for fall litters than farrowed in the fall of 1922. For the corn belt states the increase was 25.5 per cent. Again the western states led the field with an increase of 51 per cent.

These intentions were expressed on June 1. Prices since that date may have caused many farmers to change their minds. An epidemic of cholera might play havoc with both spring and fall pig crops. As things now stand, however, we had best count upon at least a moderate increase in numbers. Then there are the extra brood sows which must come on the market when the country starts to prune down production.

While the corn crop is larger than last year, there is bound to be a smaller carryover. The crops of sorghum grains, of barley and oats also are larger and there is a lot of low grade wheat which will be fed. But, taking the increases in hogs and dairy and beef cattle production into consideration, it is hard to escape the conclusion that feed costs will be higher than last year and that the corn-hog ratio will continue unfavorable well into 1924. Hog prices may remain about high enough to pay cost of production for the corn, however, even though they may not pay the full market price for it in all cases.

With higher feed costs, the tendency will be to sell at lighter weights. This is already noticeable. The decrease in weight may offset most of the increase in numbers during the coming year so that the actual supply of pork may show but little gain.

Eventually, as this unfavorable feeding ratio continues, some one will breed fewer hogs. The in-and-outer, who is always a factor in such a situation, will get out, those whose production costs are high will take to their storm cellars and the regulars who have been raising more pigs than usual will raise fewer for a while and sell more corn.

On the demand side, the most important

(Continued on page sixteen.)

Hard Red Spring Wheat

(Continued from page nine.)

United States. Siberian (a variety identical with Java) was reported grown as early as 1837. Java is grown in Illinois, Iowa, Nebraska, New York and Wisconsin.

Kota.

Kota is resistant to the forms of black stem rust that predominate in the northern spring wheat region. It is, however, susceptible to the less damaging orange leaf rust. The Kota has a slightly weaker straw and is more easily lodged than Preston, and the kernels are longer, harder and more angular. It is fairly successful under conditions of severe drought. The early experiments indicate, however, that it is best adapted to eastern and southern North Dakota.

Converse.

Converse (Red Russian) differs from Preston in being taller and earlier and in having longer beaks and somewhat softer kernels, which are more angular than those of Preston. Converse is now grown to a small extent in western Nebraska and eastern Wyoming.

Champlain.

Champlain (known also as Pringle's Champlain or Pringle's Champion) has short, wide, semi-hard, red kernels which are distinct in having a collar or rim around the border of the tuft of hairs, or brush, at the upper end of the grain. The lower leaves of Champlain are also distinct in being quite hairy. It is now grown chiefly under irrigation in Yellowstone county, Mont., and Park county, Wyo. In these localities, however, it is of less importance than Marquis.

Dixon.

Dixon (known also as Smooth Humpback and Humpback II.) is taller and later and has larger heads and kernels than Preston. The kernels are softer, have a longer brush and have a shape commonly described as "Humpbacked." This wheat is grown in Wisconsin to a limited extent under the name of Dixon, but a variety previously known as Smooth Humpback, or Humpback II., which is practically identical with Dixon and has been given that name, is considerably grown in Minnesota and Nebraska. The prices received for this wheat on the market usually are much less than for other hard red spring wheats.

Fretes.

Fretes differs from Preston in having larger heads and larger pale-red, rather soft kernels. Fretes was introduced into the United States from Algeria in 1901 by the United States department of agriculture. This variety was distributed in California and, as far as known, is now grown in the United States only in Los Angeles county, Cal.

Chul.

Chul (known also as Aulieata, Idaho Hard and Yantagbay) is distinct from other varieties already discussed in having very open heads and very large and very hard kernels. Chul was introduced into the United States in 1902 from Russian Turkestan by the United States department of agriculture. It is grown there on the steppes without irrigation and is both fall and spring sown. Chul was distributed in the dry sections of California, and the variety is now grown to a slight extent in northern California and in one county in Nevada.

The last section of hard red spring wheat described in the bulletin are mid-early in ripening, maturing about the same time as or somewhat earlier than Preston. Ladoga (known also as Spring Turkey and Bastard) is mostly of the type above mentioned. It was introduced into Canada about 1888 from Russia, and it is grown on both dry and irrigated lands in Colorado, Kansas, Montana, Nebraska and Wyoming. It is not an important variety in any of these states.

Other Hard Red Wheats.

Among other hard red spring wheats is Prelude (Wisconsin Wonder) which is an extremely early variety, maturing from seven to 10 days earlier than Marquis and has short stems, heads and kernels. Prelude is quite well adapted to the northern wheat sections of Canada, but in the United States it is too early to produce maximum yields. In a few dry seasons in the Great Plains section of Colorado and Nebraska, Prelude has outyielded all other hard red spring wheat varieties.

Humpback (known also as Bearded Bluestem and World Beater) has bearded, velvety, white-chaffed heads like Prelude, but the heads are long, wide and open and the plant is late in maturing. Humpback is grown sparingly in Illinois, Minnesota, Nebraska, North Dakota and Wisconsin. It is not grown as extensively now as it was a few years ago.

Farmers' Want Ads

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COMPLETE STOCK. WRITE FOR DESIGNS and prices. Inland Monument Co., N1001 Monroe, Spokane.

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HELP WANTED—MALE 3

WANTED—GOOD, RELIABLE, ALL AROUND dairy-ranch hand to work by the year; man with family preferred. Write or call H. E. Barnhart, Falls City, Ore.

AGENTS WANTED 9

DISTRICT SALESMEN WANTED—ALL OR spare time. Earn $1500 to $3600 yearly. We train the inexperienced. Novelty Cutlery Co., 456 Bar st., Canton, Ohio.

SALESMEN WANTED 12

ARE YOU LOOKING FOR A PAYING POSITION? Sell trees and plants for a reliable company. Terms on request. Salem Nursery Company, 428 Oregon bldg., Salem, Ore.

SCHOOLS AND COLLEGES 26

EARN $110 TO $250 MONTHLY; EXPENSES paid as railway traffic inspector; position guaranteed after completion of 3 months' home study course or money refunded. Excellent opportunities. Write for free booklet G-157. Stand. Business Training Inst., Buffalo, N. Y.

(Continued on following page.)

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FARMERS' WANT ADS

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In using these columns advertisers must observe (1) No advertisement will be accepted for less than $1.00 per insertion. (2) Every word, number and initial, including name and address, must be paid for. (3) New advertisements, changes of copy or cancellations must reach general office, Spokane, Wash., 10 days in advance of publication date. (4) Cash must accompany order.

Above rates include insertion in The Washington Farmer, The Idaho Farmer and The Oregon Farmer, which constitute the Pacific Northwest Farm Trio, 46 Review building, Spokane, Wash.

FRESH FOOD PRODUCTS 51-3

FISH—4 LBS. SMOKED SALMON, $1; 4 LBS. Alaska salmon bellies, $1; 4 lbs. black cod, $1; 3 lbs. best codfish, $1; delivered by mail. Coffin Fish Co., Seattle, Wash.

HONEY 53

ALFALFA-SWEET CLOVER HONEY—2 60-LB. cans, $9.75; one can, $5, f. o. b. Rigby; one 60-lb. can, prepaid to fourth zone, $5.75; quality guaranteed. Heckman & Larsen Honey Co., Rigby, Idaho.

ALFALFA, SWEET CLOVER HONEY, PREpaid second zone, 3 10s, $5; 60 lbs., $8.30; two cans, $14.50, not prepaid. Harry Fisher, Prosser, Wash.

HAPPY HOME HONEY — ALFALFA AND clover; 60-lb. can, $7.50; two cans, $14.50; case six 10-lb. pails, $8.50. H. N. Paul, Mabton, Wash.

PURE, WATER-WHITE SWEET CLOVER honey; 60-lb. can, $5; two, $9.75. H. R. Bowen, Roberts, Idaho.

EXTRACTED HONEY FOR SALE—WELLS D. Rose, Sunnyside, Wash.

MISCELLANEOUS—FOR SALE 60

SASH AND DOORS—O. B. WILLIAMS CO., 1943 First ave. So., Seattle. Chicken house sash, 20" wide by 25" high, 80c; a dozen different sizes in stock for immediate shipment. Skylights for chicken houses, 36"x40"; price, glazed, $2. This is the size recommended by the Western Washington experiment station. We carry them in stock for immediate shipment. Sash and doors for all purposes at lowest prices. All orders receive prompt attention. Our large illustrated catalog No. 35, showing full line of building material and built-in fixtures for the home, free on request. O. B. Williams Co. Established 1899.

LEAF TOBACCO—3 YEARS OLD. NATURE cured. Ever Ready safety razor and six blades, or imported briar pipe free with order. 10-lb. packages, select chewing, $3.50; select smoking, $3; medium smoking, $1.75. Pay for tobacco and postage when received. Farmers' Union, Hawesville, Ky.

PIPE—GET PARTICULARS ON OUR SPEcial flue pipe, 1¼, 1½ and 2 inch. Big saving on it. We also have all sizes second-hand and new standard pipe at low prices. We also save you on roofing, belting, pumps, engines, cables, etc. Alaska Junk Co., S120 Adams, Spokane, Wash.

SPECIAL—ONE-POUND TIN "SATISFACTION tobacco" and pipe for $1. Smoking, chewing tobacco, cigars, cigarettes and complete line of pipes. Wholesale and retail. Peter M. Jacoy, 3 Washington st., Spokane.

LEAF TOBACCO—FIVE POUNDS CHEWING, $1.75; ten, $3; five pounds smoking, $1.25; ten, $2; twenty, $3.50. Send no money, pay when received. Pipe and recipe free. Cooperative Farmers, Paducah, Ky.

WALL BOARD—WRITE FOR SAMPLE OF Washington plaster wall board; won't warp, won't burn. Manufactured by Washington Building Products company, 6851 E. Marginal Way, Seattle, Wash.

ALL-WOOL HAND AND MACHINE KNITting yarns for sale from manufacturer, 95c, $1.35, $1.60 per lb. Golf and plain socks, $5 orders postpaid. Free samples. H. A. Bartlett, Harmony, Me.

LEAF TOBACCO—CHEWING, FOUR POUNDS, $1.40; fifteen, $4; smoking, four pounds, $1; fifteen, $3. Pay when received. Pipe and recipe free. United Tobacco Growers, Paducah, Ky.

NATURAL LEAF TOBACCO—CHEWING, 5 lbs.; $1.75; 10 lbs., $3. Smoking, 5 lbs., $1.25; 10 lbs., $2. Pay when received; pipe and recipe free. Farmers' Tobacco Union, B19, Paducah, Ky.

TOBACCO—KENTUCKY'S PRIDE; EXTRA fine chewing; 10 pounds, $3; smoking, 10 pounds, $2; 20 pounds, $3.50. Farmers' Club, Mayfield, Ky.

NATURAL LEAF TOBACCO—CHEWING, 5 lbs., $1.25; 10 lbs., $2.50; smoking, 5 lbs., $1.25; 10 lbs., $2. Farmers' Union, Mayfield, Ky.

50,000 COINS, MEDALS, PAPER MONEY, Antique firearms, curios. Catalog free. Antique Store, 33 South 18th, Philadelphia.

50,000 SACKS FOR SALE. INLAND HIDE & Junk Co., W21 Main, Spokane.

MISCELLANEOUS 61

COYOTE TRAPPERS' QUESTIONS ANswered; dime each. Trappers' Exchange, Muldoon, Idaho.

MISCELLANEOUS—Wanted 63

WE HAVE THE FEED, WANT TO MAKE A deal with owner of band of sheep to feed on shares. A 4, Washington Farmer, Spokane.

ELECTRICAL MACHINERY 92

KOHLER AUTOMATIC LIGHTING PLANT, 1500 watts; fine running order; $400 f. o. b. Bellingham. Write or call on M. B. Johnson, Marietta, Wash.

AUTOMOBILES—FOR SALE 112

SEE CHEVROLET FIRST—NEW AND USED cars at prices that will surprise you; stop in or write Inland Empire Chrevolet Cales Corp., 916 2d ave., Spokane. Open evenings. Open Sunday.

AUTO ACCESSORIES AND PARTS 119

PATRONIZE THE HOUSE THAT CAN GIVE you the best service. Complete stock of automobile repair parts. Wire and disc wheel sales and service. Pacific Gear and Auto Parts Co., 1022 First ave., Spokane, Wash.

STOVE REPAIRING 128

WRITE MYER RUBENS, SPOKANE, ABOUT stove repairs, welding broken parts, nickel plating.

FUR-BEARING ANIMALS 170

SILVER AND CROSS FOXES FOR SALE. William Rambo, 407 Sprague, Spokane.

PETS—Dogs, Birds, Etc. 171

FOR SALE—TEN HEAD BROKE BEAGLE hounds, 3 yr. old; also 4 trained coon hounds. Send on trial. B. S. Meckley, Glenville, Pa.

3 FEMALE SHEPHERD PUPPIES; ALL good drivers, snappy. Only $3 each. Sam Gangidino, Lakeview, Idaho.

RABBITS and HARES. 173

RABBITS, TOULOUSE GEESE HAVE MADE my living for 10 years. Prize winning blue Flemish Giants, New Zealand Reds, Himalayans, at utility prices. Agnes Brenner, R4, Box 49, Tacoma, Wash.

POULTRY 174

BUY SONOMA COUNTY ACCREDITED Hatcheries chicks; electric hatched by the man who put electric incubation where it is today. I am the father of electric incubation. Stock the best. Prices right. Write for booklet. White Hatchery, Petaluma, Cal.

POULTRY (Continued) 174

IF YOU NEED ANY PULLETS TO FILL OUT your flocks, we can supply February, March, April and May hatched White Leghorn pullets of Hollywood, Tancred or Tancred-Hollywood crossed strains at reasonable prices. We have about 250 very choice R. I. Red pullets. We ship all pullets with a guarantee of satisfaction or they may be returned to us within three days. We have a large assortment of used incubators which we will sell at very attractive prices. Write for quotation on pullets and incubators. Queen Hatchery, 1430 1st ave., Seattle, Wash.

CERTIFIED WHITE LEGHORN QUALITY chicks for summer and fall months, from selected free range, high egg producing breeding flocks, inspected and accredited by the Sonoma county farm bureau. Send for catalog and attractive prices. Safe delivery and full count guaranteed. Must Hatch Incubator Co., Inc., 445 Seventh st., Petaluma, Cal.

WHITE LEGHORN BABY CHIX FROM flocks mated to males having sire's dam record of 240 to 297 eggs per year. Full particulars and interesting literature on request. We are accredited by Sonoma county farm bureau. The Pioneer Hatchery, 422 Sixth street, Petaluma, Cal.

SUMMER SALE "HENACRES" PULLETS; best for fall and winter eggs, $1.25 to $2 each. Hens for breeders, $1 to $1.50 each. High grade stock at reasonable prices. Booking orders now for 1924 baby chicks. Free catalog and price list. "Henacres," Box A, Prosser, Wash.

DOLLARS FOR YOUR EGGS—WE PAY THE top market prices for your eggs and poultry. Daily cash remittances. McClintock-Trunkey Co., produce department, Spokane.

SPECIAL PRICES ON GUARANTEED DAYold pullets; fall and winter delivery. Write for particulars. Eureka Hatchery, Petaluma, Cal.

ANCONA COCKS AND COCKERELS, $2 EA.; 5 mo. Plymouth Rock pullets, $1.75 ea. Toulouse geese. Peerless Poultry Farm, Sherwood, Ore.

TO MAKE ROOM, WILL SACRIFICE ROCK and Leghorn breeders. D. W. Allen, Laconner, Wash.

JERSEY BLACK GIANTS—YOUNG STOCK for sale, $2.50 and up. E. M. Chambers, Bovill, Idaho.

SHIP YOUR POULTRY AND EGGS TO THE Washington Meat & Poultry, Spokane, Wash.

LIVE STOCK 177

WE GUARANTEE TO PAY THE HIGHEST market price for your poultry and live stock. Veal market growing stronger. Owing to the constant changes in the market we are unable to quote prices in this paper from week to week. We will furnish tags and prices when you are ready to ship. Write us what you have to sell. Prompt returns. John Lewis & Co., Spokane, Wn.

FOR SALE—REGISTERED HAMPSHIRES, Romneys and Rambouillets in both ewes and rams. All range raised, strong and healthy. We specialize on stud rams for small flocks. We can also furnish range and farm ewes in small or large lots. Personal attention to all orders. H. Stanley Coffin, Yakima, Wash.

CALVES FOR SALE—WILL HAVE A LIMited number of Tillamook's famous dairy calves yet this fall. Write for prices. Smith, "the Calf Man," Tillamook, Ore.

WE PAY TOP PRICES FOR YOUR LIVE OR dressed veal, hogs and poultry. Your check by return mail. Shipping tags on request. M. & J. Packing Co., Spokane.

FOR SALE—REGISTERED SHORTHORNS; two yearling heifers, one two-year-old, one cow, eight years old. H. Nelson, Springdale, Wash.

TOP PRICES PAID FOR CREAM, EGGS, poultry, pork, veal. Inland Products company, Second at Cedar. Dept. E. Spokane, Wash.

FOR SALE—REGISTERED POLLED SHORThorn bull, calves; herd accredited; inspection invited. Whitla Ranch, Mica, Idaho.

REGISTERED HOLSTEINS—BULLS, HEIFers and cows for sale; accredited herd. Oscar Dunlap, Junction City, Oregon.

FOR SALE—10 HEAD OF REGISTERED Shorthorns, priced for immediate sale. E. W. Haag, Sandpoint, Idaho.

REGISTERED HAMPSHIRE SHEEP FOR sale; 22 yearling rams, 20 ewes. Perry Smith, Yamhill, Ore.

REGISTERED HAMPSHIRE BREEDING bucks and ewe lambs. Far Niente Farm, R2, Bothell, Wash.

REGISTERED SHROPSHIRE RAMS AND ewes. Write McK. Edwards, Valley, Wash.

FINE MILK GOATS VERY REASONABLY priced. Wm. Ehrke, Ashland, Ore.

OXFORDS—RAM AND EWE LAMBS. J. E. McGoran, Valleyford, Wash.

FINE REGISTERED NUBIAN BUCK. COPEland, Elmo, Mont.

HAY FOR SALE. 203

ALFALFA HAY, GUARANTEED QUALITY; prompt shipment; buy direct and save money. Prices upon application. Richard Nyman, Walla Walla, Wash.

FAIRS. 370

WESTERN WASHINGTON FAIR, PUYALLUP, October 1-7, both inclusive. 133,000 in attendance last year. You are invited to participate. W. H. Paulhamus, manager.

JOB PRINTING. 372

WEDDING ANNOUNCEMENTS AND INVItations, catalogs, booklets, high school annuals, letter heads, envelopes, cards, butter wrappers, etc. Union Printing Co., 412 First ave., Spokane, Wash.

CLEANING, DYEING, Etc. 420

FRENCH DRY CLEANING BY PARCEL post. Ladies' and gents' suits, furs, hats, etc., prompt service. Address City Dye Works (Dept. A), E422 Sprague ave., Spokane, Wash.

HIDES, PELTS AND WOOL 430

SHIP YOUR MOLESKINS TO W. E. JOHNSON, Uncas, Wash.

HARNESS and SADDLERY 189

SEND FOR FREE HARNESS AND SADDLE catalog today; cut out the middleman, buy direct from the manufacturer. Lowest prices in the west; satisfaction guaranteed. Established 1881. Write Pierce Harness Co., Dept. T, Spokane, Wash.

TANNING 425

WE WILL TAN YOUR COW OR HORSE HIDE for robes or coats, and guarantee our work. We are custom tanners, manufacturers and taxidermists. Write for prices. Spokane Fur Tanning Co., 7 Pine st., Spokane.

ANY KIND OF HIDE TANNED WITH HAIR on, or for leather. Fur and taxidermy work done to order. M. R. Mohr Co., 321 Sprague, Spokane, Wash.

KODAK FILM DEVELOPING 472

FREE ENLARGEMENT WITH 75C ORDER high gloss print. Spokane Film Co.

FILMS DEVELOPED FREE—KODO, THE PICture King, 815 Stevens, Spokane.

MATERNITY HOMES 497

MATERNITY HOSPITAL; STRICTLY PRIvate; doctor in attendance; prices reasonable. Mrs. Elizabeth Peel, matron. W1324 Broadway, Spokane.

BUSINESS OPPORTUNITIES 516

OWNER OFFERS WHOLESALE AND REtail hay, wood, grain, feed, seed and flour business established four live towns, best grain and dairy section eastern Washington. Owns warehouses, trackage each point. One has hundred car apple storage plant, another fully equipped creamery additional above lines. Main point has modern grain elevator, feed mfg. plant, seed warehouse. Also half interest growing creamery, paying good salary and dividends. All operating good profit and growing. Splendid opening for man with sons to establish in business. Sell all or part. Prices run $5000 to $20,000; ¼ cash, balance five-year contract, 6 per cent. A 3, Washington Farmer, Spokane.

BUILDING MATERIAL 588

TO PATCH A HOLE OR BUILD A HOME use Perfection Plaster Wallboard. Easily handled with hammer and saw; fireproof, waterproof. Western Wallboard Co., Seattle, Wash.

SEEDS 620

LADINO CLOVER SEED, TESTING 99.26 PER cent pure; most profitable crop for Idaho soil, $2.50 per pound. George R. Johnson, Rural Route 2, Filer, Idaho.

FOR CLOVERSEED, PASTURE GRASSES, vetch, gray oats, etc., get latest prices, stating amount wanted. Lee Hershberger, Hubbard, Ore.

NURSERY STOCK 621

TREES—NOW BOOKING MAIL ORDERS AT reduced prices for limited time only. Apples, pears, peaches, nut trees, prunes, cherry, small fruits, etc. Live agents wanted. Lafayette Nursery Co., Lafayette, Ore.

NURSERY STOCK—PRUNES, WALNUTS, FILberts, fruit trees of all kinds, gooseberry and small fruits. Buy direct and save 50 per cent. Brooks Nursery, Lafayette, Ore.

FARM LANDS FOR SALE 651

"DALYACRES," CREAM OF THE FAMOUS Marcus Daly estate in the magnificent irrigated Bitter Root Valley, is one place where you can raise all cash crops. The market is at the ranch door. Poultry and dairy products for local cheese factories and creameries; beans, cherries, peas and strawberries for two big local canneries. Big cash returns per acre with monthly income from cows and chickens make success certain. A brand new modern bungalow for you on long time, low interest and such small monthly payments that you can not fail to pay out and make a comfortable, independent living in the heart of the scenic playground of America. Write for free booklet, "Where Farming Is Different." The Bartlett-Bolen Company, 6 Coulter blk., Hamilton, Mont.

CUTOVER LANDS, EASY TO CLEAR; $8 TO $20 per acre; 25 miles north of Spokane; on hard surfaced highway; Great Northern and Milwaukee railways; excellent opportunity for dairying and stock raising with Spokane markets and creamery near at hand. Will help the man who will live upon this land and agree to clear a part each year by giving lumber to help start his buildings, and a pure-bred Jersey bull to groups of farmers. Interest and payments low. Write Milan Farms Development company, Dept. T, Old National Bank bldg., Spokane, Wash.

POTATO, POULTRY, BERRIES. ALL cleared and in meadow. A few feet from paved highway; located a half mile from railroad station, good store and sawmill; excellent neighbors, fine schools, close to several good towns. Priced at only $100 an acre. Sold in 5, 10 or 20 acre parcels. Small payment down, balance in 10 years at 6 per cent. This is the best land at the price that we know of. Write or call for full information. Carter, MacDonald & Miller, 208 Columbia st., Seattle, Wash.

5000 ACRES, NEWAUKUM RIVER VALLEY; highest type level farming land; all rich, productive scoil. No gravel. No floods. No crop failures. Well developed district. Near Chehalis, Washington, 20 acres up, $15 to $50, easiest terms. Settlers can get steady employment years to come; good wages; and live at home. See local representative, St. Helens hotel block, Chehalis, or write Graham Land company, American Bank bldg., Seattle.

DO YOU WANT A HOME IN A RICH VALLEY near Spokane, on three transcontinental railroads? Where soil is perfect, rainfall ample. Summers cool, winters moderate? The kind of stump land that pays to clear? Timothy and clover, green eight months in year; natural stock country. Land cheap. 10 yearly payments at 6 per cent. Humbird Lumber Company, Box 00, Sandpoint, Idaho.

60-ACRE FARM, FAMILY ORCHARD, FAIR buildings; creek, two wells. A. Medack, Mt. Angel, Ore.

FOR SALE—FARMS, CITY PROPERTY, loans. Henry E. Owen, Eugene, Ore.

FARM LANDS FOR SALE (Continued) 651

1000-ACRE RANCH—TO CLOSE AN ESTATE we offer at sacrifice price, the Midway Ranch, Ltd., as a going concern. Ranch consists of 1000 acres low bench and flats on both sides of Kettle river at Midway, B. C., near international boundary. On line Kettle valley and Great Northern railways; sidetrack and flag station on property. On motor highway. Power line from Bonnington Falls runs through ranch. Land will grow any crop raised in country. Has produced finest wheat. Three crops of alfalfa possible under irrigation. Two orchards totaling 30 acres. 200 acres now under irrigation with development work done for irrigating 700 acres at small additional outlay. Irrigation system installed—dam, penstock, turbines and pumps operated by our own water power. Ample water rights guaranteed. Buildings consist of 10-room residence, farmer's house, bunk house, two hay barns, granary and all necessary buildings, tractor and all implements, horses, cows and pigs go with place. $65,000 has already been expended on development. We will accept a sacrifice price. With small additional expenditure placing 700 acres under irrigation purchaser can treble his money. We can arrange easy terms after first payment is made. For full particulars write J. H. Weeden, 1003 Credit Foncier bldg., Vancouver, B. C.

193 ACRES, WELL FENCED; 140 ACRES IN cultivation; ample, incontestible water; 25 miles south of Salmon City, Idaho, on Salmon river; fine stock range; six-room house; spring water piped into house; barns, corrals, good orchard; 300 tons hay; about 130 head stock cattle, 18 head horses, lots of farm implements. Price $17,000; cash, $11,000, balance easy time. Write or call on E. K. Abbott, Salmon, Idaho.

BIG OPENING SALE OF YAKIMA VALLEY farm land, under an assessed state and government approved irrigation project; best, deep soil; close to town and good roads. Price $25 per acre and up. Very easy terms. Western Lands, Inc., owners, 918 Green bldg., Seattle.

$50 TO $65 AN ACRE—GOVERNMENT dyked, cleared meadow land on main road near C. P. R. station, 26 miles from Vancouver, B. C.; 14 miles from New Westminster; in 20 and 40 acre blocks and larger. Owner, 1003-4 Credit Foncier bldg., Vancouver, B. C.

BIG LUMBER COMPANY LAND SALE—IN Skagit county; 40-acre tracts, $1400; $200 cash, balance easy. Lots work for the settler. Splendid district, roads, schools, towns. Information free. H. C. Peters, 726 3d ave., Seattle.

40 ACRES; 19 IN CULTIVATION; THREEroom house; best of land; will be worth $4000 to $5000 within three years; best of fruit land. Price only $30 per acre. A. B. Capps, Grandview, Wash.

SELL YOUR PROPERTY QUICKLY FOR cash; no matter where located. Particulars free. Real Estate Salesman company, 501 Brownell, Lincoln, Neb.

72 43-100 ACRES WILLAMETTE VALLEY, Oregon; good, level land; no buildings; $3000; $1000 cash, balance 6 per cent. Box 526, Chewelah, Wash.

10 ACRES AT LAND, UNDER WATER, IN city limits Preston, Idaho. Will grow everything. Price right. C. S. Springer, Ogden, Utah.

320-ACRE FARM IN CULTIVATION; 10 MILES north Almira, Wash. Box 140, Twisp, Wash.

FARM LANDS—Wanted 654

NO COMMISSION — SELL YOUR FARM through Washington Farm Bureau Exchange, represented in 45 states. Lists of farms for sale by owner mailed free. 312½ Lindelle, Spokane.

I HAVE INQUIRIES FOR FARMS IN NORTHwest. Describe fully and state price. R. A. McNown, 310 Wilkinson bldg., Omaha, Neb.

FARM LANDS FOR RENT 657

TO LEASE—TWO OR THREE YEARS FOR ¼ of crops, 626 acres, improved; practically level; well located; near Hanna, Alberta, Canada; suitable for grain, dairying, etc., or will sell far below the assessed value on reasonable terms. C. J. Bay, 761 Howard st., San Francisco, Cal.

FOR LEASE—440 ACRES DAIRY FARM; ON Puget Sound; low rent; part cash, part in labor. J. M. Dempsey, owner, 326 East 58th st., Seattle.

IRRIGATED LANDS—For Sale 663

YAKIMA VALLEY BARGAIN—40 ACRES, IRrigated; W. I. and supplementary water right paid up; five-room house, in good repair; garage and other outbuildings; all fenced; this land will grow 5 tons alfalfa, ten tons potatoes, 80 bushels corn and fifty bushels wheat per acre; also suitable all kinds of berries and fruit, as well as melons; two miles to station and store; 4 miles from two good towns; on main road; half mile to school; on rural route. Price $5500. Federal loan $3100; $2000 will handle. The water right alone is worth the price asked for this farm. I. E. Foss, Mabton, Wash.

CORBIN ADDITION TO GREENACRES—IN the beautiful Spokane valley; 30 minutes from Spokane paved road; 40 inches of water for irrigation; gravity flow. Ask for booklet with all information.

Return coupon—The Fred B. Grinnell company, Spokane, Wash. I am interested in the Spokane valley. Please send booklet and all information to

Name .....

Address .....

WE OWN 1000 ACRES WESTERN WASHINGton choice irrigated land, and sell in tracts of 5 acres upward; $100 or more down, balance 10 years. $40 per acre, unimproved, to $350 per acre for land in highest state of cultivation. Ideal location and climate for poultry, berries, dairying. Write for information. Washington Colonization company, Sequim, Wash.

FIFTEEN HUNDRED IN FIVE TO TWENTY acre irrigated tracts, on state highway and railroad; send for particulars. J. W. Lindsay, Port Angeles, Wash.

CITY PROPERTY FOR SALE 694

THREE LOTS, SANDPOINT, IDAHO; FIVE blocks from passenger station. Box 262, Harrison, Idaho.

FOR SALE OR EXCHANGE 702

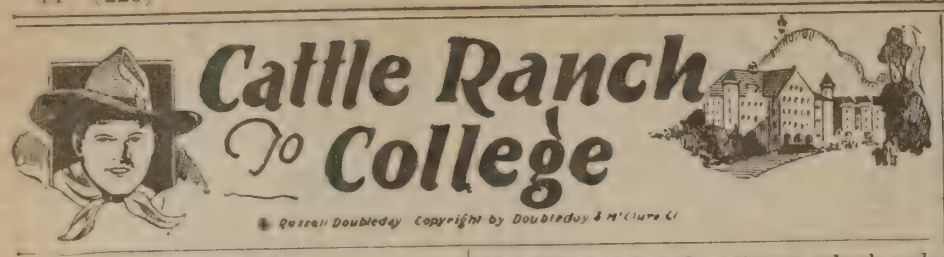
102 ACRES IN FRANKLIN COUNTY, IDAHO, 80 in cultivation, under water; buildings, fences and good spring. Price $8000; terms, or will trade for city property, good dairy farm. C. S. Springer, Ogden, Utah.

THIRTY-ACRE DAIRY FARM, HIGHLY IMproved; ideal location; sell or trade for merchandise stock, registered Jerseys included. Wm. C. Postlethwaite, Caldwell, Idaho.

80 ACRES, WELL IMPROVED; NEAR RUpert; sell or trade for stock or grain ranch, Washington or Oregon. Particulars, write Herbert Sartain, Rupert, Idaho.

TO EXCHANGE—Real Estate 705

312 ACRES HILL LAND; 20 CLEARED; plenty of timber, water and range; fair improvements; will trade for town property or merchandise. F. O. Russell, Chewelah, Wash.



CHAPTER XII.

A Change of Scene.

For a time John could do nothing but hang on like grim death. He was half unconscious; the noise was so great, the dust so thick, and the motion so altogether terrifying that he was nearly stupefied. After a while, however, he noticed that the dreadful racket did not increase, that the clicking of the wheels over the rail joints had become regular, and that all the sounds had a sort of humming rhythm. His nerves quieted down somewhat, and he realized that he was still alive. His grasp on the braking rods overhead relaxed slightly, and he began to look around him—as much as the dust would allow. The train was moving at good speed. The ties below seemed first to rush at the boy threateningly, and then in a twinkling disappeared behind; the telegraph poles along the track had the same menacing attitude and seemed bent on his destruction; objects further off went by more leisurely. It looked as if the whole earth, and everything on it, was trying to run away from the standing train.

John soon found that it made him dizzy to watch the earth slip away from under him, so he turned his eyes to his surroundings. The wheels moved so swiftly that they would have seemed to be standing still were it not for the side motion, alternately checked by the flanges; a spot of mud on the rapidly turning axle looked like a white ring. Though this mode of traveling was dangerous, dirty and unpleasant in many ways, John decided, in the recollection of his fatigue the day before, it was at least better than walking.

In half an hour the wheels thudded heavily over a switch joint, the speed of the train slackened, and the cylinder of the air brake under the center of the car groaned a warning. John remembered his instructions and bent low to avoid the big iron lever. He watched it swing slowly toward him—nearer, nearer; the rod attached to it tightened until its vibrations sung in his ear. The train slowed up and then stopped with a jolt. "Phew! that was close," he murmured to himself. He did not dare to get out of his cramped position for fear he would be run over. His eyes, nose and mouth were filled with dust, his back ached from his stooping posture, and the smell of grease and foul air escaping from the released brake was overpowering.

"Come out, kid, it's all right." It was Jimmy who spoke. John crawled out, glad of a change. A short stop was made at the station, during which the boy and the tramp lay in hiding in a ditch.

The engine tooted, and they rushed up the embankment, but before either man or boy could reach his perch the train had begun to move. John managed by following Jimmy's directions to scramble under and onto his brake-beam seat, but by the time he was safely stowed away the car was going at a good speed. The boy feared for his friend's safety. Jimmy, however, seemed entirely unconcerned; he ran alongside and caught one of the side rods that run under every freight car and look like the truss of a bridge; putting his foot on the end of the brake beam, he swung himself under and was soon sitting in state opposite John, but half a car's length from him. This was in reality a very difficult feat, though it seems simple. If, in jumping from the ground to the bar, his foot should slip, it might easily get caught in the revolving wheels, or it would be easy for him to lose his hold when swinging under—sure death would follow in either case. John only breathed comfortably when he saw his companion seated in comparative safety on the other braking gear.

Before Helena was reached several such stops were made and John learned to swing himself under to his perilous perch, when the car was in motion, with comparative ease.

It was a long and most tiresome trip for the boy. Although he got accustomed to this mode of traveling before long, the dirt and smells, the constrained position, and the necessity for caution and concealment were all very disagreeable to him. He was overjoyed when he heard one brakeman call to another: "Well, Dick, you'll see your old woman in three hours now."

The train came to a halt before entering the railroad yards of Helena, and Jimmy (who seemed to consider it his duty to look after John) was alongside in a minute. "We'll leave here, kid," he said. "There's p'leecemen in Helena, so I hear, and they nab a man climbing from under a car."

A collection of wooden houses huddled round the station and "yard" was all they saw at first, and John at least was disappointed, for he had heard much of the magnificence of the place. He learned soon that this was but the extreme suburb and that the town itself was some two miles away.

Jimmy was for separating there and then, each to forage for food on his own hook, but John, mindful of his many kindnesses, insisted that they should share the meal which he procured. The supply of ham and eggs and steak that they put away testified not so much to the excellence of the fare as to the keenness of their appetities.

This important business finished, they inquired about the town itself and learned that it was reached by a trolley car. Here was a brand new experience right away. John had heard of electric cars, but had never seen one, and he thought it a wonderful machine; but even more wonderful was the fact that for a ride of two miles a fare of only 5 cents was charged. He wished that he had a hundred eyes and almost as many ears, so that he might take in all the strange

"Whatcher laughin' at?"

sights that greeted him at every turn. Jimmy, with transcontinental experience, explained many things in language interlarded with strange hobo slang. When the yellow trolley car finally reached the town, the boy opened his eyes in wonder—here was the real city.

The companions walked along the busy street, which to John's amazement was paved with stone blocks, the sidewalks being covered with bricks and flags. As he saw the crowds of people he thought there must be some sort of a celebration going on. In front of a saloon a number of men were gathered, and among them Jimmy recognized some friends. John, however, was not content to stand and listen to long discussions as to the best routes to travel, the most likely places where "hand-outs" might be had, and all the rest of the talk that tramps indulge in; so he started off on his own hook on a tour of discovery. "Don't get lost, kid," Jimmy shouted, as the boy went off.

All his life he had been accustomed to almost unlimited space, to nearly perfect quiet, except the noise of the elements, the voices of wild things and of the few human beings. All at once he was thrown into the midst of a bustling western city, packed solid with business buildings and dwellings, the surface of the earth shod with iron and stone, the very sky stained with smoke, and the air filled with the roar of traffic, the whistle of locomotives, the clang of the electric car bells, and the shouts of street hucksters. He was almost stupified with wonder. Then natural boyish curiosity took possession of him, and he began to notice things separately and in detail. He walked along with eyes, ears and mouth wide open; his head turning constantly as some strange object caught his gaze. The frequent big "saloon" sign did not surprise him, nor did the "Licensed Gambling House" placard cause him to wonder; he knew them of yore, they were all a matter of course to a western boy. But when he came to a building six or seven stories high he stopped short in the human tide, like a spile in a rushing stream, and stood with mouth agape in amazement. The plate glass windows and the gay display behind them, the brilliant signs and elaborate decorations delighted him.

He was walking along slowly, when he caught sight of the most wonderful "outfit" he had ever seen and stood still in his tracks to take it in. It was a closed carriage with a fine big pair of horses whose trappings were decorated in bright silver. His fresh young eyes took these details in at once, but what caused him to stare was the big man on the box. Perfectly motionless, a stony stare on his smoothly shaven face, John wondered if he was made of wood. His whip, held at just the proper angle in heavy tan gloves, white trousers painfully tight, high top boots and green coat shining with brass buttons, the whole getup topped by a big, shining silk hat. For several minutes he watched him, but not a sign of life did he betray. Then a woman, richly dressed, came out of a near-by store and entered the carriage, saying as she did so, "Drive home, James." The dummy made a motion with his hand toward his hat, flicked the whip over the horses' flanks, and the carriage moved off.

John's awesome gaze gave way to a laugh: "Why, he isn't an English lord," he said to himself, "he's only a teamster," and he laughed again.

A boy with a package stopped to look at him. "Whatcher laughin' at?" said he.

"Didn't you see that outfit?" said the other, between chuckles.

Mean the kerrige?" John nodded. "That's Fleischman's rig. Never seen one before?"

"I've seen 'em in pictures, but I never thought they were true," and John laughed again. "I suppose people do go down to dinner at 6 o'clock as I've read they do," he said at last, a puzzle that had long baffled him clearing away.

"Sure. Whatjer think they did, go up to dinner?" returned the other boy scornfully.

"Why, I didn't see how they could go down 'less they ate in a cellar," said John in explanation. "Who ever heard of people eating dinner at night, anyway?"

From this talk and the big white felt hat that he wore, the boy with the parcel gathered that the other was a stranger to the town and town ways. He felt quite superior and determined to make the most of it. "Come on down the street with me," he said, and John followed, elbowing his way among the people as he saw the other boy do. They went along together, Charley Braton (John soon learned his name) pointing out the principal buildings, grandiloquently. Charley, who was an errand boy in a dry goods store, reached his destination and invited his new-found friend to come up, so both stepped into the hallway and then through an iron doorway into a sort of cage, where several other people were already standing. John wondered what it was all about, and was just framing a question when a man slammed the gate and grasped a wire rope that ran through floor and ceiling of the cage. Of a sudden the floor began to rise, not smoothly, but with a jerk that drove the boy's heels into the floor. John's breath caught and he clutched Charley's arm. "Seven," called out the latter, and the car stopped with a jar.

"Elevator?" inquired John.

"Yep. 'Fraid?" questioned the other with a grin.

"Nah. Little bit surprised, though; never rode on one before."

"Lots of people get scared, though," said Charley, and began a long account of how an old ranchman and Indian fighter lost his nerve completely during his first elevator ride, and finally pulled his pistol on the elevator man to make him "stop the thing."

Charley's errand done, they entered the elevator again, which descended so suddenly that John felt as if the bottom had dropped out of his stomach. Both stairs and elevators were new to our country boy, and he concluded that he did not care for either, but he was far too proud to show any trepidation before his new acquaintance.

The boys separated, Charley returning to the store and John to the group of tramps at the saloon. It was not an attractive circle round the beer keg that the boy joined, and even he realized that they were more dirty and shiftless than any men he had known. But one at least of them had been kind to him, and he was grateful.

"Well, kid, wha'd'ye see?" shouted Jimmy as he drew near.

John told the story with gusto of all the wonders he had seen, and especially his view of the "carriage teamster."

"That's nothin'," said one man. "You see them on every corner in N'York." Immediately there arose an animated discussion as to the possessions of this or that millionaire, and there was not one of the tramps who did not know some one in the household of a plutocrat. The talk grew apace, and each narrator put forth all his available knowledge of the traits and habits of millionaires. All referred familiarly to individuals of seven figure fame as "Tom" or "Joe" or "George."

John and Jimmy meanwhile withdrew unnoticed, and the latter evidently had some definite destination in view, for he started off at a brisk pace along the street, commanding the boy to come on. John did so without question, and soon they reached an office building, which Jimmy entered. They finally stopped before a door bearing the sign "Dr. Hamilton," and at this the tramp knocked. A boy opened the door and ushered in the two rough-looking specimens. "Doctor in?" asked Jimmy, hat in hand. The doctor, a mild old gentleman, approached, and John's protector spoke up: "Doctor, beg yer pardin for comin' in, but this here kid has a pretty bad hand," and he held up the boy's swollen member. "There ain't nobody to look after it and it needs a good washin' at least."

"Let me see it," and the doctor unwound the dirty rags, handling the wounded hand ever so tenderly. It was treatment to which the boy was entirely unaccustomed, and he did not know just what to make of it. Jimmy warned the physician that neither had any money, but nevertheless he proceeded to attend to the sore hand, washing it first, then dressing it and bandaging the whole in clean, white linen. John was ordered to come next day. And so, with a kindly smile on his benevolent face, he bade them good day.

The grateful patient tried hard to thank the doctor and harder to thank Jimmy, but he did not succeed very well with either.

"Now, kid, you've got to sleep in a bed till that hand heals up," said the latter, when John tried to voice his gratitude. "I've got a stable full of hay that I'm goin' to sleep in; but you hunt up a lodgin' house and save your money all you can."

John followed the advice at once and found a place where he could sleep in a bed for 25 cents a night.

A week passed, Jimmy had taken to the road again, and the boy was left alone for the first time in a great town. He had been lonely before, but it was as nothing compared to the feeling that now possessed him. To be surrounded with people, all of whom were strangers, seemed to him more depressing than to be absolutely alone with rugged nature.

By this time John's hand had nearly healed, but his money had about given out, and he was looking for work. It wasn't hard for a man in those booming days to find work, but the boy was in the awkward stage of growth when he was too small for a man's work and too big for a boy's—though he had a full-grown appetite and clothes to pay for.

He hunted diligently for a job; day after day he tramped the streets in search of one; he looked into thousands of faces for

(Continued on page Seventeen.)

Bits of Fun for Everyone

Already Done.

The blushing bride elect was rehearsing the ceremony that was about to take place.

"I shall expect you to give me away, dad," she said to her fond parent.

The latter looked up nervously from his paper. "I'm afraid," he murmured, "I've done it already. I told Herbert this morning that you had a disposition like your mother's!"—Exchange.

Ouch!

Demure maiden (lately returned from college): "——and father, Terry, has lots of money, a big car and a fine old southern family behind him."

Forceful father: "Well, I hope he's nice to boot."—Awgwan.

The Night Message.

It was evening and several visitors were chatting in the parlor when a patter of little feet was heard at the head of the stairs. Mrs. Smith begged her friends to listen.

"Hush, a moment, please," she said, "the children are going to deliver their night message to mother. It always gives me a feeling of reverence to hear them. They are so much nearer their God than we are, and they speak the love that is in their little hearts never so fully as when the dark has come. Listen!"

There was a moment of tense silence Then—

"Mamma," came the message in a shrill whisper. "Willie didn't wash his feet."—Anon.

Horrors!

An Irishman coming out of ether in the ward after an operation exclaimed audibly:

"Thank God that's over!"

"Don't be too sure," said the man in the next bed. "They left a sponge in me and had to cut me open again." And the patient on the other side said: "Why, they had to open me, too, to find one of their instuments."

Just then the surgeon who had operated on the Irishman stuck his head in the door and yelled, "Has anybody seen my hat?"

Pat fainted.—Exchange.

Oh You, Bertie!

Mrs. Youngbride (just back from honeymoon)—Poor Bertie was so embarrassed when he went to the hotel, what do you suppose he said to the clerk? He said, "I'd like a room with a wife for myself and bath."—Selected.

FAMILY CIRCLE

ALICE W. BARLAND
EDITORIAL CONTRIBUTOR

Little by little, sure and slow.
We are shaping our future of bliss or woe
As the present passes away.
Our feet are climbing the stairway bright,
Or gliding downward in the night,
Little by little, and day by day.—Selected.

Experience Letters

Dear Mrs. Barland: I am sending a bit of a message to the girl who said she had made such a mess of her high school days. I would say to her, don't worry over the past which you can't help now.

It is no worse for a girl to go wrong than a boy. Men who have lived a wild, bad life want good girls for wives and the wife and sometimes the children have to pay the price of that wild life. I know, because I married such a man.

We all thought him good, but I am childless today because of the sins of that father. I saw my babies suffer and die because I didn't know enough to marry a good man.

Young and old can go wrong anywhere, but the manner of dress at the present time at parties and dances, with the extreme of style in short sleeves and short dresses, both skirts and waists, helps girls on the downward way.

Parents are to blame, too, and have much to answer for in the indifferent way they have of allowing young girls to go about. Susie goes to Mary's house to spend the night—so she tells her mother—they meet some boys with a car on the street corner and all go out for what they term a "good time" at some place where they spend most of the night, a place where they have no business to be at all. The parents of any of them pay no attention and do not make inquiry into the way they have spent the night. Perhaps a friend or neighbor knows all about the matter, but dares not tell the parents because they will not believe it and the only result will be enmity between them.

I have heard parents say, "I can trust my children anywhere," but if they were to see the sort of "good times" those same children indulge in it would be a great eye opener to them I am sure. The parents should begin early to go to places of entertainment with their children; they should also provide entertainment for them, as young people like noise and excitement and so do I, though I am looking my 40th birthday in the face.

Children are brought into the world without being consulted and parents have a duty to perform in their behalf that should have first place in their attention. Children have the right to a healthy body and a well-balanced mind. They should be taught early to care for their bodies that their minds may be properly developed and they should be taught to use their will power and warned regarding matters pertaining to sex.

MRS. P. M., Cal.

Family Circle Girls

Girls, you needn't go to all sorts of places just because a boy asks you and you needn't listen to rough talk or to vulgar stories or songs. Just tell them right out that you don't want to hear anything of the kind and they will stop at once. If a boy should continue, just leave him at once. Many times it is as much the fault of the girls as the boys when they do these unbecoming things. I have a brother and there are always a lot of boys around here who come to see him and I know quite a good deal about boys.

Girls, don't talk nonsense to the boys when they come to your house, but encourage them to talk of neighborhood news and things of general interest. This will take the place of foolish talk.

Now I will tell you what I do. There are five children in our family, four girls and a boy. I am the oldest and the baby is 2 years old. My brother is 16 and the others are 13 and 5 years old.

Daddy and brother Ed are away putting up hay and we get up at 4 o'clock and milk 30 cows. Mamma and I milk 11 each and my sister milks eight. Then we separate the milk and feed 22 calves, milk and grain and water both cows and calves and feed seven pigs.

By the time this is done it is 8 or 9 o'clock and we eat breakfast and by the time everything is washed and the house cleaned up it is 12 or 1 o'clock. At 4 oclock we have to start at the chores again and get to bed at 10 or 12 o'clock. We have a large garden to care for and i don't have much time after all is done. I love to go to Sunday school and always go when I can get through in time.

I am in the eighth grade, as I have not been where I could go to school until these last few years.

If you would like to know what this "preacher" looks like I will say that I am 5 feet 10 inches tall, weigh 145 pounds and have brown hair and brown eyes. I am as black as I can be with tan, as I go without a hat so much. I don't use powder and other beauty fixings and, though I like to look neat, I don't lose any sleep over my complexion.

I am not writing this for print, Mrs. Barland, but that you may know that there are girls who care about their behavior and have self-respect. R. R. P.

Washington.

(I want to say that this girl's letter in every way compares very well with those of the many girls who write who have finished high school.—Editor.)

Dear Mrs. Barland: I've just finished reading the Family Circle in the last issue of THE FARMER, and after reading L. B.'s letter I felt that I must write. I admire the "few girls who are too proud to join her gang." Gang seems to be the most fitting name that could be applied to such a group.

No doubt the boys of today have as much responsibility in becoming the men of the future as the girls do in becoming the women of tomorrow. Does that in any way lessen the responsibility of the girls? If the boys choose to weaken themselves physically and morally, that is all the more reason why the girls should stand pat for everything right.

I am sure that the boys of L. B.'s "gang" do not respect her and the others of the group as much as they do those who hold aloof from them.

I don't smoke at all and dance but very little and have never been to a public dance, but have attended several class parties in school. I can't and shall never learn to dance the modern dances. I think they are most disgraceful and there isn't the least thing artistic or graceful about them. To see a couple going through all sorts of physical contortions (and mental, too, most likely) is silly and vulgar.

I am a member of the church, a Sunday school superintendent, president of the Epworth league and I sing in the choir. Because I do all these things doesn't mean that I am a "goody-goody" kind of girl, I am not; no one loves a good time better than I do, and I believe no one has any better time, but I have learned by bitter experience that it pays to be particular about choosing the sort of times that are called "good times." I think L. B. will soon be sorry for the way she is taking to find pleasure.

I have bobbed hair and powder a little, but use no rouge, lipstick or eyebrow pencil. I know when I am well off.

Lonesome Peggy, as far as boys are concerned, my experience has been quite similar to yours, but like you I have seen my mistakes and have tried and am still trying to rectify them. M. C. G., Wash.

Family Circle Boys

Dear Mrs. Barland: I have just finished reading the letters and take a special interest in the one signed "A Willing Helper," as he mentions the subject of whether a girl should go with more than one boy at a time and says he doesn't believe in it.

I don't see any reason why they shouldn't unless they are serious. I see no reason why girls and boys, of the age most of them are who write to the Circle, can not be good friends and just good pals and have good times together without feeling that a certain boy or girl should give all his attention to one.

I have always found the girl who is the jolliest, friendliest, the best educated and the easiest to get acquainted with to be the most decent, and the stiff kind, who won't speak without an introduction to be the most unmoral.

A Willing Helper speaks of girls who think it an insult for a boy to light a cigarette without offering her one; why not insist upon the boy being a gentleman and not smoking when in company with a girl? If a boy objects to a girl smoking in his presence why should it be worse for the boy to smoke in the presence of the girl? I neither smoke, chew nor use intoxicating liquor. EDDIE.

Washington.

Dear Mrs. Barland: I don't often have anything to say on a subject unless I am interested or am asked and know what I am talking about.

Some time ago you asked that the subjest of dancing and kissing be dropped and that the young people tell something about what they want to be or do.

I have given that subject serious thought for a long time, as I suppose most young men are apt to do. When I had to quit high school after completing my second year I determined to become a mechanic. After three years of waiting and working on the farm with my father I got enough money ahead and permission to go to southern California to a large auto and tractor school and there I completed the course and worked at the trade for a short time. But I got a longing to be back on the farm, so in the spring of '21 I came back.

I never knew how much I would miss the country until after I left it, but now I would rather farm than be foreman in any garage in a city, because I can get more satisfaction in raising a crop of grain or hay or a flock of chickens than I can in overhauling a dozen limousines, and satisfaction is what a man wants, according to my way of thinking.

The only real use money has is to secure satisfaction and enjoyment and if you can get these with a little money what is the use in doing work that you do not like just to get more money.

I don't mean to say that there is no satisfaction in getting money, but that I would rather work at something and enjoy myself and make a little money at it rather than do something that to me is drudgery and make twice that much money.

At present I have a hay and grain ranch rented next to the ranch my parents are on. At harvest time we help each other and in that way we each get more done than we can by depending upon hired help. I am looking forward to owning about 80 acres in a good dairy country and keeping enough cows, pigs and hens to eat all I raise and I think in another year I shall be able to make a payment down on such a piece of land. I am particularly interested in that kind of farming and gardening.

I would like to hear from both boys and girls who are interested in this kind of work. I am 23 years old, so I have lots of time to get what I am after, which is not very much, so far as money is concerned.

Idaho. R. R.

Just Folks

You remember by trying to forget.

Intimacy is not necessarily cooperation.

Daring gives blood to courage.

Perfection of detail makes a machine, and also makes a machine of a man.

You can keep your eyes on your feet or you can be a habitual star gazer—neither occupation will get you far.

Change is life.

Make contrivance your servant; not your master.

Easy opportunities do not amount to much.

There is more adventure in authority than in freedom. Authority has the means at hand for prosecuting adventure, while freedom is generally confined to talking about and initiating adventure.

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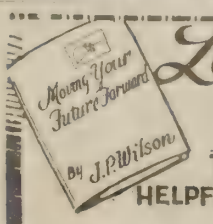

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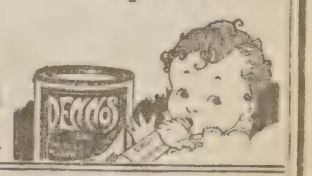

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High Points in News of the Week

Among the most important news of the last week is the report from foreign sources that officials of Germany are coming to a realization that their program of "passive resistance" to the French occupation of the Ruhr district must cease if any progress is to be made toward the settlement of controversy between the two countries. While German officials have let it be known in an unofficial way that they are contemplating an early ending of the passive resistance, France is taking the report with a grain of salt, refusing to commit herself as to terms which she might grant in return for such capitulation.

It is reported that the prospective termination of the German program has been the result of efforts on the part of Great Britain following the failure of that country's attempt to induce France to give up her program of occupation. It is generally acknowledged that an indefinite continuation of the occupation of the Ruhr district, with the idleness in that district brought about by the cessation of industrial activities on the part of the German people, would result in nothing but a chaotic collapse which would leave Germany even more incapable of paying her war reparations. Since the occupation took place last January there has been no evidence of any weakening on the part of France either as to her determination or as to her ability to make the occupation effective in bringing Germany to time. Thus the present apparent capitulation of Germany has increased hope throughout the world that the controversy may be ended and that Europe and the world at large will sooner or later be on a practical reconstruction basis.

Former Chancellor Cuno of Germany, who recently resigned the position, is a visitor in the United States. He declares that his visit is strictly a personal affair with him and that he is not here on any political or business mission.

* * *

Six destroyers of the Pacific fleet of the United States navy went ashore on a rocky point of southern California last week and were beaten to pieces on the rocks. The accident occurred during a heavy fog and storm, but as yet the responsibility for the catastrophe has not been placed. Mistaken orders are believed to be responsible.

* * *

D. W. Davis, former governor of Idaho and now United States commissioner of reclamation, is making a tour of inspection of reclamation projects in the Pacific northwest. His object is not only to inspect projects, but to discuss problems with those interested in irrigation in these states. He is accompanied by other members of the reclamation staff.

* * *

As a result of the uprising of the military element in Spain in protest against the way in which the recent disturbance in Morocco was handled, the Spanish cabinet under King Alphonso has resigned. The military authorities are reported to have taken over control of Spanish affairs, but are understood to be favorable toward the king.

* * *

General John J. Pershing celebrated his 63d birthday anniversary on September 13. One year from that date, at the age of 64 years, he will be automatically retired as an officer in the American army.

* * *

Reports from Japan indicate that about 112,000 persons lost their lives in the recent earthquake, fire and flood catastrophe and that 120,000 additional are unaccounted for at the present time. It is estimated that more than 1,000,000 persons have left the stricken area for safety.

Japanese financiers have estimated that it will take about $5,000,000,000 to reconstruct the devastated area. It is reported that considerably more than 100,000 houses and buildings have been almost totally destroyed.

Over $6,000,000 has been subscribed in the United States for the use of the Red Cross in extending relief to the Japanese.

* * *

It is reported that a complete agreement has been entered into by which the Italian army is to evacuate the Greek island of Corfu, which it occupied as a means of enforcing its ultimatum upon Greece three weeks ago. Thus it is believed that the Italian-Greek controversy has been eliminated as a possible source of another war in Europe.

* * *

During the 41 months since the prohibition enforcement law was enacted more than 90,000 cases have been tried in federal court and 72,489 convictions recorded. Fines aggregating over $12,460,000 have been inflicted and jail sentences totaling more than 3000 years passed upon violators of prohibition laws. These facts were contained in a report made by Attorney General Daugherty to President Coolidge last week.

* * *

The United States exported in the month of August $313,000,000 worth of goods and imported $275,000,000 worth. For the eight months of the year ending with August, exports totalled $2,561,000,000, as against $2,650,000,000 imports.

* * *

Six hundred buildings were destroyed and damage of $10,000,000 in the conflagration which wiped out 35 entire blocks in Berkeley, Cal., Monday. It is estimated 2400 persons lost their homes. No lives are known to be lost, but 10 injured were taken to the hospital, suffering from minor injuries.

* * *

Widely scattered areas in northern, central and southwestern California were swept by forest, brush and grass fires Monday. Seventy square miles have been burned over in the Santa Ynez muntain range in Santa Barbara county.

Farm Business and Markets Outlook

(Continued from page five.)

quoted at $2.10 to $2.25 per 100-pound sack in the Chicago market, with round whites at $1.90 to $2.25.

The carlot movement of apples has practically doubled in the last two weeks and in addition rather large supplies of home-grown stock reached consuming markets. Prices last week were steady to firm, however. Fall varieties are quoted at 75 cents to $1.25 per bushel in the Chicago market.

Middlewestern peaches were quoted slightly lower last week. Carlot shipments were heavy, although slightly smaller than in the preceding week. Colorado Elbertas are quoted at $1.25 to $1.35 per bushel f. o. b. shipping points.

Carlot shipments of onions have increased in the last two weeks, but prices of midwestern varieties have advanced sharply. Washington yellows are quoted at $2.75 to $3 per 100 pounds sacked at Chicago.

LATEST QUOTATIONS.
The Live Stock Market.

SPOKANE, Sept. 15.—Cattle—Prime steers, $6.75@7.25; good to choice steers, $6.25@6.75; Medium to good steers, $5.50@6.25; fair to medium steers, $5@5.50; common to fair steers, $4.25@5; choice cows and heifers, $5@5.50; good to choice cows, heifers, $4.50@5; medium to good cows, heifers, $4@4.50; fair to medium cows, heifers, $3@4; canners, $2@2.50; bulls, $3.25@4; light veal calves, $8@9; heavy veal calves, $6.50@8; stockers and feeders, $4@5.25.

Hogs—Prime mixed, $10@10.25; medium, $9.75@10; heavies, $7@9.25; fat pigs, $9.75@10; stockers and feeders, $8.75@9.

Sheep—Prime lambs, $9@10; fair to medium, $7.50@8.50; yearlings, $7@8; wethers, $5.50@7; mutton ewes, $3@5.

The Grain Market.

PORTLAND, Ore., Sept. 15.—Wheat—Hard white, Bluestem, Bart, $1.05; soft white, western white, $1.04; hard winter, northern spring, $1.02; western red, $1.01.

Oats—No. 2 white feed, September, $28.50; October, $28; No. 2 gray, September, $27.50; October, $26.50.

Barley—No. 2, 46 pounds, September, $28.50; October, $28; 44 pounds, September, $28; October, $27.50.

Corn—No. 2 eastern yellow, shipment September, $22.50, $21.

SEATTLE, Sept. 15.—Wheat: Hard white, Big Bend Bluestem, $1.07; soft and western white, $1.06; hard and soft red winter, northern spring, western red, $1.03.

COLFAX, Sept. 15.—Red, 85c; Forty-fold, 87c; club, 88c; Bluestem and Bart, 90c.

LEWISTON, Sept. 15.—Red, 84c; white No 1, 87c.

DAYTON, Sept. 15.—Club, 93½c; red, 90½c.

DAVENPORT, Sept. 15.—Bluestem, 89c; club, 87c; Gold Coin, 87c; Turkey red, 83c; northern spring, 83c.

PULLMAN, Sept. 15.—Red, 83c; white, 82c.

WALLA WALLA, Sept. 15.—Bluestem, 94@97c; club, 92½c; Turkey red, 89c.

Hay and Feed Grain.

SPOKANE, Sept. 15.—Wheat—Feed wheat, $38 ton. Oats—$36 per ton; rolled, $38. Corn—$44 per ton; cracked corn, $46 per ton. Barley—$36 per ton; rolled, $38. Bran—$24 per ton. Bran and Shorts—$25 ton. Shorts—$29 ton.

Hay—Alfalfa, $20 ton in ton lots, $16@18 carload lots; new timothy, $21@22 in ton lots delivered; $19 a ton in car lots f. o. b. Spokane.

PORTLAND, Sept. 15.—Millfeed—City delivery prices: Millrun, $28 per ton; middlings, $40; scratch feed, $47! rolled barley, $39@41; cracked corn, $48; rolled oats, $39.

Hay—Buying prices, f. o. b. Portland: Alfalfa, $15.50@16 ton; cheat, $13@14; valley timothy, $18@19; eastern Oregon timothy, $20@22; clover, $14@14; oat, $14@15; oat and vetch, $15@16; straw, $8 per ton.

General Produce.

PORTLAND, Sept. 15.—Buter—Cubes, extra, 45c lb.; prices, parchment wrapped box lots, 49c; cartons, 50c. Butterfat, 49c, delivered Portland; average station buying prices, 46c lb.

Eggs—Buying prices: White hennery standards, 36@37c; mixed color standards, 32@34c dozen. Selling prices: Front street, selects, 42c; candled ranch, 38c. Association selling prices, cash at store: Extras, 40c; standards, 38c; bakers, 30c; pullets, 32c.

Cheese—Price to jobbers, f. o. b. Tillamook: Triplets, 28c; longhorns, 29c; loaf, 30c per lb.

Poultry—Hens, 15@25c; broilers, 26@27c; ducks, nominal; geese, nominal; turkeys, nominal.

Dressed Meats—Veal, fancy, 15½@16c; pork, fancy, 13½@14c per pound.

Apples—Per box, California Gravensteins, $2@2.50; Oregon Gravensteins, packed, $1.75@2; cookers, $1@1.50.

Potatoes—Sackers, per cwt., new crop Burbanks, best, $1.75; Netted Gems, $2; poorer mixed varieties, $1.25@1.50.

Cabbage—Oregon bulk, per cwt., $2.25@3; mostly $2.50@2.75.

Cantaloupes—California and Oregon, green meats, standards 36s, $2@2.25; 45s, $2@2.50; flats, $1@1.10; Oregon and Washington Burrel Gems, standards, $2.25; flats, $1@1.10.

Cauliflower—Oregon, per dozen, No. 1, $2; No. 2, $1.50.

Celery—Oregon, per dozen bunches, large, 80@90c; fancy branded, $1; smaller, 50@65c.

Corn—Oregon, per dozen, yellow, 15@20c.

Cucumbers—Oregon, per box, few best, 60c; mostly 40@50c.

Egg Plant—Oregon and Washington, per lb., 10c; per crate, $2.50.

Onions—Per cwt., Oregon Danvers, $2.50@2.75; white pickling, 8@10c per pound.

Peaches—Oregon and Washington Elbertas, large, 75@90c; few $1; smaller, 70@80c; Muirs, $1; Orange Clings, 80@90c; Crawfords, 85c@$1.

Plums—Oregon Damsons, per lb., 4@5c; Italian prunes, 2@3½c.

Sacked Vegetables—Per cwt., carrots and beets, $1.50@1.75; rutabagas, $2@2.25.

SEATTLE, Sept. 15.—Eggs—Select local ranch, white shells, cases included, 39c per dozen f. o. b. Seattle; mixed colors, 35c per doz.; pullets, 28c per doz.; checks, 20c per doz.; cases returned to shippers, 1c less; do to country stores, f. o. b., 30c per doz.; loss off; eastern Washington, case count, 28c per doz. f. o. b. Seattle.

Butterfat—F. o. b. Seattle: A grade, 49c per lb.; raw milk, $2.30 per cwt.

Poultry—Hens, 4½ lbs. and up, 25c per lb.; do 3½ and under 4½ lbs., 18c per lb.; springs, 2 lbs. and heavier, 25c per lb.; do, 1 to 2 lbs., 27c per lb.; hens, 3 to 2½ lbs., 13c per lb.; do dry picked, 3c above live; capons, live, fat, 6 to 10 lbs., 35c per lb; do dry picked, fancy, dressed, 38c per lb.; do roosters, 11c per lb.; Belgian hares, 3½ lbs. and heavier, 12c per lb.; geese, fat, live, 15c per lb.; ducklings, live, 3½ lbs. and up, 16c per lb.; ducks, young, over 3 lbs., 16c per lb.; utrkeys, fat, dry picked, 8 to 10 lbs., 30c per lb.; do live, 25c per lb.; squabs, large, dressed, $4 per doz.; pigeons, $2; guineas, $8 per doz.

Beef—Steers, fancy, 7c per lb; cows, fat 5c per lb.

Veal—Fancy light, 14@16 per lb.; medium light, 12@14c per lb.; heavy, 7@14c per lb.

SPOKANE, Sept. 15.—Poultry, Live Weight—Hens, 4 lbs. and over, 18c; light hens, under 4 lbs., 14c; springs, 20@22c; old roosters, 8c.

Fresh Ranch Eggs—$8.50 to $9.50 case; fancy poultry farm, $9.50@10.

Butterfat—47c lb.

Hides, Pelts, Wool.

PORTLAND, Sept. 15.—Hides—Salted hides, all weights, 5c; green hides, all weights, 4c; salted bulls, 4c; green bulls, 5c; salted or green calf, 10c; salted or green kip, 7c; hairslipped hides and skins, half price; flint dry hides, 11c; dry salted hides, 7c; culls and damaged, half price. Horse hides, green or salted, each, $1@1.50; solt hides, each, 25c; dry horse with tail and mane on, 50c.

Pelts—Flint dry sheep pelts, long, 20c; flint dry sheep pelts, short, 10c; flint dry sheep pelts, pieces, 10c; flint dry shearings, each, 9@20c; dry salted elts, 15c; salted pelts, long, each, $1@1.50; salted pelts, short, each 50c@$1; salted pelts, shearings, each, 10@30c; salted goats, long, each, $1@2; salted goats, short, each, 50c@$1; dry goats, long, per lb., 15c; dry goats, short, each, 25@50c; goat shearings, each, 5@15c.

Mohair—Long staple, 40c per lb.; short staple, 30c lb.; burry, 19c lb.

Wool—Eastern Oregon, average to choice, 38@40c; valley wool, fine, 39c; medium, 30c; coarse, 25c; Cotswold and braid, 10c; matted, 15.

Range of Live Stock Prices for Week Ending September 12

CATTLE.	Chicago.	Spokane.	Portland.	N. Salt Lake.
Choice and prime heavy steers (1100 lb. up)	11.75@13.00			
Good heavy steers	9.50@11.90			
Medium heavy steers	7.65@ 9.85			
Common heavy steers	6.15@ 7.75			
Choice and prime light steers (1100 lb. down)	11.50@12.65			
Good light steers	9.35@11.65			
Medium light steers	7.50@ 9.60	6.25@ 7.25	6.50@ 7.50	6.25@ 7.00
Common light steers	5.50@ 7.65	4.25@ 6.25	4.50@ 6.50	4.75@ 6.25
Common to choice butcher heifers	4.25@11.25	3.50@ 5.50	3.00@ 5.50	3.50@ 4.80
Common to choice butcher cows	3.00@ 9.00	3.00@ 4.75	2.50@ 5.00	3.25@ 4.75
Bologna and beef bulls	3.00@ 5.00	3.25@ 4.00	3.25@ 4.25	2.00@ 3.50
Canners and cutters, cows and heifers	2.40@ 3.15	2.00@ 2.50	1.50@ 2.50	1.50@ 3.00
Canner steers	3.25@ 5.50	2.50@ 3.50	2.50@ 3.50	
Common to choice light veals	7.75@12.50	8.00@ 9.00	8.00@10.50	6.00@ 7.00
Common to choice heavy veals	3.00@12.25	6.50@ 8.00	5.00@ 8.00	
Common to choice feeders (750 lb. up)	5.60@ 9.40			
Common to choice feeders (750 lb. down)	4.50@ 8.50	4.00@ 5.25		
Common to choice stocker cows and heifers	3.00@ 5.50			
HOGS.				
Top of market	9.65	11.00	10.25	9.00
Bulk of sales	7.65@ 9.30	9.25@11.00	9.00@10.00	8.25@ 8.85
Heavy (250 lb. up)	8.00@ 9.25	9.25@11.00	9.00@10.00	
Medium (200-250 lb.)	8.65@ 9.60	9.25@11.00	9.00@10.10	
Light (150-200 lb.)	8.00@ 9.65	9.50@11.00	9.25@10.25	8.30@ 9.00
Light lights (130-150 lb.)	7.70@ 9.55	9.50@10.00		
Smooth packing sows (250 lb. up)	7.30@ 8.10	8.25@ 8.75	7.75@ 8.25	6.00@ 6.75
Rough packing sows (200 lb. up)	6.80@ 7.70	7.75@ 8.50	7.00@ 8.00	5.50@ 6.00
Medium to choice pigs (130 lb. down)	6.50@ 8.75	9.00@10.75	9.25@ 9.75	
Stock pigs		9.00@ 9.75	9.00@ 9.25	
SHEEP AND LAMBS.				
Medium to prime lambs (84 lb. down)	10.75@14.00	9.00@10.50	9.50@10.50	10.00@11.00
Culls and common lambs	8.50@11.75	7.50@ 9.50	7.00@ 9.50	7.00@10.00
Medium to prime yearling wethers	7.75@11.50	7.00@ 8.00	6.00@ 8.00	5.85@ 6.85
Medium to prime wethers	5.00@ 9.50	5.00@ 7.00	5.00@ 6.50	4.60@ 5.60
Medium to choice ewes	3.75@ 7.00	3.00@ 5.00	3.00@ 5.50	3.35@ 4.35
Culls and common ewes	1.00@ 3.75	2.00@ 3.00	1.50@ 3.00	2.00@ 3.35
Feeder lambs	11.00@13.90			

The Hog Raisers Prospects

(Continued from page twelve.)

question is whether business depression is likely to occur before the adjustment of hog production to smaller volume is complete. Opinions of supposedly competent authorities are strangely divided as to when such a depression will occur, but relatively high purchasing power is likely to prevail in the cities well into 1924, at least. On the other hand, domestic consumption has probably about reached its upper limit except as it is stimulated by low prices at retail.

With low prices prevailing, Europe will take a lot of pork and lard, but if prices should rise to a point that would be substantially profitable to the grower the volume of exports undoubtedly would decline.

Foreign buying power remains extremely low and Germany, our chief lard customer, is in a sorry plight, with over 1,000,000 paper marks required to buy a pound of lard in our markets, to say nothing of the transportation and distributing cost. In short, we are able to supply with pork about 20,000,000 more people than are in the United States, but that number of good customers is not to be found abroad.

The short range view of prices is dominated by seasonal conditions of supply. Receipts always are lightest from the middle of August to the end of September and prices usually reach the year's high point at that time. Furthermore, this is the season when the demand for lard and cured meats picks up and packers are credited with being willing to see an advance in hog prices in order to help the sale of the products stored away earlier in the year.

Spring pigs usually begin to troop to market early in October when prices can be expected to drop down to a lower level. Judging from the market's recent performance, that level should not be a great deal lower than last year for a number of months, at least.

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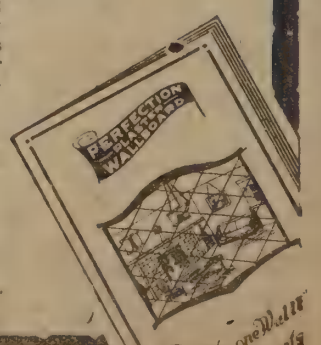

WESTERN WALLBOARD COMPANY

4527 9th Ave. So., Seattle, Wash.

The one Wall it needs

Cattle Ranch to College

(Continued from page fourteen.)

one he knew. He asked continually for work, and at last, after a particularly trying day, heard of a restaurant where a dishwasher was wanted. He went there at once, but was told that the boss would not be there till evening; later he called again and was told that it was still too early. The restaurant was set back of a saloon, which also bore the legend, "Licensed Gambling House." Instead of going away to return again, John determined to wait. He loitered around the barroom, sick at heart. It was not a pleasant place to wait in; it had no attractions for the boy, accustomed as he was to open-air life. Several tables were scattered about, and at these sat the gamblers, their faces stony and expressionless, perfectly calm, no matter how luck turned the result of long and severe discipline. It seemed as if "the boss" would never come, and John was about to give up when he chanced to look at a table in a far corner and saw, he thought, a familiar face. He was all alertness in an instant, and went over to make sure. Yes, it was Tom Malloy, John's instructor in "the noble art of self-defense." How glad he was to see him! Yet he must not interrupt, for Tom was playing cards for a considerable stake. He must wait and watch his chance to speak. Tom won steadily, and soon the boy became so absorbed in the game that he forgot all about the dishwashing; a friend was involved, so he "took sides," at once. One by one Malloy's opponents dropped out, remarking that it was "Malloy's night," till he alone remained at the table. Raking the chips into his hat he went over to the bar to turn them into the money they represented; John followed, and when the currency was being counted out he approached:

"Hello, Tom," he said.

"Why, hello, kid," answered the man carelessly.

"Don't you know me?" said John, rather hurt at this reception. "I'm John Worth; you worked for my father down in Dakota."

"The deuce you say! You little John Worth? Not so little, either," said Tom in a breath. "Where'dyer come from! What you doin' round a gamblin' house! It's no place for you."

John remembered his mission and explained.

"Job? Well, I'm just the man to get you one," said Tom cordially. He went back to the restaurant door and called a waiter to him. "Tell Albert I want to see him," he ordered. Albert, the restaurant keeper, soon appeared. "I hear you want a man," Malloy began. "Here's a boy who's as good as any man and an old friend of mine; if you've got a good job, give it to him."

Malloy was a leading character among the gamblers of the town; he won freely and spent freely, and was, therefore, to be propitiated. Albert graciously admitted that he had a job and that John might have it; he even went so far as to say that "sure he would make a place for a friend of Mr. Malloy's." So it was arranged that the boy was to begin work the next day.

The two passed out together, and Tom noticed the condition of the boys' clothes; they were dusty, torn in many places, and generally disreputable looking.

"Those all the clothes you have?"

John nodded.

"Well, I'll see if I can't get you fixed up tomorrow."

True to his word, John's friend in need took him to a clothing store and saw to it that he was supplied with a complete outfit.

John was fagged out as he had never been before in all his life; he looked at himself in the glass, feeling awkward and clumsy and wishing his face wasn't so big and red under the small derby hat. He couldn't get used to that hat, so he slyly rolled up his big, old felt one and tucked it under his arm when the left the store. Before Malloy parted from him he made him promise that he would call on him if he had any trouble or did not get along with Albert.

John began work at once. He yanked off his new coat, rolled up his shirt sleeves and started in washing dishes as if his life depended on it. It was a way he had when anything had to be accomplished.

For several months the boy stuck to his job, working steadily and well. The town, or at least the meaner part of it, became very familiar to him. Schools, churches, concerts and society events abounded, but they might have been in another planet so far as John was concerned. The saloon, the "Licensed Gambling House," the cheap theater and the back streets were his haunts. The rough teamsters, miners and gamblers were his associates. Tom Malloy was his hero; the man's generosity and kindly spirit won the boy's heart, but the former kept a strict watch over him for all that, and it is doubtful if John could have got into very bad habits if he had desired. The boy soon learned to know all the celebrities of the underworld in which he lived: Peter Aston, or Porker Pete, "handy with his gun"; Charley, or Snoozer, Johnson, also known as "Gain," who played a "close, hard game"; Tom Malloy, with the widespread reputation of being a man "hard to lick."

The class John associated with was a restless lot, seldom staying long in one place, and soon the same spirit infected him. He longed for the open air and open country; the interminable walls of the city oppressed him. It was with great interest, therefore, that he listened to a chance acquaintance who told of a new job on railroad construction he had secured. John asked several questions and learned that many men were needed, and that there might be a chance for him.

"Where's the contractor?" he asked suddenly, his mind made up. "I'm goin' to ask him for a job."

"I met him half an hour ago at the 'Bucket of Blood,'" answered his new friend. "I'll go along with you; perhaps we'll find him there."

They soon reached the saloon with the sanguinary name, and luckily found the contractor. John stated his errand and stood while the man looked him over. "Perhaps you might work in the cookhouse," he said at length. "You're too light to drive a scraper."

"Yes, I could do that, but I don't want to. I want out-of-door work. Have you got a horse-wrangler yet?"

As luck would have it, the job John wanted was not given out, and, after telling of his experience, he was appointed night horse-wrangler.

To get a saddle and riding outfit was the next thing necessary, and this Tom Mallory lent him from the store of such things he had won at cards.

John found that to part from the man who had befriended him in his need was the only really trying thing in connection with leaving Helena. Squalid as were most of his associations with the place, he was really sorry to go away from Tom Malloy. The thought of being once more in the saddle, however, delighted him, and it was with a preponderance of joy rather than sorrow, therefore, that he clambered early one morning into the rough wagon that was to convey his party to the scene of operations and saw the city disappear in the distance.

Soon he would be astride of a horse, out in the open. No walls to encompass him, no roofs to shut out the sky what a glorious and inspiring thought it was!

(To be continued.)

Latest High Class Patterns for the Home

Please order the patterns you desire at least two or three weeks before you wish to use them. Desiring to obtain the latest high-class patterns for its readers, THE FARMER has made arrangements to have them sent direct from the east, and under present mailing conditions it takes about that time for them to reach you.

4302. Ladies' house frock. Cut in seven sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. A 38-inch size requires five yards of 40-inch material. The width at the foot is two and one-half yards. Price 10 cents.

4508. Child's dress. Cut in four sizes: 2, 4, 6 and 8 years. A 6-year size requires two and one-fourth yards of 27-inch material. Price 10 cents.

4354. Junior's dress. Cut in three sizes, 12, 14 and 16 years. A 14-year size requires four and one-fourth yards of one material 32 inches wide. Price 10 cents.

4489. Ladies' negligee. Cut in four sizes: Small, 34-36; medium, 38-40; large, 42-44; extra large, 46-48 inches bust measure. A medium size requires six and one-half yards of 27-inch material. Price 10 cents.

4272. Ladies' dress. Cut in seven sizes: 36, 38, 40, 42, 44, 46 and 48 inches bust measure. A 38-inch size requires three and seven-eighths yards of 54-inch material. The width at the foot is three yards. Price 10 cents.

4498. Girl's dress. Cut in four sizes: 6, 8, 10 and 12 years. It requires three and one-half yards of 27-inch material for an 8-year size. Price 10 cents.

4495. Misses' dress. Cut in three sizes: 16, 18 and 20 years. An 18-year size requires three and three-fourths yards of 40-inch material. The width at the foot is two and seven-eighths yards. Price 10 cents.

4507. Child's play dress. Cut in three sizes: 6 months, 1 year and 2 years. A 1-year size requires one and seven-eighths yards of 36-inch material. Price 10 cents.

4493. Ladies' apron. Cut in four sizes: Small, medium, large and extra large. A medium size requires three and one-half yards of 27-inch material. Price 10 cents.

4064. Girls' under garment. Cut in six sizes: 2, 4, 6, 8, 10 and 12 years. A 6-year size requires two and one-eighth yards of 36-inch material. Price 10 cents.

4491. Ladies' dress. Cut in six sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. A 38-inch size requires four and seven-eighths yards of 40-inch material. The width at the foot is two and one-half yards. If made with short sleeves five-eighths less material will be required. Price 10 cents.

2872. Boys' and men's shirt. Cut in 11 sizes: 13 1-2, 14, 14 1-2, 15, 15 1-2, 16, 16 1-2, 17, 17 1-2, 18 and 18 1-2 inches neck measure. A 16-inch size requires three and five-eighths yards of 36-inch material. Price 10 cents.

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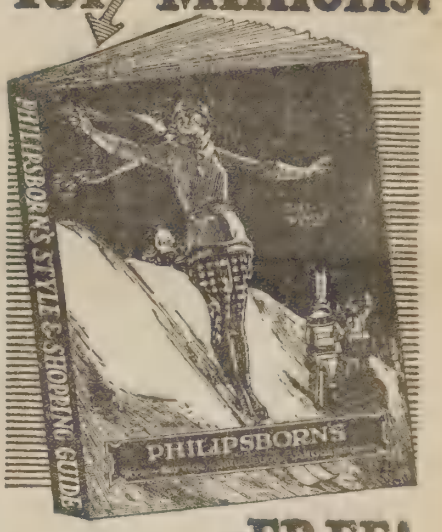

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[PLEASE WRITE PLAINLY]

Teacher—Willie, define puncture. Willie—A puncture is a hole in a tire, usually found a great distance from a garage or a repair shop. Herman Lehmkule, who lives in Island county, Wash., sends in the above joke. Herman had a good time on the Fourth of July. His home town won in the relay race, but lost in the ball game. He lives half a mile from the school he attends and walks to and from school with his brother, Fred Wheeler, and Fred's sister. (You are a Corner graduate when you are 12 years old, Herman. We shall be glad to receive your story.)

Annie Anderson's pet dog ate her pet rabbit, but she still has a kitten named Frolic and a hen with six chickens. Annie says it was hot this summer in Okanogan county. Lois Henderson is her friend. What key is the hardest key to turn? A don-key.

Edna Garrison, who used to live in Idaho, is now living in Washington. She is in the seventh grade at school this fall and enjoys her school work very much. She hasn't any pets.

Esther Boos, Adams county, Wash., says her baby brother, who is 8 months old, has four teeth and is creeping. Baby's name is Calvin Roscoe. Esther is learning to cook. She has made three jars of dill pickles. She sews, too, and has made two towels. She will be in the sixth grade when school commences.

Birthday Greetings

THURSDAY, September 20—Keith Jones, 11 years old; Eldora Lenhart, 8; Theodore Schaefer, 10; Freeda Dittmar, 10.

FRIDAY, September 21—Milda Holmes, 9 years old.

SATURDAY, September 22—Kay Leander.

SUNDAY, September 23—Raymond Lerbeck, 11 years old; Greta Martzen, 10; Myrtle Myers, 11.

MONDAY, September 24—Elizabeth Flechlin, 11 years old; Nadine L. Hutchens, 11; Alice Pauline, 11; Ellen Wagner, 10.

TUESDAY, September 25—William Goetzenberger, 11 years old.

WEDNESDAY, September 26—Ruth Campbell, 11 years old; Louis Chabre, 11; Florence Frye, 11; Irene Small, 9; Sadie Wirkkala, 9.

LETTERS WELCOMED BY AUNT NELLIE.

Among recent letters received by Aunt Nellie are those from cousins whose names follow. A few of these will be published each week in the regular edition of THE FARMER and others will appear from time to time in The Junior Farmer:

Ellen Nelson, Magdalene Lindh, Don Burbank, Alice Herndon, Esther Strunk, Julia Emma Rainbolt, Alma Tarter, Mildred Hedlund, Mildred Watson, Inez Watson, Edna Amend, Bertha Eagle, Helen Larson, Lucy Krebs, Delbert L. Rucker, Patricia M. Stuhr, Edith Johnson.

BEDTIME STORIES

By THORNTON W. BURGESS.

PETER WISHES HE COULD HELP.

Peter Rabbit couldn't sit still. He was so uneasy that little Mrs. Peter, who was little Miss Fuzzytail before she became Mrs. Peter, quite lost patience.

"Goodness gracious! What ever is the matter with you, Peter?" she demanded.

"Nothing," replied Peter.

"Then why don't you sit still?" She looked at Peter straight in the eyes until he felt that he just had to say something.

"I'd like to know what he's done for us," declared Mrs. Peter.

"I—I——" he stammered. Then abruptly he asked a question himself. "Say, Fuzzy, what can we do for Farmer Brown's boy?"

Mrs. Peter stared at Peter. "Why should we do anything for him?" she asked.

"Because he has done so much for us," replied Peter.

"I'd like to know what he's done for us?" declared Mrs. Peter.

"Why, lots of things," replied Peter.

"Don't you remember the nice cabbage leaves he left for us when food was scarce last winter? He doesn't hunt or try to trap us any more, nor let any one else. All the birds, at least a lot of them (Peter was trying to be strictly truthful) are up in the old orchard and Farmer Brown's berry patch and garden this very minute helping Farmer Brown's boy and—and—I want to help, too."

"What are they doing?" asked Mrs. Peter, looking interested.

"Catching all the bugs and worms that eat the leaves of the trees and spoil the fruit and the things that grow in the garden. I wish I liked bugs, but I don't. Bah!" Peter made a wry face and Mrs. Peter laughed.

"I'm glad you don't," said she. "Ugh! It makes me crawl all over just to think of eating those wriggly, crawly things! But I guess it's a good thing that some people like them or they would eat up all the nice, tender, green things we like so well."

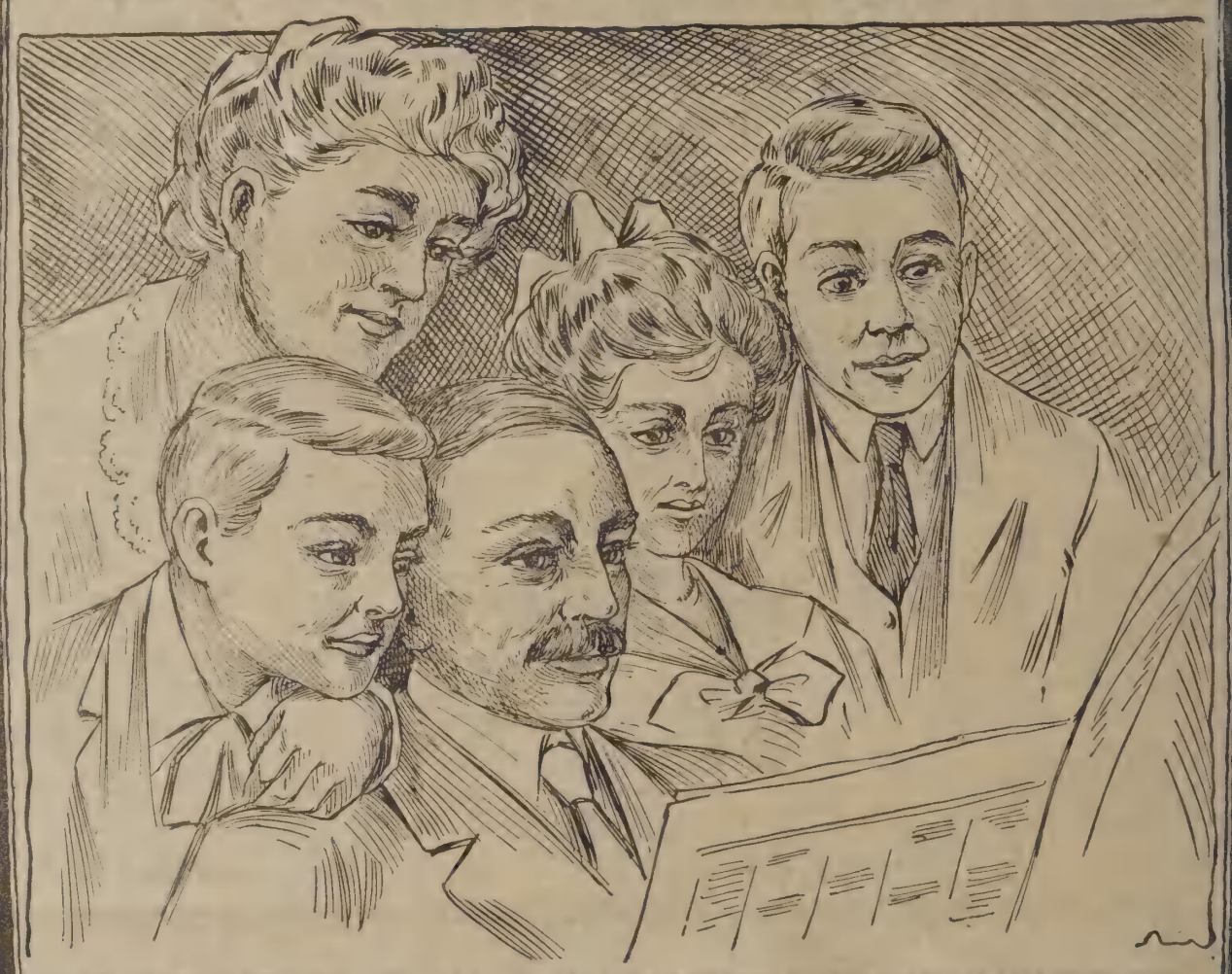
"Yes," replied Peter. 'I guess if it wasn't for the birds there wouldn't be any green things at all and without any green things we couldn't live. Why——" Peter paused and stared very hard out over the green meadows for a new and very surprising thought had popped into his head. "Why, I do believe, Fuzzytail, that the birds are doing something for us every day, and we just haven't known it! I never have supposed that the birds had anything to do with us. Of course, I've always liked to see them flying around and to hear them sing, but if you had asked me before this I would have said that we could get along very well without them. But now it has just come over me that without them we soon wouldn't be able to live at all unless we ate bugs ourselves. Ugh!" Peter shuddered and made another wry face so that Mrs. Peter laughed right out.

"This is a funny old world," continued Peter, "and I learn something every day. Just listen to the racket going on over in the old orchard! We can hear them way over here. They're having a great time, and they're doing it for Farmer Brown's boy. I wish I could do something for him." Peter's face clouded.

Just then he noticed a dark speck up in the air over toward the green forest. He knew what it was. It was Redtail the hawk. A sudden thought popped into his head. Those workers in the old orchard might be so busy that they would forget to watch out, and so Redtail might catch one of them.

"Goodby!" shouted Peter, and before Mrs. Peter could open her mouth to ask where he was going he was off for the old orchard, lipperty-lipperty-lip, as fast as he could go.—(Copyright.)

ENTIRE FAMILY ENJOYS THE WASHINGTON FARMER



The Washington Farmer is welcomed by the wives and daughters, the young men and boys on the farm just as it is by the farmer himself.

It keeps the entire circle of readers informed about the farm life of our own state, acquaints them with outstanding personalities, and keeps them posted on the problems and events the world over. The interests of the boys and girls are given plenty of space. The "family circle" with its constant interchange of experiences, ideas, opinions and methods makes a strong appeal to the housewife. The stories, illustrations and special features appeal to all.

It follows that the expenditure of $1 for a five-year subscription is an investment in entertainment and instruction for the entire family.

The subscription price is low on account of our cooperative subscription plan. Instead of employing agents to go from farm to farm to solicit orders, we ask our readers to send in their own orders at least 30 days in advance of the expiration date on the wrapper of your paper, and to include the orders of friends and neighbors with your own.

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Sept. 20, 1923.
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Makes Record Under Handicap

Giving over 75 pounds of milk out of only two teats, and those all she ever did give milk from, Steilacoom Fayne Cascade, a Holstein cow owned by the state hospital at Steilacoom, has made an unusual and unique record. Cascade was bred by the hospital and when she came to maturity her front teats were small and they never gave any milk. But she is well bred, being a daughter of Sir Fayne DeKol Inka, sire of Steilacoom Inka Posch, with a record of 26.610 pounds of milk and 1133 pounds of butter as a junior 4-year-old, while her dam, Cascade Jennie, has a seven-day record of 28 pounds of butter as a 4-year-old. So V. W. Richards, superintendent of the live stock and farm at the institution, decided to give her an official record. And Cascade produced 497.7 pounds of milk and 21.98 pounds of butter, or 17.584 pounds of butterfat, in seven days as a junior 4-year-old. Now she is on a year's semi-official test and promises to produce close to 20.000 pounds of mil kand 800 pounds of butter. Six of the registered herd are on full year test. Countess Beauty Korndyke, 12 years old, on since March 15, has already about 9000 pounds of milk to her credit and is a show cow. She is granddam of the heifer that stood second in the strong junior calf class last year at the Pacific international Stock show, and is dam of a 23-pound 3-year-old that is a show cow.

A new "open air" test barn that is greatly needed, and will be a beauty as well as most conveniently arranged, is being built. It is the hope of Mr. Richards and Mr. Stewart, as well as all others connected with the institution, that the next legislature will appropriate money for the building of a modern new dairy barn, for the old one, while looking well from the outside, has to be propped up now to keep it from falling down.

Blood Tests Disclose the Germs

"There have been a number of cases of abortion in Washington and there are times when it is hard to tell whether it is the result of contagious abortion or from some injury that the cow receives from other animals in the herd," according to Dr. J. W. Kalkus of the school of veterinary science at the State College of Washington at Pullman. Dr. Kalkus has recently been transferred to Puyallup, where he will be in the field to do investigation work among the dairy herds of western Washington in the hopes of finding more definite data regarding this disease.

"There is a general opinion that the time of aborting has something to do with whether or not the disease is of the contagious type or otherwise, but from our experience the time that the calf is dropped has nothing to do with the case. There may be times when the disease is present and the calf will be carried the full time and be born a healthy calf, when on the other hand there are cases where the cow will abort in a short time after pregnancy.

"There are some herds that have had no trouble of the kind, but when the blood test is made the germ will be found in many of the animals. In such herds there are usually a few cases of retained afterbirth, which is enough to cause suspicion that there is contagious abortion in the herd. If there are repeated cases of retained afterbirth, it is time that some steps were taken to find out if there is any such disease present."

ON HOLSTEIN HONOR ROLL.

Fourth from the top on the list of breeders of cows on the Holstein-Friesian honor roll for 1922-3 is Hollywood farm of Hollywood, Wash., with 206 points computed on the basis of milk and butterfat production by cows which were actually bred on the farm. The breeder highest on the list, A. C. Hardy of Brockville, Ont., has a total of 255 points, and the others ahead of Hollywood are both eastern breeders. A. E. Smith of Sumas, Wash., ranks 14th in the compilation, and others in the list are University of Idaho, William Bishop of Chimacum, Wash.; the late E. B. Marks og Yakima, Wash.; William McKeown of Gresham, Ore.; George W. Leighton of Boise, Idaho; Piet Bergsma of Ferndale, Wash.; H. C. Davis of Granger, Wash.; the late David Munroe of Spokane, Wash., and R. H. Tuttle of Walla Walla, Wash.

BARN COSTS $10,000.

What will be undoubtedly the finest dairy barn in southwest Washington is nearing completion on the farm of Albion L. Gile at Chinook. With stanchion room for 68 head of cattle, and with a test and calf barn and a completely equipped milk handling room adjoining, the new quarters for Chicona Guernseys will give Superintendent Floyd Reith new incentive to record making. The barn proper is 36x140 feet in size, with a Gothic roof which gives unobstructed loft space for 200 tons of hay. Floors and sides are of concrete; the stable is sealed throughout, and James equipment is used. The test barn will be 20x60 feet in size, with eight box stalls and room for 35 or 40 calves. The structure looms in plain sight of passersby on the new Ocean Beach highway. Its cost will exceed $10,000.

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Remember that none of these animals were purchased for show purposes, have all been in the herd three years or over, and with only two exceptions, the whole herd was bred at Hollywood Farm.

Hollywood Farm Hollywood, Wash.

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GOLD MEDAL JERSEYS

AT AUCTION, EUGENE, ORE. OCTOBER 5, 1923

Included in the offering are four cows with official GOLD medal records, one a world's record class leader (gold and silver medal), six cows with silver medals, young stock, both sexes, from medal cows, sired by bulls of gold medal ancestry. The pedigrees of the offering are full of gold medal production records. For the convenience of the buyers the sale will be held on the Eugene fairgrounds. Catalog being prepared gives details.

COL. J. W. HUGHES, Auctioneer.
Forest Grove, Ore.

OWEN THOMPSON, Blachley, Ore.
E. A. RHOTEN, Sale Manager, Salem, Ore.

LAWSON'S

ST. MAWES JERSEYS

AT AUCTION, OCTOBER 9, 1923

On the Lawson Farm, just east of McMinnville, twenty-eight head, including twenty-two head from the herd of G. W. Lawson and six offered by John Michaelbrook—cows, bred heifers, bulls; many with R. of M. records, others on test, all rich in the blood of St. Mawes-Rosaire Olga Lad. The offering includes daughters of such bulls as Dufranas Poppy, Gertie's Poppy's St. Mawes, St. Mawes Golden Poppy, Golden Poppy's St. Mawes, etc. Mark this date on your calendar as a good day to buy St. Mawes Jerseys. Catalog upon request.

G. W. LAWSON, JOHN MICHAELBROOK, Owners.
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E. A. RHOTEN, Sale Manager, Salem, Ore.

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This offering consists of 33 head of carefully selected animals from the herd that holds the world's record for butterfat production—19 cows averaging 685 lbs.

Included in the sale list are the medal of merit cow, Helma of Ashwood (903 lbs. fat) and two of her sons; the gold medal cow, Olga of Ashwood; the silver medal cow, Figgis of Ashwood and two silver medal daughters by St. Mawes of Ashwood; a dozen beautiful daughters of Pogis 99th of Hood Farm 39th—all out of medal winning dams; four choice daughters of Carry-on of Oregon and two of the best heifer calves from the recent importation of Reid & West.

The blood of the medal of merit bulls, Holger and Rinda Lad of S. B. predominates in this offering.

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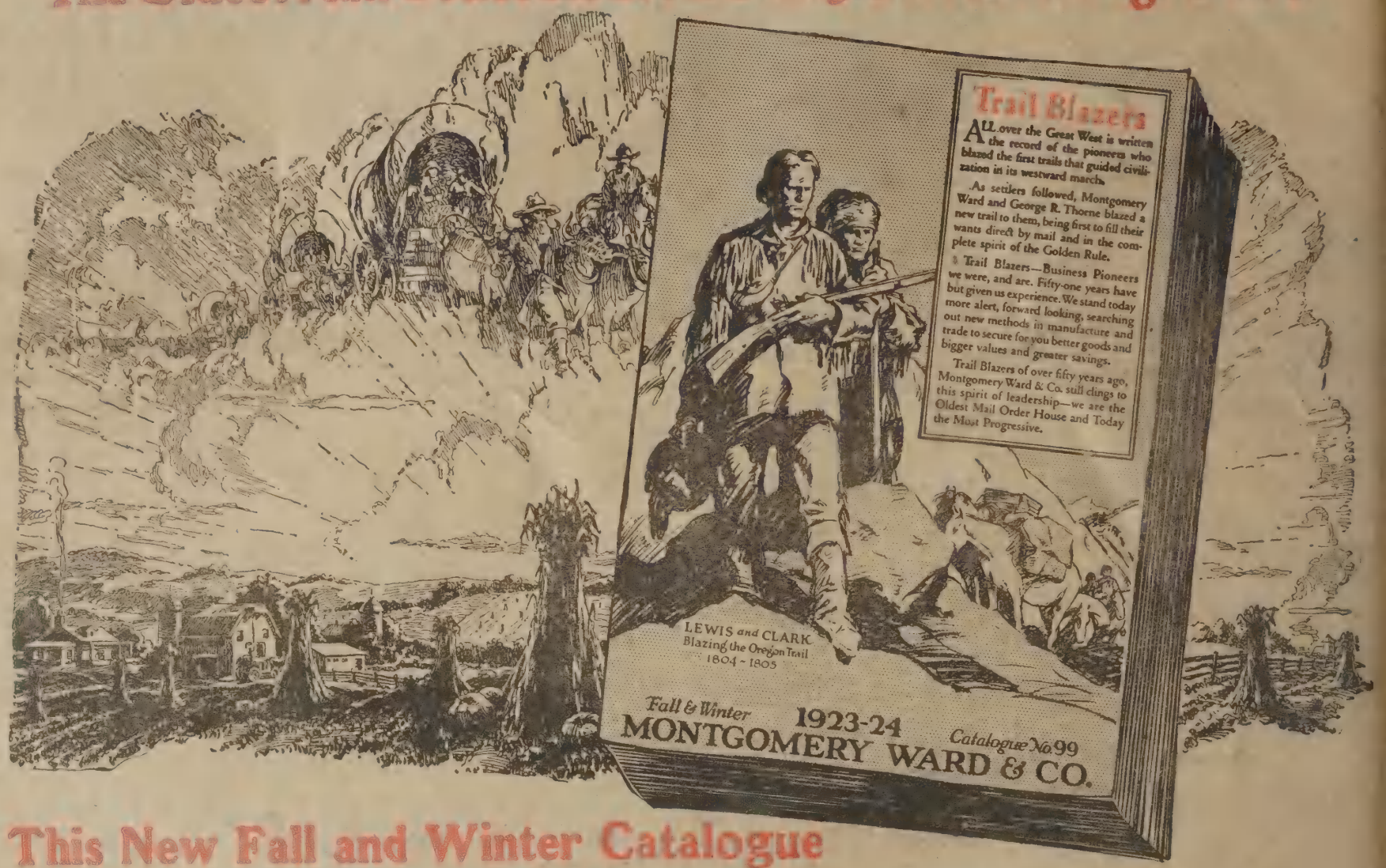

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THE WASHINGTON FARMER
ESTABLISHED 1894
SPOKANE. SEATTLE.

Fair Week Is a Better Homes Week

Mother, Baby and the Girls Receive More Than Usual Attention on the 1923 Circuit

"Here Is Where You Check Your Babies."

This sign, in letters large enough that any mother who wanted to visit the Washington state fair at Yakima last week unhampered could not fail to see it, meant exactly what it said and in a way indicated a feature not entirely new to the state fair, but much more thoroughly developed this year than previously. The day nursery, over which the sign appeared, was a place where babies were properly cared for at 15 cents an hour by competent nurses and Camp Fire girls under the supervision of the women's club of Yakima. From the standpoint both of the babies and the mothers, it certainly beat trailing or toting the tots around in the dust and dirt and noise that necessarily prevailed in the various divisions of the fair.

Frow now on, fairs must reckon with the baby.

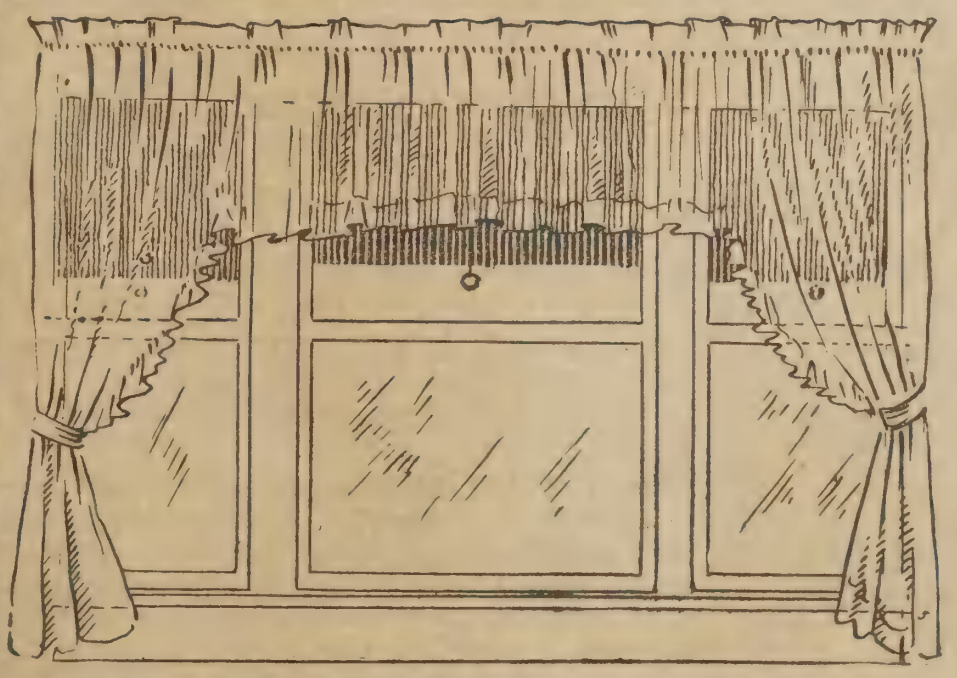
As one rushed back and forth between the baby clinic and the hog judging rings, stopping en route to find out which club team won the bread-baking contest, or what kinds of material had been used to make the draperies in the better homes booth of the state college extension service, the feeling could hardly be suppressed that maybe, after all, boys and girls and kitchens and living rooms were almost as important as pigs and calves and modernly equipped barns. The crowds at the fair actually seemed as keenly interested in them as in the live stock parade.

In addition to the day nursery above mentioned there were two other baby headquarters on the grounds, one a clinic under the supervision of Miss Mary Sutherland, extension nutrition specialist of the state college, and one a child hygiene booth prepared and presided over by Miss Florence B. Struthers, supervising nurse of the division of child hygiene of the state department of health. Almost anything that a mother (or even a daddy) might want to know about babies in general or a particular specimen could be learned in one or the other of these places, and not half as many questions were asked in all the live stock division of the fair as were propounded to those in charge of these two small departments. Every day was children's day at these places, and father and mother attended regularly.

But babies grow up and become men and women.

One evening of fair week a representative of The Washington Farmer was standing, pencil and note book in hand, looking into a little display room over which was the sign, "Making Better Homes."

"Is there anything I may explain to you about this exhibit?" a pleasant voice inquired. Upon assurance that there was, Miss Maude Wilson, of the state college extension service, proceeded to explain that it was a booth representing one of the advanced steps in girls' club work in which girls from 15 to 20 years old are given practical training in making the rooms of their homes serviceable and attractive at a minimum cost. The work consisted in refinishing old, but serviceable furniture, refinishing floors, working out appropriate color schemes and materials for walls, curtains and bedspreads and so on.



This sketch is suggestive of the simple, attractive way in which a window may be decorated as described in the accompanying article.

"You know," said Miss Wilson, "a girl often has more money to spend the

Continued on page two.

Pacific Coast Figgs Go to New York Through the Panama Canal—Page 5

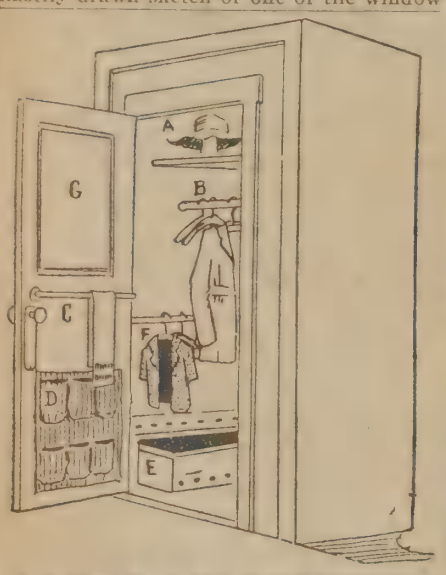
Fair Week a Better Homes Week

(Continued from page one.)

first year after she is married than later, and yet she knows less about how to spend it efficiently than she does after a few years' experience in housekeeping. One object of this phase of our work is to train girls so that they may get the most out of what they have on hand or can get easily with which to make their homes, either before or after they are married, convenient and attractive."

From there Miss Wilson led the way down the line past the booth where samples of club sewing, canning and gardening were on display to Miss Minerva Lawrence's curtain and draperies display. The purpose of this booth, too, was to suggest definite ways and means of improving the appearance and serviceability of the inside of the farm house—the place where the farm woman spends 90 per cent of her life. Miss Lawrence and her fellow-workers believe that dismal or unattractive surroundings are likely to result in dismal or unattractive lives, and that touches of brightness and beauty tend to inject brightness and beauty into the lives of the housewife and her family. Hence, there were on display in that booth a large number of simple bits of drapery and window trimming that should have inspired hundreds of women during fair week to undertake practical steps in home improvement. And the best of it is that the booth was primarily an announcement to the 55,000 fair visitors that the extension service is offering instruction along these lines to as many farm women as it is able to reach as it goes out into the multitude of communities of the state.

At the bottom of the cover page is a hastily drawn sketch of one of the window exhibits in the booth. The woodwork was painted a soft, restful color—one tending to brighten the room and yet not make too much display of the dust that it inevitably collects. The window shades (just common, dark green shades) were painted on the inside a color to match, or at least harmonize with, the woodwork. The outside was left the original green color. And then the curtain or drapery—just a simple, softly-colored piece of organdie, the color being in keeping with those of the wood and the blinds. The decoration of the window had cost little, yet its simple beauty was adequate to turn a housewife's day of discouragement to one of victory and cheer.



A, a place for a hat; B, mother's clothes rack; C, the towel rack; D, pockets for slippers, hosiery, etc.; E, ventilated drawer for shoes; F, kiddie's clothes rack; G, the mirror.

In the same booth were others as simple, inexpensive and attractive. One pair of curtains for a single window were made of crash, stenciled with a pretty, colored, waterproof design. Any woman could make it. Another illustrated what could be done with unbleached muslin with applique decoration. (For the benefit of some mere man who may be reading this, an applique decoration is one sewed onto or embroidered onto the goods.) And then there were cretonne curtains with sateen lining, and so on far beyond this writer's ability to narrate or describe. And the whole idea was to stimulate farm women and girls who do not have these simple and beautiful and serviceable things to want them, learn how to make them and then have them.

Then the scribe went next door and met Miss E. Belle Alger, clothing specialist and inventor of the women's work table—just as if women do not have enough work to do as it is. But this table was designed to lighten and make her work more efficient. The only one of them ever made was on display in Miss Alger's booth, having been made up by the Tacoma Sash and Door company as a special favor to her for demonstration on the fair circuit. One of these days The Washington Farmer is going to print a sketch and explanation of it. For now it is enough to say that it is a roomy table, especially intended for cutting and sewing, but equipped for a number of household uses.

Herewith we are reproducing a drawing of a clothes cabinet that was a prominent feature in Miss Alger's display. Note the higher bar on which father and mother (or at least mother) may hang their clothes. And then take a look lower down where kiddies' little coats and dresses may be properly put away. And still lower, observe the drawer for shoes with the rows of round holes for ventilation. On the shelf at the top are a number of things, the one showing being a pasteboard, cone-shaped device with a cushion of tissue paper on the top. It is better to put a woman's hat away on some such thing than to hang it up to draw out of shape or lay it down on a shelf to flatten and get dirty. And then on the inside of the door there are several things worth looking at. The pockets below are for slippers, hosiery, brushes and the like. The towel rack is for what towel racks are usually for; likewise the mirror on the upper part of the door. This cabinet is about three or three and one-half feet square and six feet feet high, is simple in construction and fits into any unoccupied corner.

We might go on indefinitely describing various features of home improvement education being offered by the extension service, but space limitations forbid. Possibly enough has been suggested to indicate that a fair can not get along very well from now on without making room for this last division that should have been among the first, the home betterment department.

Oakesdale Fair Next Week

Next week, October 5 and 6, Oakesdale will hold its annual produce and live stock fair. Prizes are offered for all classes of farm produce, including fruits ,vegetables, grains, poultry and live stock. A culinary and fine arts department is maintained for women and girls.

A. G. Woodward, secretary and manager, is providing evening programs, at which lectures on various form and rural problems will be given by authoritative speakers. The programs will include entertainment features also.

EXHIBIT CHESTER WHITES.

Frank von der Heyden of Wapato, Wash., wishes to correct a statement in a recent issue of The Washington Farmer, to the effect that he showed two O. I. C. hogs at the Southwest Washington fair. Mr. Von der Heyden says his exhibits were Chester Whites.

GENERAL ADVERTISING.

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The inventor, W. W. Johnson, 161 Union Ave., Portland, Ore., is offering to send a lamp on 10 days' FREE trial, or even to give one FREE to the first user in each locality who will help him introduce it. Write him today for full particulars. Also ask him to explain how you can get the agency, and without experience or money make $250 to $500 per month.—Adv.

In writing advertisers, be sure to say you saw their advertisement in The Washington Farmer.

GREAT NORTHERN EXPLAINS ITS OWNERSHIP

There are outstanding 2,494,730 shares of Great Northern stock, of the par value of $100.00 each. Each share represents an equal ownership in the property of the Great Northern Railway and each share has an equal voice in all shareholders' meetings, including those for the election of directors.

On December 31, 1922, these shares were owned by 44,314 men and women in all walks of life, and by organizations and institutions, as follows:

Number of men	24,416
Number of women	18,113
Insurance companies and miscellaneous corporations	1,616
Hospitals, charitable bodies, religious and educational institutions	169

The wide distribution of these holdings is shown in the following table:

28,449 held from 1 to 50 shares each.
12,579 held from 50 to 100 shares each.
Only 3286 held over 100 shares each.
The average holding is only 56.2 shares.

Dividends have been paid on this stock since 1891. From 1900 to 1921 the dividend rate was 7 per cent per annum. In 1922 this was reduced to 5 1-4 per cent and in 1923 to 5 per cent.

Many people in the territory traversed by the Great Northern are among its largest shareholders, and are therefore directly affected by its ability to pay a return on capital invested.

Most of the large life insurance companies have money invested in Great Northern securities. Therefore, nearly every one who holds a life insurance policy, and many depositors in savings banks, are partners in the operation and development of this railway, and their livelihood is partly or wholly dependent on its ability to pay. Many of you belong to this class.

LOUIS W. HILL,
Chairman of the Board.

Talk No. 7.

Yakima Fair Shows Breadth of State's Industry

Entertainment and Education Are Provided for Those Who Seek Either or Both

Everything that grows in the temperate zone was on display at the Washington State fair last week at Yakima—nearly everything. If there is a state in the Union in which a wider variety of staple crops and live stock thrive than in ours, we want to be commissioned to report its fair next year. From corn to cassabas; wheat to watermelons; apples to artichokes, the field and garden crops were there. Animals ranging in weight from five pounds to 2500, the small just as high class as the large, gave the judges in the live stock rings something to worry about. Cooking and canning displays by club members and grown-ups proved that the housekeepers know what to do with the meats, milk, vegetables, fruits and cereals that are produced in abundance and high quality in the state of Washington.

Aside from those special features that had to do directly with the problems of the housekeeper in her efforts to improve the home life of her family, which features are more fully referred to on the cover page of this issue, the displays in the agricultural and horticultural building were the most noteworthy of the fair. The live stock show was good, but, let it be admitted at the outset, not as good as a year ago. In most sections the quality of the animals was perhaps up to last year's standards; in some perhaps a little higher; in some lower. Last year there was not a stall or a pen vacant; this year there was room for more entries in every barn. And yet the live stock show was reasonably representative of the great industry of the state. Few of the prominent breeds were absent, the most notable being the Belgian horse. The Percheron was represented by only two head.

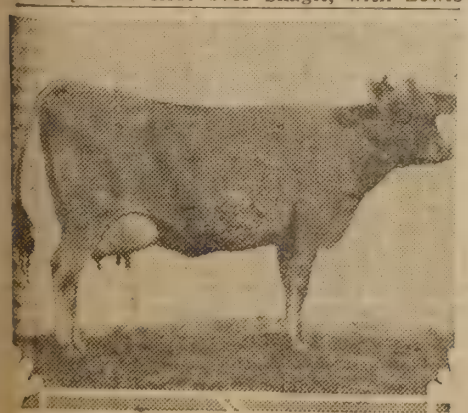
In the poultry department about 25 breeds crowed and cackled, and not a bird there but was sure he or she was sweepstakes winner. The show was high class and the coops were full. The Plymouth Rocks, the Wyandottes and the White Leghorns were perhaps strongest. A good display of geese attracted many, and the Thanksgiving birds filled several coops. Near by Mrs. George Shoup of the West Washington experiment station answered hundreds of questions for visitors in the model poultry house. No other educational feature of the fair but the baby clinic and the home demonstration booths attracted the attention that this practical poultry school did. Poultrymen and farm folk generally profited also by the two poultry booths of the state college extension service, the one showing how many hundred thousand dollars the producers of Washington would benefit were they to increase the production of their hens five eggs per year, and the other showing how the profit in egg production increases with the increase in the number of eggs laid per hen (the hen laying 120 eggs or less leaving no profit, the one laying 180 leaving a fair profit and the hen of 200 production and up making real money for the owner).

In this connection, there were interesting extension service booths in addition to these and the home demonstration booths mentioned in the cover page article. For instance, there was an informative drainage display prepared by Drainage Specialist A. B. Crane. Bee Specialist B. A. Slocum taught beekeepers and would-be beekeepers through an attractive display of honey, bees, bee equipment, flowers and so on, and George L. Zundel had his potato booth on display, urging in terms stronger than words the desirability of disease eradication and the use of better seed. Among other valuable displays of educational type were those of the state department of agriculture, showing diseases and pests of fruits; the U. S. department of agriculture; the state pure foods department and so on.

The Agricultural Show.

Two Yakima valley localities topped the contest in general displays of farm products, Naches Heights winning first and Wapato second. Grandview took third and Pomona fourth. Zillah, Broadway and Priest Rapids valley also exhibited good collections of products.

In the county competition Spokane county won first over Skagit, with Lewis third. The Spokane county display, prepared under the supervision of Horticultural Inspector John B. Wiley, was unusually complete and attractively arranged. It scored 94 to Skagit's 92, the latter county falling down principally on its fruit exhibit. Other counties in the competition scored as follows: Lewis, 81; Pierce, 79, and Assotin, 73, with Benton, Clallam, Jefferson and Kitsap completing the competition in the order given. Of the nine counties with displays, three were East Side and six West Side.



Brighter Dawn, Midfields Farm's senior and grand champion Jersey cow at the Washington State fair.

Individual Winners.

The following were individual winners in the various classes of produce, as indicated:

Wheats—Sheaf winter wheat—J. M. Armstrong, Manette, Wash.; J. N. Gould, Burlington, Wash. Sheaf spring wheat—A. M. Kearns, Selah, Wash.; J. F. Butler, Burlington, Wash. Hard winter wheat—J. M. Armstrong; Forest Fisher, Mount Vernon, Wash. Soft winter wheat, Turkey red—H. C. Doepke, Fairfield, Wash.; Ed Hunter, Burlington, Wash. Any other soft winter wheat—J. N. Gould, Ed Hunter. Early Bart—J. N. Gould. Wheat special—Bluestem—H. C. Doepke. Macaroni wheat—J. M. Armstrong, J. F. Butler.

Corn—White Dent—Mrs. W. H. Passmore, Yakima, Wash. Yellow Dent—Ora F. Gregg, Mabton, Wash.; James Baxter, Granger, Wash.

Oats—Best sheaf oats—J. F. Butler, J. M. Armstrong. Swedish select oats—J. F. Butler. Any variety oats—J. F. Butler.

Barley—Best sheaf barley—J. M. Armstrong, J. F. Butler. Six row barley—J. M. Armstrong, J. F. Butler.

Rye—Best sheaf rye—J. M. Armstrong. J. F. Butler.

Timothy—Sheaf timothy—J. F. Butler.

Clover and alfalfa—Sheaf alfalfa—J. F. Butler, J. M. Armstrong. Sheaf mammoth clover—J. M. Armstrong, J. F. Butler. Sheaf Alsike clover—J. F. Butler.

Sunflowers—Largest head stalk—M. W. Luckenbach, Yakima, Wash.; Mrs. R. N. Harrison, Yakima, Wash.

Best display Washington grown seed—J. F. Butler.

Many Show Vegetables.

Vegetables—Kale—W. H. Heimsoth, Pomona, Wash. Mangelwurzels—Conrad Peck, Yakima, Wash. Pumpkins—W. M. Johnson, Harwood, Wash.; Dana Alexander, Yakima, Wash.; Conrad Peck. Beans—O. J. Oder, Yakima, Wash.; Orvin Young, Yakima, Wash.; J. O. Jeffrey, Johnson, Wash.; F. W. Bidwell, Yakima, Wash.; A. M. Kerns, Selah. Beets—W. H. Heimsoth; Deccio Bros., Yakima. Carrots—Deccio Bros.; Christ Bayer. Cabbages—W. H. Heimsoth. Cantaloupes—George Kehuchi, Wapato, Wash.; Conrad Peck, Deccio Bro. Celery—Spokane Vegetable Growers, Spokane, Wash. Cucumbers—W. H. Heimsoth; M. C. Starcher, Fruitvale, Wash.; Deccio Bros., A. M. Kerns. Egg plant—Deccio Bros., M. C. Starcher. Horseradish—Jacob Stelling, Puyallup, Wash.; G. Stelling, Sumner, Wash. Kohlrabi—W. M. Heimsoth, M. C. Starcher. Lettuce—M. C. Starcher, Deccio Bros. Onions—W. J. Lee, Yakima, Wash.; Deccio Bros.; J. F. Perry, Kennewick, Wash.; Spokane Gardeners; W. M. Heimsoth; S. J. Marshall, Granger, Wash.; M. C. Starcher. Peppers—Hilda Meystre, Naches, Wash.; Deccio Bros. Popcorn—Alfred Hicks, Yakima, Wash.; M. C. Starcher. Radishes—Deccio Bros.; W. H. Heimsoth. Rhubarb—Mrs. R. N. Harrison, Yakima, Wash.; Mrs. H. B. Doust, Yakima, Wash. Salsify—M. C. Starcher. Squash—W. H. Heimsoth; Deccio Bros.; M. C. Starcher; Mrs. Fred Nelson, Yakima, Wash.; Conrad Peck; S. J. Marshall. Sunflower head—S. J. Marshall, Christ Bayer. Sweet corn—W. M. Heimsoth, M. C. Starcher. Swiss chard—Hilda Meystre, W. M. Heimsoth. Tomatoes—Deccio Bros., F. W. Bidwell. Watermelons—Christ Bayer, George Kehuchi. Largest and best display of vegetables—Louis Deccio.

Potatoes—Netted Gem—D. A. Forest, Grandview; Spokane Gardeners. Best 12 Netted Gems—George Stanton, Marysville, Wash.; Spokane Gardeners. Best, any variety—George Stanton; Helmold Bros., Sumner, Wash. Collection, six varieties—W. M. Helmold, Sumner. Best bushel seed potatoes—D. A. Forest; Barnes & Ongram, Dayton, Wash. Best 12 Beauty of Hebron—W. M. Helmold. Best 12 Ohio—Spokane Gardeners. Best 12, six weeks—Spokane Gardeners. Best 12 Burbanks—W. M. Helmold.

The Apple Show.

Apples—Arkansas Black—H. O. Aiken, Wapato, Wash.; J. L. Lease, Zillah, Wash. Delicious—Paul Besser, Yakima, Wash.; H. O. Aiken. Golden Delicious—R. C. Knight, Yakima, Wash.; A. Clanssing, Zillah, Wash. Jonathan—W. E. Kitner, Wapato, Wash.; W. H. Mahara, Yakima, Wash. King David—Charles Snider, Selah, Wash.; O. G. Gardener, Yakima, Wash. Rome Beauty—C. Mihn, Spokane; O. G. Gardener. Red Rome Beauty—M. C. Starcher; A. A. Boggers, Yakima, Wash. Spitzenburg—Charles Snider, Christ Bayer. Stayman Winesap—J. Houser, Selah, Wash.; E. E. Zirkle, Harrah, Wash. Winesap—C. J. Staus, Wapato, Wash.; W. E. Kitner. White Winter Permain—G. A. Rutherford, Selah; M. C. Starcher. Winter Banana—A. N. Banks, Manson, Wash.; C. Mihn. Wealthy—C. Mihn. Wagener—E. A. Fisk, Yakima, Wash.; Charles Snider. Yellow Newtowns—W. L. Wright, Yakima, Wash.; Charles Snider. Crabapples—J. H. Gould, Buckley, Wash.

Other fruits—Peaches—A. N. Banks, Orvin Young, Yakima, Wash.; C. P. Cahoon, Yakima, Wash.; Oson Harrill, Yakima, Wash.; D. Wohler, Yakima, Wash.; J. E. Jones, Zillah, Wash.; A. L. Henson, Benton City, Wash.; W. R. McGalliard, Yakima, Wash.; A. Van Klinken, Zillah, Wash.; E. A. Fisk, Yakima, Wash.; Slappy, Yakima, Wash. Pears—A. N. Banks, Mrs. Robert Morris, Yakima, Wash.; W. H. Young, Yakima, Wash.; Christ Bayer; C. C. Wiher, Yakima, Wash.; J. Hansen, Selah, Wash.; E. A. Fisk; W. R. Krause, M. C. Starcher, C. Mihn; W. G. Simon, Yakima; Hilda Meystre. Grapes—O. C. Patch, Sunnyside, Wash.; Mrs. R. N. Harrison, Yakima, Wash.; W. J. Lee; Mrs. W. H. Passmore, Yakima, Wash.; W. M. Lee; E. E. Nostrant, Grandview, Wash.; V. L. May, Okanogan, Wash.; M. C. Starcher; E. V. Wyant, Grandview, Wash.; Orvin Young; Mrs. George Frim, Prosser, Wash.; E. A. Fisk; R. R. Wardall, Grandview, Wash.; E. J. Appel, Prosser, Wash.

Plums and prunes—A. N. Banks; Orvin Young; O. J. Oder, Yakima, Wash.; E. Remy, Yakima; W. L. Wright; M. C. Starcher; Albert Simpson, Selah, Wash.; W. M. Knight, Naches, Wash. Quinces—W. R. McGalliard; Mrs. True, Yakima, Wash.

Nuts—Almonds—C. P. Cahoon, Yakima, Wash.

Berries—Blueberries — Hilda Meystre, Naches, Wash.; F. W. Bidwell. Currants—M. C. Starcher. Strawberries—Hilda Meystre, A. M. Kerns.

The Poultry Show.

The following were winners in the poultry show in the breeds indicated, as selected by Judge William Coats:

Dark Barred Plymouth Rocks—Carl Carpenter, Machias, Wash.; A. E. Oliver, Buena, Wash.; Jacobson's poultry yards, Tacoma, Wash.; J. E. Horton, Spokane, Wash.

Light Barred Plymouth Rocks—Trututype Farms, Tacoma, Wash.; Boone Avenue poultry yards, Spokane, Wash.; Ray Leftwick, Tacoma, Wash.; A. E. Oliver; J. E. Horton, Carl Carpenter.

White Plymouth Rocks—Axel Wold, Seattle, Wash.

Columbian Plymouth Rocks—Jennie W. Gillard, Wapato, Wash.

S. C. Black Leghorns—C. I. Doll, Hillyard, Wash.

White Wyandottes—Frank Thompson, Spokane, Wash.; Bickert's poultry yards, Yakima, Wash.; William Bischoff, Lind, Wash.; James H. Nichols, Tacoma, Wash.

Buff Wyandotte—Fred A. Johnson, Tacoma, Wash.

Partridge Wyandotte—Fred A. Johnson.

Silver Wyandotte—Fred A. Johnson.

Rhode Island Reds—King Poultry Co., Seattle, Wash.; Manuel L. Matson, Buena, Wash.; Sam R. Robinson, Wenatchee, Wash.; J. E. Hartson, Spokane, Wash.; Mrs. M. C. Amsden, Spokane, Wash.; John Bakker, Yakima, Wash.; Mrs. G. H. Coney, Yakima.

R. C. Rhode Island Reds—Mrs. Stenna O. Bach, Olympia, Wash.; A. Melrose, Spokane, Wash.

Rhode Island Whites—McLean & Son, Sunnyside, Wash.

Light Brahma—Harold Bonds, Yakima, Wash.; H. L. Wilder, Yakima, Wash.

Partridge Cochin—V. J. Hemmert, Seattle, Wash.

S. C. White Leghorns—Fred A. Johnson; A. Greener, Spokane, Wash.; Mrs. Ed Johnson, Selah, Wash.

R. C. White Leghorn—J. G. Wilder, Everett, Wash.

Buff Leghorn—J. G. Wilder.

S. C. Light Brown Leghorns—Fred A. Johnson.

Silver Leghorns—Fred A. Johnson.

Silver Gray Dorkings—C. Dracup, Tacoma, Wash.

Red Cuban Games—Melvin Porter, Hillyard, Wash.

S. C. Buff Orpingtons—J. C. McGinnitie, Mount Vernon, Wash.; Mrs. J. N. Critzer, Spokane, Wash.; Lucy R. Scudder, Yakima, Wash.; L. M. Varney, Spokane, Wash.

S. C. White Orpingtons—John Sim, Red Lodge, Mont.

White Faced Black Spanish—Canyon Road poultry farm, Beaverton, Ore.; Robert Leibig, Sunnyside, Wash.

Silver Spangled Hamburgs—E. E. Enos, Spokane, Wash.; Fred A. Johnson; W. R. Krause, Yakima, Wash.

Turken—E. C. Vase, Selah, Wash.

Buttercups—R. Manning Palmer, Seattle, Wash.

Silver Campines—Mrs. J. N. Sheppard, Selah, Wash.; F. W. Hoffman, Spokane, Wash.; Jennie W. Gillard.

Blue Andalusians—Rudolph Knaack, Yakima.

Jersey Black Giants—R. Manning Palmer.

Capons—Carl Carpenter; T. J. Hartley, Richland, Wash.

Salmon Favorelle—J. H. Hennessey, Cle Elum, Wash.

Silver Seabright Bantams—A. E. Oliver, Fred A. Johnson.

Black Cochin Bantam—Fred A. Johnson.

Light Cochin Bantams—Fred A. Johnson.

Buff Cochin Bantams—Fred A. Johnson.

Japanese Bantams—Mrs. W. C. Kohlmeister, Seattle, Wash.

Brown Bantams—W. R. Krause.

Homer pigeons—Avery Fuller, Yakima, Wash.

Fancy pigeons—Avery Fuller.

White Indian Runner Oucks—J. G. Wilder.

White Indian Runner Ducks—Christ Bayer, Yakima, Wash.

Crested Ducks—Dolly Heidbreder, Yakima, Wash.

Moscovy Ducks—Alphonse Benjamin, Yakima, Wash.

White Pekin Ducks—W. R. Krause, Christ Bayer.

Toulouse Geese—John Bakker; Mrs. A. J. Rasinbaum, Tieton, Wash.; Christ Bayer; W. R. Krause.

African Gray Geese—I. J. Oder, Yakima, Wash.

Bourbon Red Turkeys—Mrs. W. E. Cole, Yakima, Wash.; Mrs. Seward, Yakima, Wash.

White Holland Turkeys—Mrs. U. P. King, Yakima, Wash.

Bronze Turkeys—T. J. Hartley, Richland, Wash.; Lucy R. Scudder.

Specials.

Best bird, Mediterranean class—A. Greener, Spokane, Wash., first on White Leghorn cockerel. Fred A. Johnson, second on White Leghorn hen.

Best bird, Asiatic class—H. L. Wilder, first on Light Brahma cockerel; second on Light Brahma pullet.

Best bird, American class—William Bischoff, Lind, Wash., first on White Wyandotte cockerel. A. Melrose, Spokane, second on R. C. R. I. cockerel.

Best bird, English class—Mrs. J. N. Critzer, Spokane, first on S. C. Buff Orpington hen. J. C. McGinnitie, second on S. C. Buff Orpington cock.

The Club Work.

The club department at the state fair this year created its usual interest, with scores of boys and girls from various parts of the state participating. The contests were under the general supervision of Miss Elmina White, specialist in club work. Winners in the various contests were as follows:

Dairy—First, Norman Refling, Snohomish; second, Crissie Jeuster, Milan; third, Peter Hendrickson, Forest.

Hogs—First, Clarence Swinthe, Chehalis; second, Edwin Pease, Usk; third, George King, Mabton.

Sheep—First, Walter Tornquist, Elma.

Beef—First, Harold Varnum, Mabton; second, Erling Hanson, Ellensburg.

Poultry—First, Clarence Glen, Elma; second, Pearl Caudill, Spokane; third, Fred Milliron, Tieton.

Garden—First, Frank Kinezek, Dryad; second, Lewis Cox, Tieton; third, Alfred Pease, Usk.

Potato—First, Gordon Brown, Spokane; second, Albert Hoagge, Olympia.

Bee—Robert Adair.

Canning—Leona McGuire and Hazel Schuffert, Olympia; second, Adrienne VanderGriend and Maurine VanderGriend of Lynden and Nancy Colyar and Josephine Moore, Cheney, tied.

Cooking—First, Gladys Smith, Montesano; second, Edna Jacot, Kennewick; third, Lores Sweaney, Curtis.

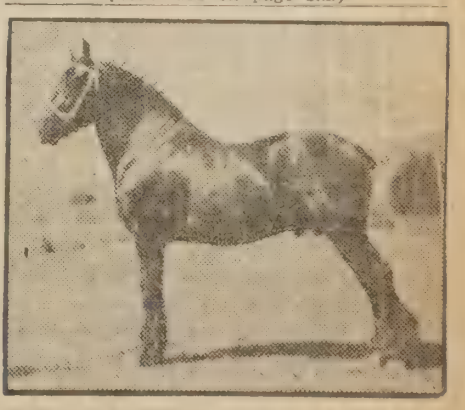
Sewing—First, Elvira Lethinen, Aberdeen; second, Helen Welch, Sunnyside; third, Elsie Bucklen, Arlington.

Grant county, which has only recently organized its club work, was represented by sewing and canning teams, which put on high-scoring demonstrations in the district contests. They were unable to meet all club requirements and so were not eligible for placing in the contests above reported.

Club Members Win.

One of the especially interesting features of the dairy show was the competition among club boys and girls for three dairy calves, one Holstein, one Jersey and one Guernsey. Governor Hart awarded a

(Continued on page six.)



Forest Prince, H. W. Merritt's senior and grand champion Shire stallion at the Washington State fair.

THE WASHINGTON FARMER

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New Wrinkle in Poultry Keeping

W. D. Buchanan, state college specialist in poultry, has a new wrinkle for poultry producers. He says: "Make the laying house bright, airy and attractive for the young pullet. If you don't, she may get the blues and refuse to lay."

Value of Certified Seed

An interesting demonstration of the value of certified seed potatoes was shown at the Kittitas county fair by George Michels of Ellensburg. He showed the product of 10 hills that had been planted with local seed which had been taken field run. They weighed only 16 pounds as compared with 74 pounds for the same variety of potatoes planted with certified seed. The size of the latter was better and the tubers were even and attractive for selling on the market.

A further improvement was made by grading the tubers for fancy table stock and another grade for select seed, both of which had been produced from certified seed. This pointed out how he was able to get a better price for all of his potato crop by grading the tubers before putting them on the market for sale.

Producing Wheat at a Loss

The fact might as well be faced by city dwellers that American farmers are not going on with the production of wheat at a loss. They may do it for a year or two, but in the long run farmers will not produce wheat or any other product at a loss, any more than manufacturers will make shoes, farm machinery, automobiles or any other article at a loss.

For the last two years agriculture has been out of gear with other industries, and we regret to say that the evil is not righting itself as we had hoped it would. Irving Fisher, professor of economics at Yale university, a leading authority, makes weekly reports on the purchasing power of the dollar. These reports show that the dollar is slipping down the scale again. Its present purchasing power is less than 60 cents, as compared with 100 cents just before the war. That same dollar, which will now buy for the farmer only about 59 per cent of what it would buy just before the war, will buy nearly as much agricultural produce as it bought before the war.

If that unfair condition applied to the products of factories, the owners of the factories would close their plants. But the farmers can not adjust themselves that quickly. They are of necessity bound to the soil. But they can do this: they can cut down their production; they can discharge the hired man, allow a part of their soil to lie fallow and run the old farm with their own labor.

The Educational Opportunity

Happy opportunity exists for many boys and girls in this state who are beginning their college courses.

Opportunity also remains for the many boys and girls who can not go to college. These opportunities call for harder work, longer look ahead, more self-discipline and have in them the making as a rule more vigorous men and women than usually come out of the colleges. This is not deprecating the value of a college education. It is simply saying that many of those who go to college do not apply themselves sufficiently to get the largest rewards of a college education.

If Abraham Lincoln could become one of the best educated men of his day with the meager opportunities which he had, then surely there is no boy in the state of Washington today who can not become educated in books if he so desires. Books are about the cheapest product left in these days. The state traveling library is willing to help any boy or girl and there is hardly a man or woman in any town but who will be glad to aid any boy or girl who shows real earnestness of purpose in becoming a well-read person.

But, then, books are not the sole source of education. A trained mind is one who has had to think out things for himself, he has had obstacles to meet, he has been obliged to endure hardship.

Any boy or girl who wishes to become educated in the best sense of the word has an opportunity if he or she has a mind to go after it.

Roosevelt Memorial Association

Here are the things that the Roosevelt Memorial association is doing:

Erecting a monumental memorial in Washington.

Establishing a memorial park in Oyster Bay. Maintaining a caretaker at Colonel Roosevelt's grave.

Erecting a memorial to the colonel of the Rough Riders on San Juan hill, Santiago de Cuba. Unveiling winter, 1924.

Assembling a great memorial library of manuscripts, books, pamphlets, magazine articles, newspaper clippings, photographs and cartoons relating to Roosevelt.

Establishing a Roosevelt museum at his birthlace for the exhibition of memorabilia.

Gathering biographical data on Roosevelt's life.

Arranging and calendaring Roosevelt's correspondence in the Library of Congress.

Issuing publications about Roosevelt. Compiling selections from his writings for use in schools.

Compiling a cyclopedia of Roosevelt quotations, similar to the "Jeffersonia Cyclopedia."

Compiling a Roosevelt day-book, similar to the Washington day-book, showing as far as possible where Roosevelt was each day of his life.

Preparing an exhaustive Roosevelt bibliography.

Editing Roosevelt's complete works for the standard collected edition.

Preparing text and slides for lectures on Roosevelt's life. Collecting moving picture films of Roosevelt.

Conducting an information bureau on Roosevelt for historians, lecturers, students and the general public.

The headquarters of the association is at 1 Madison avenue, New York city. Those interested in the work being done and desirous of assisting in financing it may send voluntary subscriptions to that address. The association will send its report on request to any one.

The Cooperative Movement

Farm and Ranch: Cooperatives are entering into a crucial year. Their accomplishments in 1923-24 will, in a large measure, spell success or failure for the present organizations. The plans of many of these organizations have received the unqualified endorsement of all those who have made a study of the economic situation our producers are facing. It is now up to the members of these associations to play fair with their officers and leaders. It is equally important that those in charge of the business of the associations should give their full confidence to every member and to conduct their affairs economically and efficiently. Members should be furnished a report of operations of their organizations in detail. Mistakes should be discussed in the open. In turn, members should condone these mistakes and give credit where it is due. Leaders should welcome constructive criticism. Much of it may appear to them to be unjustified and not constructive, but upon close analysis they probably will find something worthy of their consideration. Certainly they must not expect to be above criticism, for just as soon as any official gets into that frame of mind, he ceases to be of value to his organization. As a matter of fact, he becomes a positive menace.

Government Price-Fixing

St. Paul Farmer: The idea of government price-fixing is most alluring, and the debt to the wheat grower because of harmful price-fixing during the war has been generally recognized. The seriousness of the situation in which the wheat grower now finds himself has won over many advocates to the idea of emergency legislation which will take care of this year's crop. Except in the mind of the desperate wheat grower who faces ruin, price-fixing is believed to be a most dangerous expedient, full of peril even to the wheat grower.

Washington State Gleanings

Five thousand dollars has been appropriated in the tentative budget for Clarke county for 1924 to be used for the purpose of reviving the county fair, which has not been held in this county since 1914.

SEED GROWING IN SKAGIT.

More than 1000 acres surrounding Mount Turner, Skagit county, have been set aside for seed growing. It is stated that nearly three-quarters of the world supply of cabbage seed comes from this section.

WEST WASHINGTON FRUIT CROP GOOD.

Western Washington fruit and agricultural crops generally have had almost as good a season as eastern Washington, according to State Horticulturist Robinson. General garden and farm truck have also had a good year.

WHEAT AVERAGES 45 BUSHELS.

The wheat yield in the Molson district will average 45 bushels an acre, according to G. B. Avery, president of the Molson state bank. More than 50,000 bushels have been threshed. George Schleif had an average of 50 bushels an acre from 65 acres.

FARM FIRE; LOSS $5000.

The barn, granary and tool shed owned by Vernie Despaine of Edwall, with the season's crop of hay and an outside stack of hay, were burned the other day. The fire was caused by his small son playing with matches. The loss is about $5000, partly covered by insurance.

THRESHING MACHINE BURNS.

S. H. Evans' threshing machine, which was being operated in the Evaline neighborhood, near Winlock, burned the other night. A job of threshing had just been completed for S. E. Peterson of La Camas. The fire is thought to have caught near the feeder.

WALLA WALLA FRUIT SHIPMENTS.

About 1275 cars of soft fruit went to market from the Walla Walla valley last week, 382 being pears, with a value of $936,800. To date 4545 cars, valued at $3,272,400, have been shipped. Peaches totaled 1114 cars, out of an estimated crop of 1200. Totals on all fruits exceed earlier estimates.

WHETSTONE FARM BURNS.

Fire, supposed to have been of spontaneous origin destroyed the house, barn, windmill and shed on the J. E. Whetstone farm, just east of Montesano on the old Olympic highway, a few days ago, with a loss estimated to be between $5000 and $6000, none of which was covered by insurance.

HOP PICKING UNDER WAY.

Hop picking is well under way at the 135-acre yard of the Klaber Investment company at Klaber, 16 miles southwest of Chehalis, according to Gus Anderson, superintendent. The yield is turning out very well. Three hundred pickers are employed and are getting the crop in good shape.

DELEGATES TO DAIRY CONGRESS.

Governor Hart has named the following as delegates for the state of Washington to the world dairy congress, which opens at Washington, D. C., October 2, continues at Philadelphia October 4, and winds up at Syracuse, N. Y., October 5-10: John L. Smith, Spokane; J. B. Scollard, Chehalis; O. R. McKinney, Tacoma; Dr. A. Macrae Smith, Bellingham; N. C. Sears ,Todelo; A. L. Giles, Chinook; R. Christoferson, Seattle, and Ralph Tuttle, Walla Walla.

FILBERTS FOR COMMERCIAL USE.

That the culture of filberts for commercial uses in the vicinity of Chehalis is possible, is the belief of N. E. Britt, a Newberg, Ore., grower. Mr. Britt spent several days in Chehalis and vicinity recently, looking over the district. He has trees that were planted 15 years ago that are producing 2350 pounds of nuts an acre, and says that a ton to the acre from trees 12 to 15 years of age is reasonably certain.

FIGHT WHITE PINE BLISTER.

The forestry service is assisting in the statewide campaign against the white pine blister rust, which has reached Canada and is progressing toward the Idaho forests, according to A. H. Sylvester, supervisor of the Wenatchee forest. "The disease has not made any headway in this region and we are taking all precautions against it," said Mr. Sylvester. Posters with pictures showing the symptoms are being placed in prominent places and any one noticing these symptoms is requested to notify the forest service.

TO RAISE SHEEP IN ALASKA.

The state of Washington must do her part in developing the live stock interests of Alaska. At least Peter Jensen, stockman of the Toppenish district, in the Yakima valley, is to do his part. He will leave soon for Alaska, where he will engage in the sheep business. He has entered into an agreement with a live stock company to participate in a sheep raising project on the island of Unalaska. He will take 3000 sheep with him on the steamer when leaving Seattle for the northern land. He has signed up for a five-year stay in Alaska.

TOURISTS FROM EVERY STATE.

E. R. Patterson, caretaker of the Lewis and Clark state park, 12 miles from Chehalis, on the state highway, was at the Southwest Washington fair for a part of a day, taking that much time from his duties at the park. The park, of 520 acres, is maintained by the state and has such conveniences for campers as stoves, tables, free wood and water, etc. Mr. Patterson has a large number of trails already cut, as well as good driveways. He reported 2000 visitors for the month of August and says they came from almost every state in the Union and one from New Zealand.

PLAN BIG POWER PLANT.

Plans for a $2,000,000 power plant near a dam which it is proposed to construct in the canyon of the Wynooche river, 20 miles north of Aberdeen, were favorably commented on and are being considered by the water, power and light and finance committees of the Aberdeen city council following their submission at a meeting of the council September 12. J. L. Stannard, chief engineer of the Lake Cushman project for Tacoma, submitted a comprehensive report estimating that 27,000 horsepower could be developed at a cost not to exceed $75 per horsepower. Mayor H. E. Bailey said that he had assurance from firms for handling the necessary bond issue.

The Constitution

Widespread Outpouring of Belief in the Historic Document

Never since the constitution of the United States went into effect 134 years ago has there been such a widespread outpouring of belief in and veneration for that historic document as has taken place during the last week. Constitution day and Constitution week have called forth the profoundest sentiments of loyalty to our beloved country.

"We, the people of the United States, in order to
"Form a more perfect Union,
"Establish justice,
"Insure domestic tranquility,
"Provide for the common defense,
"Promote the general welfare, and
"Secure the blessings of liberty to ourselves and our posterity, do ordain and establish this constitution of the United States of America."

In order to form a more perfect Union.

Not to speak of the paramount need of union in government, every one of our readers will agree with us that farm troubles would be rapidly solved if farmers themselves could form a "a more perfect union."

To establish justice.

Justice between man and man—that is the age-long problem. It needs to be solved over and over again. Its solution demands the clearest brains and the whitest hearts. Governments stake their endurance on establishing justice.

To insure domestic tranquility.

Quarreling and fighting families do not get anywhere. Quarreling and fighting towns and cities do not get anywhere. Quarreling and fighting states soon come to an end. Quarreling and fighting is death to any organization among men whether it be in a political party or in a religious sect. Domestic tranquility gives every one an opportunity.

The preamble of the constitution of the United States has furnished texts for our ablest thinkers and the points brought out in it have by no means exhausted the subject.

History records that the Constitution was "done in convention by the unanimous consent of the states present the 17th day of September in the year of our Lord 1787 and of the independence of the United States of America the 12th."

The Constitution was declared in effect on the first Wednesday in March, 1789.

Pacific Coast Eggs by Panama

According to estimates of the Port of New York Authority the annual consumption of eggs in the port of New York district is 156,791,869 dozen.

The important place which eggs hold in the diet of that city may be realized from the figures of the average daily consumption of 429,567 dozen, or 5,154,804 eggs. In the metropolitan district there are almost 200 wholesale dealers in eggs.

New York is known as a "white egg market," although large quantities of brown eggs are consumed there. That market places a distinct premium on the white egg, ordinarily giving a preferential price of from 5 cents to 20 cents a dozen, averaging about 10 cents throughout the year.

The middle west is the great producing center for New York's eggs, but most of the white eggs sold in that city come from the Pacific coast. It is on the Pacific coast where soil and climate are ideally suited for egg production that the egg industry has been placed on the same scientific plane occupied by the other great staple food crops of the nation. The center of egg production is at Petaluma, Cal., which is to the egg industry what Detroit is to the automobile or Akron to tires. The flocks are of enormous size, many containing 10,000 to 20,000 hens and one having 40,000. Those raisers who produce eggs for the market do not hatch any chickens themselves; they buy chicks from the big commercial hatcheries to replenish their flocks. These are the first eggs to be produced scientifically on the factory plan and many egg producers in this part of the country have organized in cooperative societies to market their eggs.

Pacific coast eggs reach New York in splendid condition, due to the care with which they are packed and the improved methods of loading and handling cars by the railroads. They are shipped in refrigerator cars, insulated in winter to prevent freezing and iced in summer to remove the danger of spoilage. Breakage and other losses formerly ran as high as $1000 a car, but today it is unusual to have more than a nominal loss.

A complete list of the egg shipments to New York by states for 1922 is contained in the following table:

State.	No. of Cases	State.	No. of Cases
Alabama	7,938	New Jersey	134,279
Arkansas	8,825	New York	490,801
California	354,068	North Carolina	4,141
Connecticut	4,429	Ohio	514,248
Delaware	51,506	Oklahoma	15,430
Dis. Columbia	9,422	Oregon	14,911
Georgia	2,391	Pennsylvania	265,014
Illinois	1,378,846	Rhode Island	2,648
Indiana	726,323	South Dakota	30,066
Iowa	921,046	Tennessee	251,241
Kansas	221,829	Texas	65,036
Kentucky	143,380	Virginia	64,604
Maryland	83,611	Washington	143,175
Massachusetts	8,574	West Virginia	6,842
Michigan	99,713	Wisconsin	53,681
Minnesota	217,004	Parcel Post	25,786
Mississippi	3,713	Canada	12,829
Missouri	437,529	Miscellaneous	8,683
Nebraska	37,517		
Total			6,821,079

Manager Dixon of the Pacific Poultry Cooperative association has received a wire from New York announcing the safe arrival there of 10 carloads of eggs via the Panama canal from Portland. Not only were the eggs received in good condition, but they struck a very good market. Mr. Dixon says the new plan is a success.

How the Mighty Fall

Yet the Divine Spirit Stirring Man to Better Himself Survives

"How are the mighty fallen!"—II. Sam., i:25.

That biblical text came to mind as the writer reflected upon the distress in European countries as described in a series of articles by John F. Sinclair. Mr. Sinclair, who is an economist of note and has been an investment banker as well as a college professor, has returned from a study tour of Europe that carried him into 16 countries. He reports "an appalling condition, a visible sinking of the living of the people," and reaches the alarming conclusion that "modern civilization is afflicted with disease which may mean decay and death; not one country is affected, but scores of them."

How are the mighty fallen! Thrones have gone down in the wreckage of the World war; dynasties that had ruled great countries for hundreds of years are ended, and the members of former royal families are scattered over the face of the globe and reduced to poverty.

But that is not the real calamity. The world can well lose the thrones and crowns of monarchs. The real tragedy is the setting back of civilization, the dreadful lowering of the standards of living of millions upon millions of people the pinch of hunger where once there was plenty, the fact that hundreds of millions of men, women and children must shiver in winter and go insufficiently clad and nourished throughout the year.

Contemplating all that misery and poverty, one would be driven to a hopeless view if not for the fact that history abounds in instance after instance of the recovery of peoples from the destruction of war and the devastation of oppressive governments. Macauley, the famous English historian, emphasizes this reassuring fact in his discussion of the state of England in 1685. In chapter 3 of volume 1 of his celebrated history Macaulcy says:

"No ordinary misfortune, no ordinary misgovernment, will do so much to make a nation wretched as the constant progress of physical knowledge and the constant effort of every man to better himself will do to make a nation prosperous. It has often been found that profuse expenditure, heavy taxation, absurd commercial restrictions, conflagrations, inundations, have not been able to destroy capital so fast as the exertions of private citizens have been able to create it."

It remains eternally true that the recovery of civilization, the progress of nations, the salvation of the world from the wreckage of war, depend upon "the constant effort of every man to better himself." We are in the enjoyment now as never before of "the constant progress of physical knowledge."

If the divine spirit that through the long ages of history stirred "every man to better himself" has survived the horrors, the depressions and the discouragements of the great war, as we confidently believe it has, the nations of Europe will recover from the disease that now afflicts them, civilization will survive and mankind will continue to climb to the heights of progress and better things.

FARM BUSINESS AND MARKETS OUTLOOK

CATTLE prices have traveled an up and down course in the last few weeks, but have lost little ground in spite of the sharp increase in receipts since the range and pasture cattle movement started. Just now a sinking spell affecting the lower grades is in progress, following several days of advancing prices. Choice steers have held their recent gains with mature beeves against at $13 at Chicago and yearlings at $12.75.

Compared with a year ago most of the medium and all of the better grades of steers and she stock are higher, but the rest of the list is on about the same level except those on the cutter and canner order which are lower than in 1922. Veal calves are fluctuating wildly at present, with a downward trend probable in the next 30 days.

Cattle feeders are buying more freely right along. The movement to the country in August was about the same as last year, but in the week ended September 7 the 12 leading markets sent out 134,422 head against 115,547 head last year, 55,422 two years ago and 76,690 three years ago. With two profitable winters behind them, fat cattle now at a high level, thin steers but little higher than last year, a big corn crop maturing, and good fall pastures, feeders may overdo the game this year. It is doubtful if larger operations than last year are justified, as feed costs promise to be higher and no evidence of a broader demand for beef can be detected. Texas is believed to have only about 73 per cent as many heavy calves for fall delivery as a year ago.

Large Hog Receipts Due Soon.

The trend of hog prices in the next two weeks is uncertain, as receipts may shrink moderately or they may expand. Prices have been fluctuating rather widely of late and are now moderately lower than a week ago. After September a rapid increase in the run and some decline in values will be due.

Demand for hog products remains commendable. Clearances for export in the last three weeks totaled 67,000,000 pounds of lard and 66,000,000 pounds of hog meats, the largest since May. Stocks of hog products in storage are disappearing satisfactorily.

Lambs Higher on Big Run.

Combined receipts of lambs at seven leading markets have been mounting steadily for the last five weeks and last week were over one-fourth larger than a year ago. Prices reached the highest point since July, but are weakening at present, as the run continues to expand. In the last few years the peak of the fall movement has been reached almost invariably around the end of September.

Boston reported a noticeable spurt in wool buying last week. Mills are not receiving orders for goods in large volume, and are slow to accumulate stocks of raw material, but holdings of some spinners are small and they are obliged to buy. The London auction is firm at the opening advance, which is 5 to 6 cents above a basis at which wools could be imported here, so that confidence that our prices will be maintained is becoming general.

The Boston market is quoted as follows:

Wisconsin, Missouri and average New England one-half blood, 51@52c; three-eighths blood, 50@51c; one-fourth blood, 45c.

Scoured basis:

Texas-Fine, 12 months, $1.20@1.25; fine eight months, $1.10@1.15.

Oregon—Eastern No. 1 staple, $1.32@1.33; fine and fine medium combing, $1.25@1.30; eastern clothing, $1.15; valley No. 1, $1.15@1.18.

Territory—Fine staple choice, $1.30@1.35; one-half blood combing, $1.15@1.20; three-eighths blood combing, $1@1.05; one-fourth blood combing, 80@82c.

Canadian Wheat Depresses Prices.

Canadian wheat has been chiefly responsible for the decline in prices within the last 10 days, during which about half of the gain from the low point of the season was erased. The Canadian crop estimate of 470,000,000 bushels, or 88,000,000 bushels more than a month previous, made a decided change in the world's wheat situation and unsettled both domestic and export buyers as well as the speculative following which at the time was predominantly committed to the bull side.

While the Canadian estimate means an adequate supply of wheat in the next 12 months unless a calamity occurs in one or more of the southern hemisphere countries, a distinct tendency to exaggerate the size of the exportable surplus in North America is noticeable.

The new crops and carryover in North America are only 9,000,000 bushels larger than last year. Assuming the same rate of home consumption as last year in both countries and allowing for a normal carryover on July 1 next year, the surplus would be only about 35,000,000 bushels more than in 1922-1923, when net North American exports were 477,000,000 bushels.

If farm feeding of wheat is as extensive as now expected, exports of 450,000,000 to 475,000,000 bushels may be sufficient to clean up the supply. Estimates that a surplus of 550,000,000 to 650,000,000 bushels is available in North America are totally unjustified.

The United States alone can export about 160,000,000 bushels, based on present indications, plus an amount equivalent to any imports from Canada. In the first two and one-half months of the crop year our exports have amounted to about 48,000,000 bushels, which means that excellent progress has been made toward working off the surplus in this country.

Frost Catches Corn Crop.

Frosts early last week caught a great deal of immature corn over the northern part of the corn belt. The extent of damage is uncertain, but reports have been rather uniformly doleful, as many replanted fields needed another two weeks of ripening weather.

While primary receipts of oats thus far in the crop year have been larger than a year ago, they are below the 10-year average. In spite of substantial additions to the visible supply, it is considerably below normal. Oats are cheap compared with other feed grains and producers are disposed to hold back for farm use.

The range of cash grain prices for the week ended September 19 was as follows:

CHICAGO—Wheat—No. 2 red, $1.02@1.04; No. 3 red, $1.00 1-2@1.03; No. 2 hard, $1.03@1.09 1-2; No. 3 hard, 99c @$1.03; No. 4 hard, 97 3-4c@1.01. Corn—No. 2 mixed, 85 3-4@89c; No. 2 yellow, 86 3-4@89 1-2c; No. 3 yellow, 86 3-4@89c; No. 2 white, 86@89c. Oats—No. 2 white, 40@44 1-2c; No. 3 white, 38 1-2@41c; No. 4 white, 37@40 3-4c. Rye—65@72 1-2c. Barley—55@73c.

Seed and Feed.

The recent advance of about 20 per cent in clover seed prices seems to have discounted for the present the size of the crop, which is the smallest with one exception since 1915 and the market has declined slightly.

Small Gain in Hay Crop.

The September forecast of the hay crop was 88,000,000 tons, which represents a small gain over a month ago. It compares with 112,800,000 tons in 1922, however. Prices at most of the leading hay markets are firm, with a fair demand and light receipts. Alfalfa hay is scarce and higher at most markets. The south is said to be a less urgent buyer than a week or two ago, although stocks in southern markets remain small.

Fresh egg prices found still higher levels last week as the supply of fine graded stock became more limited.

Butter production is failing to show the increase so confidently expected by dealers earlier in the season and the market is firm, with advancing prices, as the supply is barely sufficient to satisfy the demand.

Trading in small lots was active in the cheese market last week at unchanged prices, but dealers were uninterested in large amounts.

Fruits and Vegetables.

The September forecast of the white potato crop was

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Fair at Yakima Shows State's Industry

(Continued from page three.)

purebred Holstein bull calf, that had won first in his class in the Holstein show, to Homer Mounser of Elma, who won the Holstein club judging contest. The calf was from the state herd at the Western State hospital at Steilacoom. Margaret Campbell of Spokane was awarded a purebred Jersey calf from the herd at Waikiki farm near Spokane as a prize for winning the Jersey club judging contest. A Guernsey calf given by A. L. Gile of Chicona farm, Chinook, was won by Chester Schlein of Mabton, who proved to be the best club judge of Guernseys. Twenty-eight boys and girls competed in the three contests, 14 in Holsteins, eight in Jerseys and six in Guernseys.

The Live Stock Show.

As stated previously, this year's showing of live stock was not as inspiring as was the great show and keen competition of a year ago, but it was a show worthy the prominence of that phase of the agricultural industry of the state.

Judges of the live stock show were: Beef cattle and milking Shorthorns—Frank Brown, Carlton, Ore. Holsteins and Ayrshires—Axel Hanson, Minneapolis. Guernseys and Jerseys—P. M. Brandt, Oregon Agricultural college. Horses—George M. Wilson, Rocklyn, Wash. Hogs—Ray J. Fox, Silverton, Ore. Sheep—Howard Hackedorn, State College of Washington.

Every class of live stock was reasonably well represented. Not the most showy from the viewpoint of the casual observer, but perhaps the most noteworthy of the entire show were the entries in the hog department. The six breeds of hogs common in the northwest were represented by first-class herds and individual animals. The Poland Chinas and Duroc Jerseys probably led in numbers, but, while their general quality was high, it did not exceed that of the Chester Whites, Hampshires, Berkshires or Tamworths. There were strong shows of each breed, as indicated in the awards in the swine department, which were as follows:

The Poland Chinas.

Boars: Aged boar—1, B. F. Kammerzell & Sons., Colfax, Wash., on Headliner; 2, Harold Van Wechel, Yakima, Wash., on Buster Clansman; 3, Kenneth E. Cain, Yakima, Wash., on Big Tim's Jap. Senior yearling—1, I. J. Oder, Yakima, Wash., on King Midas; 2, Kammerzell on K Big Bob. Junior yearling—1 and 2, Baker & Paddison, Yakima, Wash., on Columbia's Chief 2d (senior and grand champion) and Designer C; 3, Kammerzell, on Fashion Archdale; 4, Oder, on King of Mastodons; 5, B. B. & Ivan B. Fenton, Sunnyside, Wash., on Hillcrest Prince. Senior pig—1 and 3, Kammerzell, on Designer's Model 2d and Royal Pilot; 2, Oder, on Prospect King. Junior pig—1 and 2, Baker & Paddison on Washington Lad (junior champion) and Washington Prospect; 3, on Prior's Big Bob.

Sows: Aged sow—1, Kammerzell, on Clansman's Kind: 2 and 3, Oder on Cedal Lady and Lady Mastodon; 4, Archie Prior, Yakima, Wash., on My Pet. Senior yearling—1, Longknecht, on Moxien; 2, Oder, on Naches Queen; 3, Kammerzell on Miss Buster; 4, Prior, on Dorothy 1st. Junior yearling—1 and 2, Kammerzell on Archdale's Best (senior and grand champion and Archdale's Queen; 3, Longknecht, on Helen A. Wonder; 4, Fenton, on Hillcrest Lil; 5, Oder, on Miss Mastodon M. Senior pig—7, Oder, on Prospect Lass (junior champion); 2, Washington State college, on Cedar 3d; 3 and 4, Kammerzell, on Washington Queen 3d and Washington Beauty; 5, Longknecht, on Blanch. Junior pig—1 and 2, Baker & Paddison, on Washington Cedar and Washington Lady; 3, Kammerzell, on Arch Back Lady; 4 and 5, Charles Lampkin.

Herds and groups: Aged herd—1 and 3, Kammerzell; 2, Oder. Young herd—1, Baker & Paddison; 2 and 4, Kammerzell; 3, Oder; 5, Cain. Breeder's young herd—1, Baker & Paddison; 2, Kammerzell; 3, Oder. Get of sire—1, Kammerzell; 2, Baker & Paddison; 3, Oder. Produce of sow—1 and 2, Kammerzell; 3, Baker & Paddison.

The Poland China Futurity.

Junior yearling boars—1, Baker & Paddison, Yakima, Wash., on Columbia's Chief 2d; 2, I. J. Oder, Yakima, Wash., on King of Mastodons; 3, B. F. Kammerzell & Sons, Colfax, Wash., on Fashion Archdale; 4, B. B. & Ivan B. Fenton, Sunnyside, Wash., on Hillcrest Prince; 5, Archie Prior, Yakima, Wash., on Prior's Missouri Wonder 483039.

Junior yearling sows—1 and 2, Kammerzell & Sons on Archdale's Queen 1194172 and Archdale's Best 1194170; 3, George Longknecht, Yakima, Wash., on Helen A. Wonder 1197458; 4, Fenton on Hillcrest Lil 1184092; 5, Oder, on Miss Mastodon M 1206926.

Senior boar pigs—1, Kammerzell & Sons, on Designer's Model 2d 519877; 2, Oder, on Prolific King.

Senior sow pigs—1 and 5, Oder, on Prospect Lass and Miss Prospect; 2 and 3, Kammerzell, on Designer's Queen 1284608 and Washington Queen 3d 1255604; 4, Longknecht on Blanch 1285526.

Junior boar pigs—1 and 2, Baker & Paddison on Washington Lad 517909 and Washington Prospect 517907; 3 and 6, Longknecht, on Prior's Wonder 520133 and Bob Big 520137; 4 and 7, Kammerzell & Sons on Peter's Great Archdale 519881 and Fashion Clansman 519879; 5, Prior, on Prior's Pride 518475; 8, Oder, on Convincer.

Junior sow pigs—1 and 2, Baker & Paddison, on Washington Cedar 1278766 and Washington Lady 1278778; 3 and 4, Kammerzell & Sons, on Archdale King 1284602 and Checkers Girl 1284604; 5 and 6, Harold Van Wechel, Yakima, Wash., on Lady Mastodon 1282480 and Pollie Mastodon 1282486; 7 and 8, Longknecht on Georgia Top 1285528 and Orphan Girl 1285530.

Senior pig litters—1, Kammerzell & Sons on litter of Washington Queen 1131262; 2, Oder, on litter of Lady Mastodon 1049210.

Junior pig litters—1, Baker & Paddison, on litter of Cascade Cedar 1195330; 2 and 4, Kammerzell & Sons on litters of Peter's Grand Lady 1183614 and Clansman's Best 1259222; 3, Longknecht, on litter of Willey's Top 877912; 5, Van Wechel on Mastodon Maid 1156158; 6, Washington State college, on litter of Giant Price 1178408; 7, Prior, on litter of My Pet 1108594; 8, Oder, on litter of Lady Mastodon 1049210.

The Duroc Jerseys.

Boars: Aged boar—1, Sam Erwin, Yakima, Wash., on Yakima Pathfinder 2d; 2, Pease & Hartley, Usk, Wash., on Orion Critic. Senior yearling—1, B. W. Powers & Sons, Palouse, Wash., on Joe's Sensation (senior and grand champion). Junior yearling—1, Garfield Stock Farm, Garfield, Wash., on Comet Sensation; 2, Mayview Stock Farm, Johnson, Wash., on Mayview Giant I Am; 3, J. K. Couzins, Yakima, Wash., on Cherry Red Pathfinder; 4, S. E. Chaffee, Sunnyside, Wash., on Glencliff Chief; 5, Pease & Hartley, on Proud Orion Joe. Senior pig—1, Mayview Farm, on Lookout Sensation (junior champion); 2 and 3, Pease & Hartley, on Prince of Pathfinders 3d and Mammoth Sensation 2d; 4 and 5, Chaffee on Glencliff Pathfinder and Glencliff Billy. Junior pig—1 and 2, Chaffee on Glencliff's Best and Glencliff Leader; 3, Mayview Farm, on Mayview's Double Orion; 4 and 5, Philip Hitchcock, Sunnyside, Wash., on Gano's Traveler and Gano's Pathfinder.

Sows: Aged sow—1, I. J. Oder, Yakima, Wash., on Golden Best Yet; 2, Mayview Farm, on Mayview Joe Orioness; 3, Chaffee, on Miss Hazel 2d; 4, Couzins, on Pathfinder Belle; 5, Pease Hartley, on Wonder Lady Orion. Senior yearling—1, Mayview Farm on Mayview's Orioness I Am. Junior yearling—1 and 2, Mayview Farm, on Mayview Queen I am (senior and grand champion) and Mayview Queen I Am 2d; 3, Couzins, on Queen Orion Pathfinder; 4 and 5, Hartley & Pease, on Proud Princess and Josie Orion. Senior pig—1 and 5, Mayview Farm, on Mayview Orion Queen (junior champion) and Mayview Orion Queen 2d; 2 and 4, Pease & Hartley, on unnamed pigs. Junior pig—1 and 4, Mayview Farm, on Mayview Double Orioness 2d and Mayview Orioness 3d; 2, H. W. Turner, Sunnyside, Wash., on I Am Lady Orion Jr.; 3, Chaffee, on Glencliff's Prize; 5, Pease & Hartley, on Queen Orion.

Herds and groups: Aged herd—1, Pease & Hartley. Young herd—1, Mayview Farm; 2, Chaffee; 3 and 5, Pease & Hartley; 4, Turner. Breeder's herd—1, Mayview Farm; 2, Chaffee; 3 and 4, Pease & Hartley; 5, Turner. Get of sire—1, Mayview Farm; 2, Chaffee; 3, Powers & Sons; 4, Pease & Hartley; 5, Turner. Produce of sow—1, Mayview Farm; 2, Chaffee; 3, Powers & Sons; 4, Pease & Hartley; 5, Turner.

The Duroc Jersey Futurity.

Junior boar pigs—1, 2 and 3, S. E. Chaffee, Sunnyside, Wash., on Glencliff's Best, Glencliff's Leader and Glencliff's Commander; 4, Mayview Stock Farm, Johnson, Wash., on Mayview Double Orion; 5 and 6, Phillip Hitchcock, Sunnyside, Wash., on Gano's Traveler and Gano's Pathfinder; 7, F. E. Pease & Sons, Usk, Wash., on Wonder Orion; 8, H. W. Turner, Sunnyside, Wash., on Lady Orion's Boy.

Junior sow pigs—1 and 4, Mayview Stock Farm, on Mayview Double Orioness 2d and Mayview Double Orioness 3d; 2, Turner on I Am Lady Orion Jr.; 3, Chaffee, on Glencliff's Pride; 5, Pease & Sons, on Queen Orion; 6, 7 and 8, B. W. Powers & Sons, Palouse, Wash., on Red Giantess, Red Giantess 1st and Red Giantess 3d.

Litters of four—1, Chaffee, on litter of Miss Hazel 2d; 2, Mayview Stock Farm, on litter of Mayview Queen Orioness; 3, Powers & Sons, on litter of Sensation's Giantess; 4 and 8, Turner, 1st; 5, Pease & Sons, on litter of Wonder Lady on litters of I Am Lady Orion and Orion Lady Orion; 6, Chaffee; 7, Mrs. Tena Martin, on litter of Glencliff's Tena; 9, Chaffee.

The Chester Whites.

Boars: Aged boar—1, Frank Von der Hayden, Wapato, Wash., on Oak Prince. Senior yearling—1, C. M. Meenach, Sharon, Wash., on Sharon Buster (senior and grand champion); 2, Von der Hayden on Oak Prince 2d. Junior yearling—1, Von der Hayden on Tacoma Boy. Senior pig—1, Von der Hayden on Wapato Boy; 2, Meenach on Hank. Junior pig—1, S. L. Woodhouse, Ellensburg, Wash., on junior champion; 2, C. M. Meenach on Whirlwind; 3 and 5, Leonard Newman, Thorp, Wash., on unnamed pigs; 4, C. T. Meenach, Sharon, Wash., on Buster's Choice.

Sows: Aged sow—1 and 2, C. M. Meenach on Pet Benton and Marjorie; 3 and 4, Von der Hayden on Ruth and Silver Lady. Senior yearling—1, C. M. Meenach on May Belle; 2, C. T. Meenach on Lucile. Junior yearling—1, C. M. Meenach on C. M's. Choice (senior and grand champion); 2, Von der Hayden on Diamond 2d. Senior pig—1 and 2, C. M. Meenach on Margie (junior champion) and Pearl; 3, 4 and 5, Von der Hayden on Elm 1st, Elm 2d and Elm 3d. Junior pig—1 and 4, C. T. Meenach on Daisy and Pinkey; 2 and 3, C. M. Meenach on Min and Jaqueline; 5, Leonard Newman on unnamed pig.

Herds and groups: Aged herd—1, C. M. Meenach; 2, Von der Hayden. Young herd—1 and 2, C. M. Meenach; 3, Von der Hayden. Herd bred by exhibitor, get of sire and produce of sow—1 and 2, C. M. Meenach; 3, Von der Hayden, in each lot.

The Berkshires.

Boars: Aged boar—1, J. A. Simonson, Buena, Wash., on Crestland Bob (senior and grand champion). Senior yearling—1, Simonson on Buena Long Fellow. Junior yearling—1, Simonson on Monarch Sentinel; 2, J. Alva Bull, Ellensburg, Wash., on Emblem's Prince 7th. Senior pig—1 and 2, Fred H. Sinnes, Prosser, Wash., on Longview Rival (junior champion) and Longview Rival 2d; 3, Simonson on Buena King. Junior pig—1 and 2, Sinnes on Longview Rival 3d and Longview Rival 4th; 3, Simonson on Buena 3d; 4 and 5, Bull, on Sunset Demonstrator and Sunset Demonstrator 2d.

Sows: Senior yearling—1 and 3, Bull, on Grapewild Bernice 20th (senior and grand champion), and Escalon Artful Belle 34th; 2, Sinnes on Dominator's Royal Fashion 2d. Junior yearling—1, Sinnes on Monarch's Lady Laurel 3d. Senior pig—1 and 3, Sinnes on Longview Lady 2d (junior champion) and Longview Lady 3d; 2, Simonson on Buena Rose. Junior pig—1 and 2, Simonson on Silver Brand Beauty 4th and Silver Brand Beauty 5th; 3, Sinnes on Longview Lady 4th.

Herds and groups: Young herd—1 and 2, Sinnes; 3, Simonson. Breeder's young herd—1 and 2, Sinnes; 3, Simonson. Get of sire—1 and 3, Sinnes; 2, Simonson. Produce of sow—1 and 3, Sinnes; 2, Simonson.

The Tamworths.

The Tamworth show was made up largely by the herd of I. J. Oder, Yakima. Except for 1 and 2 in junior sow pigs, 1 in get of sire, 1 in produce of sow and junior champion sow, which were won by D. R. Canfield, Yakima, Wash., Mr. Oder won all awards as follows:

Boars: Aged boar—1 on Round Knoll Colonel 2d. Senior yearling—1, on Inauguration 2d (senior and grand champion). Junior yearling—1, on Colonel Columbus. Senior pig—1, on Prospector. Junior pig—1 and 2, on Prospect King (junior champion) and Prospect Lad.

Sows: Aged sow—1 and 2, on Sunnyside Belle (senior and grand champion) and Columbia Girl. Senior yearling—1 and 2, on Beauty and Julia. Junior yearling—1 and 2, on Miss Prospect and Prospect Lass. Senior pig—1 and 2, on Miss Bacon and Miss Bacon 2d. Junior pig—3, on Beauty's Choice.

Herds and groups—1 and 2, on aged herd; 1 and 2 on young herd; 1 and 2 on breeder's herd; 2 and 3 on get of sire, and 2 and 3 on produce of sow.

The Hampshires.

Boars—Aged boar—1 and 3, Hayes & Harter, Grants Pass, Ore., on Model's Designer and Nehawka Masterpiece; 2, J. M. Fruitts, Cambridge, Idaho, on Silver King. Junior yearling—1, S. E. Chaffee, Sunnyside, Wash., on Cherokee Monarch (senior and grand champion); 2, Fruitts on Tipton's Chief. Senior pig—1 and 4, Fruitts on Quargo Tipton Master (junior champion) and Rambling Kid 2d; 2 and 3, Hayes & Harter on Cherokee Premier and Cherokee Prince. Junior pig—1, Fruitts on Sourdough Jim; 2 and 3, Hayes & Harter on Nehawka Monarch and Nehawka Broadway.

Sows—Aged sow—1 and 3, Fruitts on Fruitts' Model (senior and grand champion) and Alabama; 2, Hayes & Harter on Bell Flower. Senior yearling—1, Hayes & Harter on Cherokee Belledora; 2 and 3, Fruitts on Goodenough and Midnight. Junior yearling—1 and 3, Fruitts on Silverbell and Silver Moon; 2, Hayes & Harter on Lady Princess Maid. Senior pig—1 and 4, Fruitts on Snake River Nellie (junior champion) and Spark Plug; 2 and 3, Hayes & Harter on Cherokee Cornflower and Cherokee Baska. Junior pig—1 and 2, Fruitts on Idaho You'll Do and Fruitts' Pippin.

Herds and groups—Aged herd—1, Hayes & Harter; 2 and 3, Fruitts. Young herd—1 and 3, Fruitts; 2, Hayes & Harter. Breeder's young herd—1 and 3, Fruitts; 2, Hayes & Harter. Get of sire—1, Fruitts; 2, Hayes & Harter; 3, Chaffee. Produce of sow—1 and 2, Fruitts; 3, Hayes & Harter.

(Continued on page twelve.)

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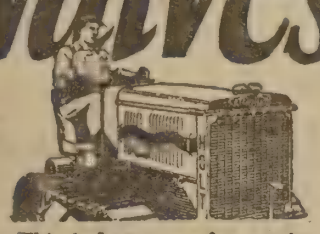

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If you wish to look over the country with a view to taking up land get an order from the nearest Canadian Government Agent for special rates on Canadian railroads. Make this your summer outing—Canada welcomes tourists—no passports required—have a great trip and see with your own eyes the opportunities that await you.

For full information, with free booklets and maps, write

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SOW ROSEN RYE

Because it far outyields the ordinary winter rye. This variety was introduced from Russia by the University of Michigan and in order to supply first class seed have secured a carload from Michigan.

SAND or WINTER VETCHES

Also all varieties of clover and grasses for fall sowing.

Write for prices, stating amount wanted. Samples furnished on request.

"Inland Seeds Are Quality Seeds."

The Inland Seed Co.

SPOKANE, WASHINGTON.

In writing advertisers, be sure to say you saw their advertisement in The Washington Farmer.

Just Folks

Sooner or later fate befalls all of us.

Right and wrong never lose their punch.

Saying may be as much of an action as doing.

Nothing is more shabby than assumed aristocracy.

Our civilization demands mechanical giving in charitable work. This reaches its height in the community chest. You give your dollar and a so-called impartial committee sitting in an office of a city business building portions out the lump sum of dollars given by all according to certain rules of arithmetic to the score of different agencies which are engaged in welfare work.

You are cautioned against feeding the tramps at your door, for you are told this advertises your home as a tramp feeding station, and many impositions will be made upon your good will. Just tell the wayfarer at your door that No. 410 Community Chest block will aid him if he can prove that he is not an impostor.

The successful church demands that you give your tithes to the business committee that apportions the amount to the salary of the minister, to the painting of the meeting house, the purchase of new hymn books and the payment of the interest on the debt.

Having donated to the community chest, the church treasury and the relief fund in your fraternal organization, the personal calls for aid which come to you are met with a grudging spirit, as your conscience is quieted by your regular mathematical donations.

And yet this mathematical and mechanical charity builds hospitals, supports homes for orphans and other wide-reaching needs of humanity, which would largely lapse if left to the individual attention of a people fed up on hurried work and hurried pleasures.

Now and then a visit to the hospital to which you have contributed might take the metallic taste out of your mouth. Even your taxes might for the moment be condoned if you found the old folks having quite comfortable days at the county farm.

Some years ago I visited one of these county farms and one of the happiest pictures in my memory was the sewing, knitting and fancy work "bee" participated in by several of the older inmates.

This is a mighty interesting contest that is waged between individuality and the collectism of the 20th century civilization. E A S

Bits of Fun for Everyone

Tough Luck.

"Just my luck," said the prisoner, as he threw the magazine across the cell in disgust. "Nothing but continued stories, and my execution's fixed for next Friday."—Key of the House.

That's the Place.

Teacher—Who can tell me the meaning of the word "leisure?"

Little boy—Please, miss, it's a place where married people repent.

No Bacon.

The young couple's cook was pretty as a picture, but her cooking was terrible, and one morning the bacon was wholly inedible.

"Dear," said the wife, "I'm afraid the cook has burned the bacon. You'll have to be satisfied with a kiss for breakfast this morning.

"All right," responded the husband gruffly. "Call her in."—American Legion Weekly.

Chicken Had Flown.

A popular Oklahoma city salesman recently married and was accompanied by his wife as he enterd the dining room of a Texas hotel famed for its excellent cuisine. His order was promptly served, but the fried chicken he had been telling his wife so much about was not in evidence.

"Where is my chicken?" he asked, somewhat irritably.

The dusky waiter, leaning over and bringing his mouth in close proximity to the salesman's ear, replied:

"Ef youse mean de li'l gal with blue eyes an' fluffy hair, she doan' work heah no mo'."

Knows Nothing at All.

Topsy—Do you know, daddy, I don't think mummy understands anything about children, really!

Daddy—What do you mean, Topsy?

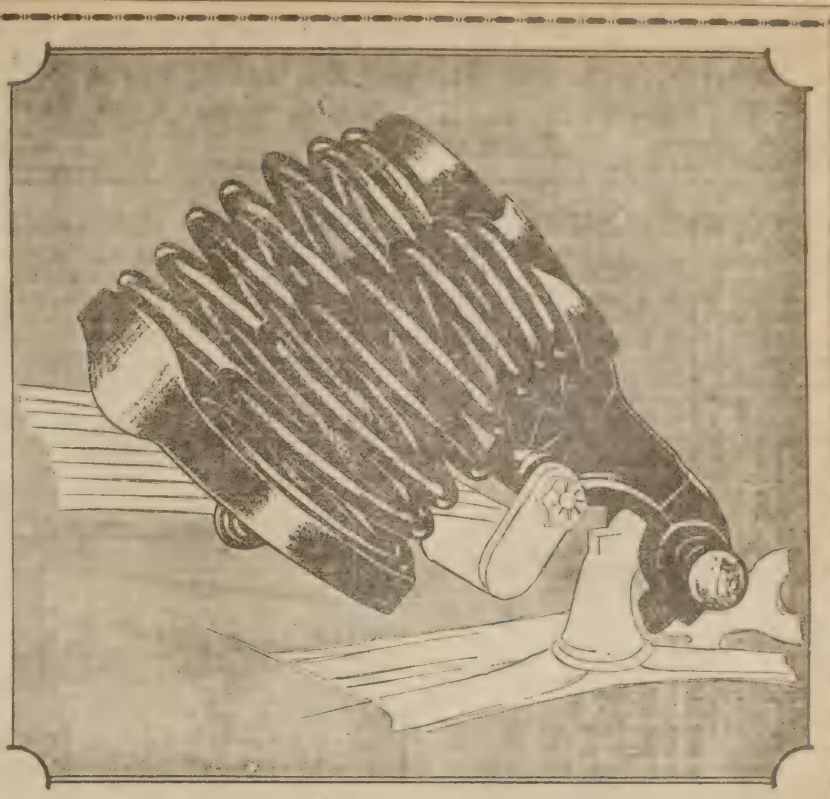
Topsy—Well, you see, she wants me to go to bed when I am wide awake and to get up when I'm awfully sleepy.—London Mail.

How Did He Know.

Freddie—Ma, what is the baby's name?

Ma—The baby hasn't any name yet.

Freddie—Then how did he know he belonged to us?—Edinburgh Scotsman.



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Write for "An Auto Biography." This new Hassler booklet, sent free on request, will grip you with its human interest, no matter what car you drive

Why is it that the farmer, with Hasslers on his Ford, is usually well-to-do?

Follow him to his farm and you will very likely find his place *kept up*—clean barn yard—fences in repair—machinery under cover—accounts properly kept—money in the bank—everything insured.

There is just one answer:

It is good business to protect and insure the life of fine machinery.

—and your Ford is the finest piece of machinery on your farm.

Think it over.

There is the proper type Hassler for every Ford model and there is a Hassler dealer in your nearest town.

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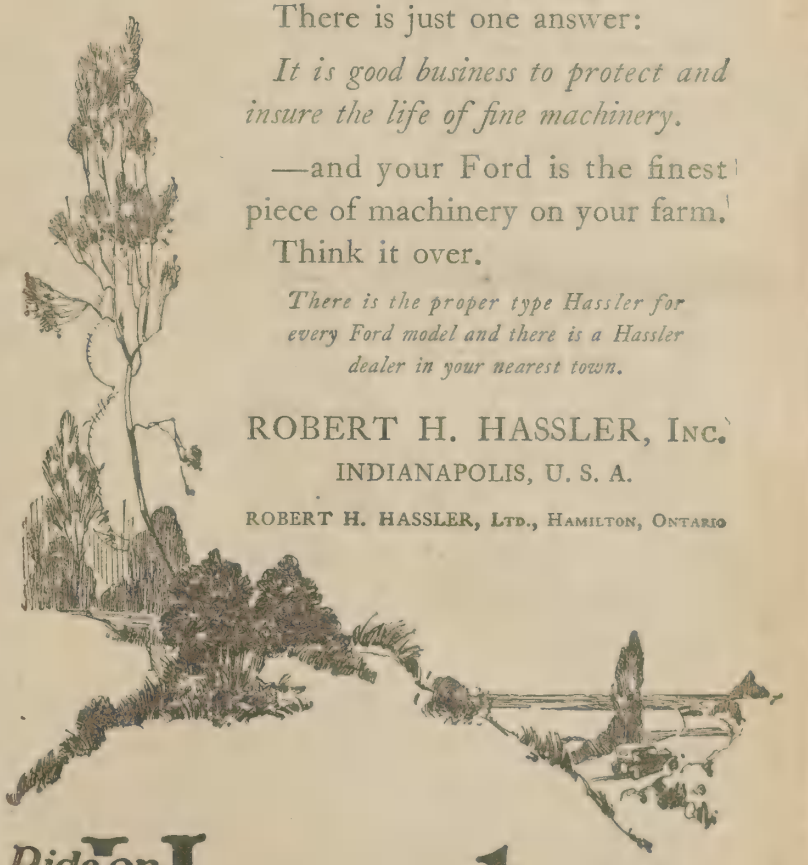

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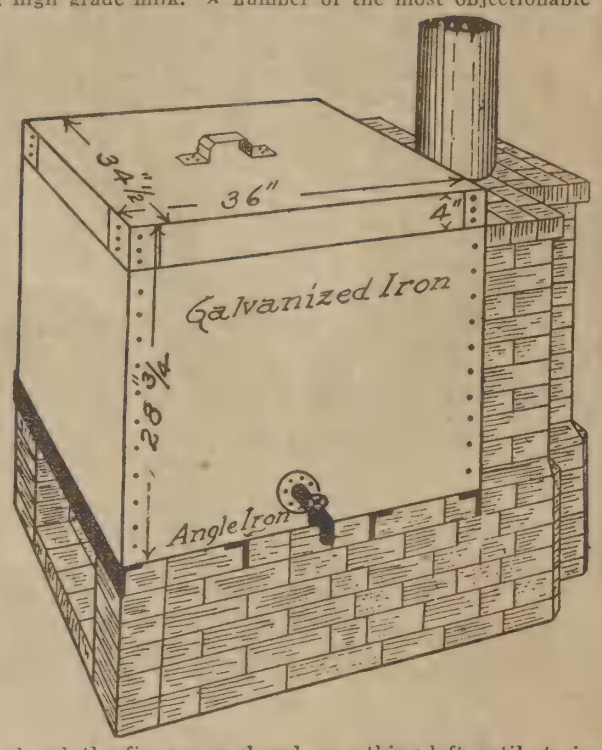
Shock Absorbers

"One car out of every ten in use today is Hassler equipped"

LIVESTOCK AND DAIRY

Properly Sterilizing Utensils of the Dairy

The washing and sterilizing pails, cans, milkcoolers, strainer clothes, bottles, etc., is very important in the control of the bacteria of the dairy, says H. C. McNatt, dairyman of the Western Washington experiment station at Puyallup, in his July bulletin. The article continues that properly handling this part of the dairy work will go very far toward producing a high grade milk. A number of the most objectionable kinds of bacteria, notably those causing slimy milk, bitter milk, sweet curdling and souring are propagated from milking to milking, and from day to day by the undestroyed germs remaining in improperly washed and sterilized utensils. The word "utensils" is used in its broad sense and includes the cream separator, cooler, wash vats, strainer cloths, cans, etc., as well as the milk pails.



A practical type of sterilizer especially adapted to small dairies is that devised by the dairy department of the University of California. The usual routine involved in using this type of sterilizer is to fill it with water just before milking begins, and supply with sufficient fuel to warm the water well by the time milking is finished. When ready to wash the utensils this water is drawn off into a washing and rinsing vat as needed. The outlet faucet of the sterilizer is placed above the bottom at such a distance as to cause an inch or so of water to automatically remain. This water produces the steam for sterilization of the utensils. When the utensils are washed and rinsed, they are stacked in the sterilizer, the lid closed, the fire renewed and everything left until sterilization is complete. After being sterilized the utensils should be placed on a draining rack to dry.

The following is the description, illustration and specifications of the California station device. It is stated that this sterilizer can be constructed at any first-class tin shop.

"For small dairies producing market milk, or for large dairies shipping cream, in case a steam boiler is not available, very satisfactory sterilization can be accomplished by placing all dairy utensils into a covered galvanized iron tank, such as shown in the illustration, and boiling them for 20 minutes.

"The sterilizer tank may be made of galvanized iron of any weight or quality, but unless it is constructed of heavy, high purity galvanized iron it will soon burn out. Those made from the best material of No. 16 or No. 14 gauge will be the cheapest in the end on account of the increased durability, if they are properly cared for. If the tank is made of No. 16 gauge iron the top may be only No. 20 gauge, which will be less expensive and just as durable since the cover is subjected to less wear than the tank.

"Wood is the fuel most commonly used in heating these sterilizers, but in case an oil burner is used an extra sheet of iron should be placed directly above the flame; otherwise the extreme heat from the oil burner will injure the bottom of the sterilizer and decrease its durability.

"Since the galvanized iron usually carried by plumbers does not exceed 36 inches in width, the size of sterilizer can not exceed that shown in the figure if it is to be economically constructed. A false bottom should be provided in the bottom of the tank to hold the utensils above the boiling water. The heat from the steam accomplishes the sterilization and by keeping the utensils above the water in the tank, they are less likely to rust when kept in the tank after sterilization.

"The false bottom may be constructed from 1-4x1 inch galvanized bar iron, as follows:

"Seven parallel pieces five inches apart to be riveted to 1-4x1 inch end bars. The end bars are turned downward at right angles three inches from each end to form supports and raise the false bottom three inches from the bottom of the tank. The metal frame is given greater strength by riveting a 1-8x1 inch angle iron through the center and parallel to the end bars. The ends of this also should be turned at right angles to rest against the bottom of the tank. This size tank is sufficient for the sterilization of the cans and other dairy utensils on dairies of the size previously stated.

The sterilizing tank may be filled twice with utensils in case it is not sufficiently large to allow for sterilizing all utensils at one time.

Made Profit on Wheat

In these days when one hears on every hand the statement that there is no money in farming and that wheat is being sold for less than cost of production, it is encouraging to hear a statement like that made by Bert Hanna, a member of the firm of Hanna Brothers, farmers, near Plaza, in southern Spokane county.

Hanna Brothers threshed 8000 bushels of wheat this season and sold it as soon as threshed, for 84 cents a bushel, or on a basis of 84 cents for No. 1 wheat. But there was much smut in their wheat and after deducting the dockage for smut their wheat brought them 77 cents a bushel, net, at the warehouse. The grain was bought by the Farmers' Union Warehouse company at Plaza and shipped direct to Portland. It filled eight cars. Speaking of the crop, Bert Hanna said:

"This crop brought us the greatest net returns we have ever had from our land since we began farming it and after deducting all expenses we have a good profit from the crop. There is money in raising good crops of wheat, even at what now seems low prices."

accurate control governor

The control governor of "Caterpillar" Tractors is especially designed to operate with utmost accuracy and smoothness—a feature that you will appreciate. The catalog tells more—send for it.

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THE PROFITABLE WAY TO HAUL

"Goodyear Cord Truck Tires speed up my farm work, save shrinkage in loads of live stock, and enable me to do hauling for other farmers at a profit. Goodyear Service helps me to get all the miles that are built into them."

—WILLIAM WOESSNER, Sterling, Ill.

HAULING on Goodyear Cord Truck Tires is more profitable because Goodyears give you more mileage at low tire cost. Their famous All-Weather Tread is powerfully tractive in any going. Their stronger sidewalls resist rut, curb and road wear. Their great activity enables you to make more trouble-free, on-time, full-load trips between your farm and your market.

The new beveled All-Weather Tread Cord Tire is made in all sizes for trucks and passenger cars

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More Milk—More Meat
More Money Guaranteed

Stop that monthly feed bill. The Letz Dixie will cut, grind and mix anything grown—makes a perfectly balanced ration from home-grown crops. Guaranteed to increase production from 15 to 30% and cut feeding costs from 25 to 50%. A warehouse in Spokane and Portland.

Write today for Valuable Feeding Book—It's FREE

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IRRIGATE

Rife Rams provide a continuous supply of water night and day, winter or summer, without fuel, labor or repairs. A stream with 3-foot fall and 3-gallon per minute flow will operate it. Over 20,000 in use.

Tell us about your water conditions and we'll send you a quotation or an expert to talk things over. Write today.

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with a RIFE RAM

750 lb. Separator For $5.89 Down

Balance On New Cream Check Payment Plan

The biggest reason for not using a worn-out cream separator—wasting cream and good, hard-earned money—is this special offer made by William Galloway, of Waterloo, Iowa, to farmers in every part of the country.

Every farmer knows the reputation for highest quality of Galloway merchandise. Now, William Galloway, implement manufacturer, has worked out a plan to save farmers money these times. The special terms and low prices on genuine Galloway Sanitary Cream Separators is an example of how far Wm. Galloway will go to help farmers save and make money.

Wm. Galloway, President Wm. Galloway Co.

Any farmer who is now making an old, worn-out separator do cannot afford to pass up the special opportunity to have a new, up-to-date, close-skimming Galloway Sanitary Cream Separator on his place. Under the Galloway cream check payment plan the new separator pays for itself through the additional cream saved and the elimination of repair costs. It is like adding several good milch cows to your herd without buying more cows.

The reputation of the Galloway Sanitary Cream Separator speaks for itself—thousands of letters pour in telling of increased income from closer skimming, easier operation and unequalled durability.

To allow every farmer to convince himself of the superiority and value of the Galloway Separator Mr. Galloway has arranged to put one of his separators on your farm for a 90-day trial before you decide it is the best money can buy.

Wm. Galloway says: "Just try my New Sanitary Cream Separator. If you like it, keep it—let it pay for itself. If you don't like it, send it back. It will sell itself to you by the way it runs and skims or no sale."

Write Wm. Galloway, president of Wm. Galloway Company, Dept. 2457, Waterloo, Iowa, today for low prices and terms on separators; engines, spreaders and other farm necessities.

AT YOUR SERVICE.
DEMPSEY
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(C. C. DEMPSEY & SONS)
UP TO DATE.
Opposite Union Station, Spokane.

Treating Seed Wheat

During the last year a demonstration at the western Washington experiment station has been completed, which had as its object a comparison of several methods of seed treatment for controlling bunt or stinking smut of winter wheat. A statement of the results has been prepared as follows by M. E. McCollam, agronomist, and Arthur Frank, plant pathologist:

The seed used was of the hybrid 128 variety, very heavily infected with smut. The seed was divided into six portions and treated variously, as follows:

Treatment 1—Seed soaked for 10 minutes in a solution of copper sulphate (one pound to eight gallons water). Then spread out to dry.

Treatment 2—Seed untreated.

Treatment 3—Seed soaked for 10 minutes in a solution of formalin (one pound to 30 gallons water). Then covered for five hours with sacks soaked in solution and spread to dry.

Treatment 4—Seed dusted with copper carbonate (two ounces to one bushel wheat). Grain and copper carbonate thoroughly agitated to cover all grains with the chemical.

Treatment 5—Seed soaked in copper sulphate solution as above. Then dipped in lime solution (one pound quicklime to 10 gallons water). Spread out to dry.

Treatment 6—Seed soaked in formalin solution as above. Then dipped in lime solution (one pound quicklime to 10 gallons water.) Covered for five hours and spread to dry.

Seed of each lot was then planted in quarter-acre plats. The yield and percentage of smut under each of the six treaments follows:

Treatment No.	Yield per acre in pounds.	Per cent smutted heads.
1	1965.56	0.56 per cent
2	1491.05	73.59 per cent
3	2593.39	2.37 per cent
4	2696.33	4.54 per cent
5	2535.22	4.67 per cent
6	2365.08	7.59 per cent

This plainly shows the relation of seed treatment to yield. The crop on the untreated plat showed over 73 per cent smut and yielded least grain. The seed treated with copper carbonate and that treated with formalin yielded most grain and there was a low percentage of smut in the crop. The treatment with copper carbonate, aside from producing the greatest yield of grain, proved to be a more convenient and time-saving method than the soaking and drying methods.

Clallam County Fair

The third Clallam county fair covers more space this year than ever before and the racing program shows a decided improvement over last year.

The fairgrounds are leased by the county fair association from the city commissioners and occupy an important position in the city park of 160 acres. The board of county commissioners has appropriated money for the construction of six permanent buildings for the housing of exhibits. Besides the permanent buildings it was necessary to erect five large tents to shelter cattle, sheep, running horses, automobile exhibits and flower show.

The keenest spirit of competition was shown among the various communities for the loving cup which in 1917 was offered to the community winning it three times in succession. Since that time it has been won by four different communities and this year came nearly being permanently won by the Eden Valley grange, which had won it two preceding years. Eden Valley grange was given second place by the margin of one point. Six communities, Fairview, Eden Valley, Dry Creek, Sequim, Inugeness and Carlsborg, entered the contest. Nearly the whole of Clallam county was represented in the county fair by community exhibits.

The boys' and girls' club exhibits received favorable comments and grown folks expressed surprise at the quality and amount of work done by the young folks in the sewing, canning, cooking, garden and dairy clubs. The dairy club exhibits and contests were a new phase of the club work shown at the fair. There were contests in testing milk, judging dairy cattle and the showing of their own animals in the show ring. Harvey Eacrett of Port Angeles made the highest total score and won a silver loving cup.

The live stock was featured in the main by the work done by the Guernsey club in getting out a good show and transporting the animals to the fairgrounds. There was also some showing made by the Jersey breeders and by the Aryshire breeders. The quality of the dairy stock shown was the best that has yet been made, although the number was about the same as usual.

The poultry exhibit was improved by the addition of new wire coops.

Other departments of the fair, including the schools, merchants, industrial, etc., deserve special mention.

J. L. Keeler of Sequim was the general superintendent and manager and working under the supervision and hearty support of the board of directors of the fair association deserves credit for the success of the fair.

Hold Fair at Hunters

After a lapse of two years live stock men and business men of Hunters this year revived the Southwestern Stevens County fair and put on a good little event at Hunters. In the live stock department Shorthorn cattle predominated, John Fox, Worthley Brothers and Urquhart & Campbell being the principal exhibitors. Fox had the champion bull in Violet Star, a good roan senior yearling. Worthley Brothers won the female championship on a promising red senior calf, Jerome Beauty 5th. The awards follow:

Aged bull—First, Urquhart & Campbell on Golden Stamp; second, Worthley Brothers on Hercules Crown. Senior yearling bull—First and championship, Fox on Violet Star. Junior yearling bull—First, Urquhart & Campbell on Golden Star 5th. Senior bull calf—First, Worthley Brothers on Roan Lad; second, Fox on Duke; third, Urquhart & Campell on Morning Star. Junior bull calf—First, Fox on Kid; second, Worthley Brothers on Golden Crown. Aged cow—First, Fox on Valley Queen; second, Worthley Brothers on Green Mountain Bell. Two-year-old heifer—First, second and third, Fox on College Girl, Roan Lady and Red Wing. Senior yearling heifer—First, Fox on Sweetheart. Junior yearling heifer—First, Fox on Red Mandy; second, Worthley Brothers on Jerome Beauty 4th; third, Urquhart & Campbell on Violet Stamp. Senior heifer calf—First and championship, Worthley Brothers on Jerome Beauty 5th; second, Urquhart & Campbell on Golden Lass. Junior calf—First, Fox on unnamed calf.

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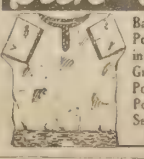

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82-923

POULTRY AND RABBITS

When Eggs Are High

By PREN MOORE.

The season when eggs are high in price is at hand. The hens should lay heavily through this period. The pullets should have been in their winter quarters by September 1 and be in full production by October 1.

Success or failure with hens depends upon the farmer's ability to make them lay uniformly high throughout the year. High production throughout the spring and early summer months is not sufficient for real profit from hens. Spring and early summer is the season of cheap eggs. It is important that hens lay well, even when eggs are cheap, but if hens are to be satisfactorily profitable they must be made to lay as many eggs during fall and winter as they do in spring and early summer.

Many farmers fail with poultry for the reason that they do not pay proper attention to the necessary details leading up to the fall and winter season. Pullets must be hatched early, and kept growing steadily from the time they are hatched until they are full grown. In order that this may be done, the chicks must be properly brooded, and the range condition and food supply must be correct throughout the growing season.

The growing season for pullets is a very busy time on most farms. Farmers are usually very busy around the first of September. September 1 is the time when pullets should be fully mature and gotten into the laying house. It is quite easy to neglect the work that appears the least pressing, especially when there seems to be more work than can be done. The pullets take care of themselves, after a fashion. However, if they are neglected to the extent that they are not gotten into production at the proper time there will be sustained a loss just in proportion to the neglect. The momentary loss is a minor consideration compared with the future loss resulting from temporary neglect.

If pullets do not get started off right, early in the fall, they seldom produce satisfactorily during any season of the year; even if they should produce abnormally high later in the season, there has been a price loss which can never be made up. The egg market runs in cycles. The egg market is high during the fall and early winter and is low in spring and summer. Ordinarily, the egg market becomes very nervous about Christmas, gradually weakening during January, with a short decline in February, reaching the bottom in March or April. Seasonal influences on prices for eggs vary some, but not much. In July the market usually becomes firm, with slight raises in August and September. The rise is usually very rapid during October. The egg market often reaches the peak in October and continues firm up to about Christmas. One dozen of eggs may sell for as much in October or November as three dozen would bring in April.

When Prices Are High.

Production should be high when prices are high. It costs but little, if any, more to produce eggs in October than it does to produce them in April. In any event, the stock is consuming feed in October whether they lay few, many or no eggs. It is much to the farmer's advantage, therefore, to keep conditions right so that his hens will produce as many eggs during October as they do in May.

Pullets should be full grown by the last of August; not fat nor producing to any extent. They should be well developed machines, plenty of bone, muscle and capacity. On September 1 they should be gotten into the laying house and put into laying condition. By laying condition is meant a little over fat—when pullets come into production they should be carrying a little surplus fat. Plump bodies and firm flesh is good laying conditions.

In Winter Quarters.

When pullets are taken off the range and placed in confinement, or winter quarters, they should not be placed on full feed at once. Stockmen know what will happen to any type of live stock when they are taken off the range or pasture, placed in confinement and put on full feed at once. Stockmen say that they must exercise care in feeding so that the stock will not get off feed. When stock is once off feed they do not thrive, and often much time is lost getting the animals on to feed again. They lose weight and may become ill. Fowls are no different in this respect from other animals.

The first day they are shut up, feed light. Keep them a little hungry. The second day feed a little more, and gradually increase the feed until they are on full ration. If the pullets have been properly developed they should be in good laying condition after about 10 days to two weeks feeding in confinement. The feed up to this point should be largely grain; a liberal supply of green feed is also necessary. The condition can be determined by the plumpness of the bodies. If the bodies are round and plump, the breasts fleshed even with the breast bone and the flesh firm, the pullets have reached laying condition.

To bring the pullets into production gradually reduce the grain or coarse feed. Reducing the coarse feed will cause the pullets to consume more mash or ground feed. The change should not be made abruptly. It is never wise to make abrupt changes of any kind with laying hens. The reduction in coarse feed should continue until the pullets are consuming not to exceed eight quarts or 15 pounds of scratch feed per 100 hens per day. A less amount may be better. Vary the amount of scratch feed in proportion to the flesh condition of the pullets. Never lose sight of the fact that hens poor in flesh never lay many eggs.

Hens poor in flesh may lay quite well during mild weather, but drop off very sharp in production with unfavorable changes of the weather. For a man to be a good poultry man he must be a good feeder. Have no fear of overfeeding hens when the feed formula is correct. There are more hens underfed than there are that are overfed. Hens properly bred

(Continued on page twelve.)

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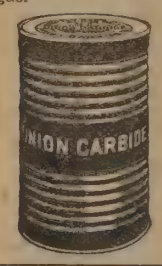

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ORCHARD AND GARDEN

Dry Rot

A Serious Trouble of Tomatoes

By A. G. B. BOUQUET, O. A. C.

The rotting of the underside of tomatoes in the field is a common and well-known occurrence. The trouble is perhaps more frequently seen in home and farm gardens rather than in commercial fields, for in the home garden oftentimes the soil and moisture conditions may not be so well fitted for tomato production as they would be in a commercial field. On the other hand, there is a greater possibility for the home gardener to prevent this rotting inasmuch as there is usually available for the home garden a supply of water which would be an important factor in preventing the tomatoes from becoming rotted.

There has been and still is a considerable difference of opinion as to the cause of the disease. The writer is calling it a "disease" in this case, although it has not yet been proven that any fungus is actually responsible for it.

In the home and farm garden dry rot, or point rot, or blossom end rot—all three names being synonymous—is usually associated with dry weather, soil and moisture conditions having a great deal to do with the prevalence of the rot. The supposition by those who have grown tomatoes under many varying conditions is that the cells at the blossom end of the fruit collapse due to lack of sufficient moisture supplied them. Our own experience in growing field tomatoes for many years confirms the belief that in the dry seasons, when the plants are grown in soil that lacks moisture in the summer, dry rot is at its worst. On subirrigated ground, where there is ample moisture for the plant's needs during the dry part of the year and through ripening time, the rot is conspicuous by its absence.

The dry rot may also be caused by withholding irrigations after the plants have once begun to be watered in the summer. I have seen irrigated areas of tomatoes that had a large number of rotted tomatoes because the plants after once being irrigated or so had water temporarily withheld for some reason or other. This means that if you start in to irrigate tomatoes you must see that the plants receive a consistent amount of water and not be alternately wet and dry.

Causes Premature Ripening.

On garden soils that dry up badly during the summer months blossom end rot is often very bad. The rotting causes premature ripeness of the fruit before the tomatoes have become large enough for commercial use. One can often detect a rotted tomato without turning it over, for it will have a flattened appearance where the fruit did not develop at the blossom end and also there will be a deep red color when the fruit is quite small. Green tomatoes also become rotted, but the fruit usually begins to get diseased when it is ready to change from a green to a pink color.

Some varieties seem to be more susceptible to the rot than others.

Hill land and heavy upland are liable to have considerably more dry rot than the bottom soils, which are often subwatered by the capillary action of the soil.

The disease starts at the point or blossom end of the fruit and causes large, black, hard and rough spots, which finally result in a collapse of the cells and a complete soft area. The rotting is not contagious, but plants that show rotted fruits early in the season are liable to have a still greater number of these later on. However, it is ordinarily the case that the first fruits on the plant are the ones to have the rot, this being partly accounted for by the fact that the plants during the early part of the season are growing rapidly and are taking a great deal of moisture for the needs of the plant which, therefore, the fruit is deprived of. Later in the season the plant stops its growth and the fruit has a better chance to get a uniform amount of water. The later fruits are not nearly as badly rotted, according to our observations in many gardens besides our own.

When Rot Is Absent.

One experiment station in the United States in particular has quite closely investigated the dry rot under many different kinds of conditions, dry, moist, cool, hot, etc., and the general conclusions arrived at were that the rot was always worst in the driest seasons, on driest soils, but where the plants had all the moisture they needed for themselves and the bearing of ripe fruit the rot was conspicuously absent.

Our own experiences bear out these findings. For a number of years back it was necessary for the writer to grow his tomato crop on some inferior soil which dried out badly during the summer; there was also no possibility for irrigation. The result was that each summer there were almost bushels of dry rotted tomatoes to be thrown away. During the last three years the vegetable gardening operations of the college have been changed in location, so that the tomatoes are now grown on fine bottom land that to a certain extent subirrigates. To date there has been little waste in the tomato area due to dry rot, and crops have been raised under varying conditions. One seldom sees rot during cool and moist summers.

It will thus be seen that the disease is well named "dry" rot, for the soil dryness is in a great measure responsible for the trouble. Good cultivation and irrigation are undoubtedly preventive factors, but once the watering begins it must be kept up consistently, so that the plants do not become alternately wet and dry.

In some cases, almost green fruits can be picked before the rot has begun to develop to any degree, the tomato later changing to a good red color if put away for a short time in a cool place.

Pruned Two Ways

An important point in cherry culture has been brought out at the W. A. Glendenning farm, near Sequim, Wash. The Montmorenci trees in his two-acre young orchard have been pruned in two different methods. Most of them were topped back, while young trees, while the others have only been thinned out. The latter trees produced by far the most fruit and are better shaped. This goes to indicate the correctness of what horticulturists have contended, that sour cherries should not be topped back heavily, but merely pruned to the main lateral branches and then thinned as needed in later years.

In addition to cherries, Mr. Glendenning has one acre of raspberries, one-fourth acre of Himalaya blackberries, three acres of loganberries and an acre of apples. Between the cherries are 300 Oregon Champion gooseberry plants that bore their first crop last spring. The logans are trained with the two-wire system, with slats to support the vines.

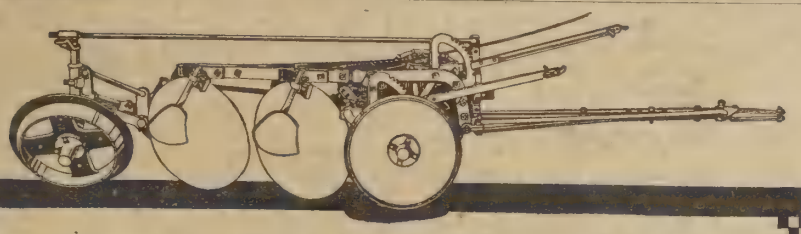
Mr. Glendenning uses the grape hoe in cultivating his berry rows. This is an implement with a shovel set on the extreme right, while the handle at the left governs a disc which steers the cultivtaor to or from the rows.

Small Acreage

So Berries May Get Proper Care

"It takes only a small acreage of raspberries to keep one man busy giving them the proper care, especially if he has a few other crops to attend to," asserts A. H. Bernes of Sumner, who has a farm near town. "I have only 2 1-2 acres of raspberries, one-half acre of strawberries, and about the same acreage of rhubarb. I also want to plant a few acres of Evergreen blackberries on some of the lower land along the river bottom.

"I have not been able to do as much heavy work as I should, and I therefore have been forced to rent part of my place each year. I believe, however, that for a man who understands the game he should have a variety of fruits which can be harvested from early spring until late summer. This will spread his harvest season throughout the entire summer and there will be less danger of any crop failure. It is important, however, to set out only as much ground as can be properly handled. Too many berry growers have attempted too much, and can not give the right attention to what they have. I have never planted any sour cherries, but believe they are a good crop since they never have a crop failure and the picking season can be spread out over a longer period without much damage to the fruit. I have had good returns from twelve Gravenstein trees, and find that they are one of the best apples to grow in this district, since they always are in demand on the local market and they ripen early in the season. There is, however, a disadvantage in that the trees do not always yield a heavy crop."



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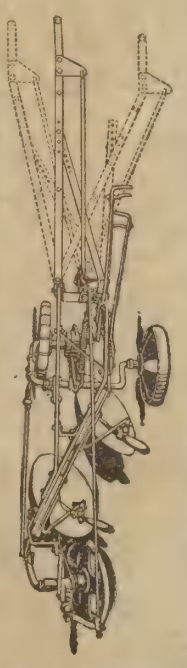

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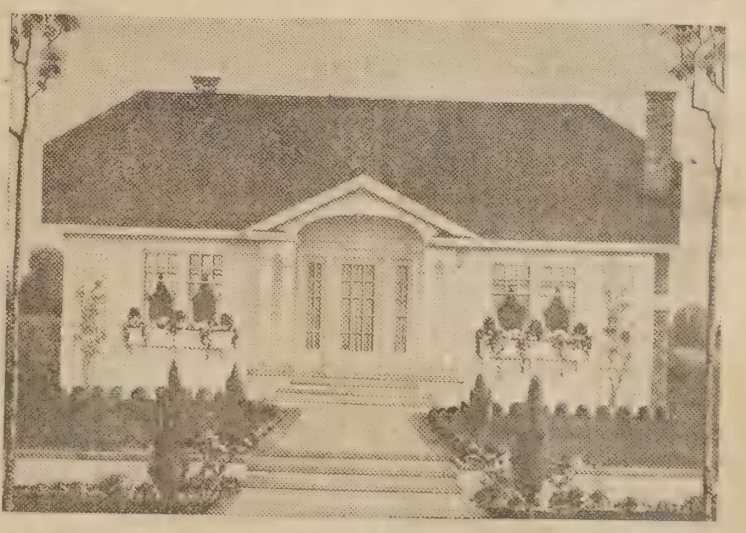

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When Eggs Are High

(Continued from page ten.)

can not be overfed on correct feed formulas unless they are given more than they can eat. It is never a good practice to keep scratch feed before hens constantly. They should be anxious for the scratch feed every feeding time. Mash or ground feed should be in self-feeding hoppers so that the hens can eat of it at will. The mash hopper should never be empty, even for a minute. The mash hopper should be large so that there will be ample feeding room. It should never be necessary for hens to crowd around the mash hopper in order to get their food.

Factors for Production.

If all the necessary factors involved are properly developed, it is possible to make pullets produce 70 per cent on the average during October. The factors involved are: Good breeding, proper care of breeding stock, early hatching, successful brooding, sanitary and ample range, comfortable summer roosting quarters, plenty of succulent green food, ample and proper feed supply at all times, early housing of pullets, proper laying conditions, artificial lighting, sanitation and good management at all times.

Winter molting of early hatched pullets is an annoying problem with many farmers. Winter molting of early hatched pullets result when they have slowed up or discontinued production entirely at a time when there is a rapid change to inclement weather early in the season. However, the winter molt can happen only in the event pullets have reached a fairly high state of production early in the fall. If all conditions are correct, the pullets will continue production and there will be no molt. Pullets that have not started laying will not winter molt. The problem with pullets that start laying early is to keep them laying. There will be no winter molting if the pullets continue production.

The purpose of this article is to call to the farmer's attention the necessity for having fall and winter egg production, and to impress upon his mind the essential features involved. There must be as little change in environment and food supply as possible. To avoid change in environment after the pullets have come into production is the reason. Pullets may start laying on the range and be doing well. After a time there is a change in the weather, probably snow, and it becomes necessary to shut the pullets up in order to keep them comfortable. The change of environment, together with the change in weather conditions, are too great and the pullets stop laying. In a few days the neck becomes rough, which is the first signs of winter molting. Had the pullets been used to being confined, the change in weather would not likely have affected them at all or but slightly at most. Of course, there are always exceptions to all rules. It sometimes happens that weather changes are severe and very rapid. Even so, if pullets are used to being confined, the weather change will not be so noticeable and the effect upon egg production will be less and there is but small likelihood of molt. Keep the pullets laying and there will be no winter molt.

Get the pullets into the laying house in early fall and keep them there until summer. Do not turn them out on nice days during winter. Keep them housed from September until June. Laying hens need but small range during summer. What they have should be shaded. If they can not be made more comfortable out of doors than in, even in summer, do not turn them out.

Fair at Yakima

(Continued from page six.)

Sow and Litter (Any Breed).

1, Harold Van Wechel, Yakima, Wash., on Poland Chinas; 2 and 5, I. J. Oder, Yakima, Wash., on Tamworths; 3, George Longknecht, Naches, Wash., on Poland Chinas; 4, C. M. Meenach, Sharon, Wash., on Chester Whites.

Fat Barrows (Any Breed).

Single barrow under 6 months—1, Mayview Farm, Johnson, Wash., on Duroc Jersey; 2 and 3, B. F. Kammerzell & Sons, Colfax, Wash., on Poland Chinas; 4 and 5, C. M. Meenach, Sharon, Wash., on Chester Whites.

Single barrow, 6 months and under 1 year—1 and 2, J. M. Fruitts, Cambridge, Idaho, on Hampshires; 3, Mayview Farm, on Duroc Jersey; 4, Frank Van der Heyden, Wapato, Wash., on Chesster White; 5, J. A. Simonson, Buena, Wash., on Berkshire.

Pen of three under 6 months—1, Kammerzell, on Poland Chinas; 2, Meenach, on Chester Whites; 3, Oder, on Tamworths; 4, Pease & Hartley, on Duroc Jerseys; 5, Carol Robinson, Ellensburg, Wash., on Chester Whites.

Pen of three over 6 months—1 (grand champion), Fruitts, on Hampshires; 2, Von der Heyden, on Chester Whites; 3, Simonson, on Berkshires.

Lack of adequate space prevents publication this week of all the live stock awards. The others will be given in full in an early issue.

CZECHOSLOVAKIA'S GRAIN CROP.

It is believed that Czechoslovakia's grain crop will be considerably below that of last year, according to consular advices to the department of commerce. In view of this fact, Czechoslovakia will probably be a heavy purchaser of grain and flour during the coming year.

Farmers' Want Ads

MONUMENTS F

COMPLETE STOCK. WRITE FOR DESIGNS and prices. Inland Monument Co., N1001 Monroe, Spokane.

HELP WANTED—Female 1

GIRLS DESIRING WORK FOR HALF BOARD and room, while attending school, write Gooding College, Gooding, Idaho, today.

HELP WANTED GENERAL

ORCHARD HELP WANTED—IN THE APPLE orchards of the Wenatchee and Okanogan valleys, beginning October 1. Enjoy a vacation in the bracing autumn air of north central Washington and earn good wages at a congenial occupation; work plentiful for several thousand men and women. Apply at Wenatchee Commercial club or the U. S. employment bureau, Wenatchee, Wash.

MEN AND WOMEN, AGE 17 TO 30, AT ONCE to train for positions with Western Union Telegraph Co. and various railroads. Pacific Telegraph Institute, Spokane, Wash.

SCHOOLS AND COLLEGES 26

EARN $110 TO $250 MONTHLY; EXPENSES paid as railway traffic inspector; position guaranteed after completion of 3 months' home study course or money refunded. Excellent opportunities. Write for free booklet G-157, Stand. Business Training Inst., Buffalo, N. Y.

FRESH FOOD PRODUCTS 51-3

FISH—4 LBS. SMOKED SALMON, $1; 4 LBS. Alaska salmon bellies, $1; 4 lbs. black cod, $1; 3 lbs. best codfish, $1; delivered by mail. Coffin Fish Co., Seattle, Wash.

HONEY 53

ALFALFA-SWEET CLOVER HONEY—2 60-LB. cans, $9.75; one can, $5, f. o. b. Rigby; one 40-lb. can, prepaid to fourth zone, $5.75; quality guaranteed. Heckman & Larsen Honey Co., Rigby, Idaho.

ALFALFA, SWEET CLOVER HONEY, PREpaid second zone, 3 10s, $5; 60 lbs., $8.30; two cans, $14.50, not prepaid. Harry Fisher, Prosser, Wash.

PURE, WATER-WHITE SWEET CLOVER honey; 60-lb. can, $5; two, $9.75. H. R. Bowen, Roberts, Idaho.

EXTRACTED HONEY FOR SALE—WELLS D. Rose, Sunnyside, Wash.

(Continued on following page.)

anti-friction bearings

Extensive use is made in this Two-ton "Caterpillar" Tractor of anti-friction bearings—ball and roller. This is another time and money saving feature. Let us tell you the whole story.

THE HOLT MFG. CO.
Stockton, Calif. Peoria, Ill.

did you ever hear of Sally Lunn?

Sally Lunn, a famous English pastry cook of the 18th century, made tea cakes and breakfast breads that won her world-wide fame. But Sally, expert cook though she was, worked under a great handicap: she didn't have Sperry Drifted Snow Flour. Today, in your own kitchen, you can make a Sally Lunn breakfast bread that will outmatch, in texture and deliciousness, even the products of this famous cook. For you will use Sperry Drifted Snow Flour—smooth, uniform, sure-to-work-out! You'll find it easy to make—an ordinary muffin mixture baked in a shallow pan and cut in squares for serving. And your tablefolk will find it easy to eat—with jelly, jam, maple syrup, honey! Here's how:

2 cups Sperry Drifted Snow Flour	¼ cup sugar
4 teaspoons baking powder	1 cup milk
½ teaspoon salt	2 well-beaten eggs
	2 tablespoons melted shortening

[*Note:* All measurements are level and flour is sifted once before measuring. One-half pint measuring cup is used.] Mix and sift dry ingredients; beat eggs; add dry materials and milk gradually, beating to a smooth batter, adding melted shortening last. Pour into a greased shallow pan and bake in a hot oven. Cut in squares to serve.

Send for Sperry Cook Book—free! It will show you how to make many new-fashioned, as well as old-fashioned, dishes. And it's free—use the coupon!

SPERRY DRIFTED SNOW FLOUR
to be sure

Mail this coupon to Sperry Flour Co., Dept. T, Sperry Bldg., San Francisco

Please send me, without cost, the Sperry Cook Book.

Name_____ Address_____

HONEY (Continued) 53

HAPPY HOME HONEY — ALFALFA AND clover; 60-lb. can, $7.50; two cans, $14.50; case six 10-lb. pails, $8.50. H. N. Paul, Mabton, Wash.

MISCELLANEOUS—FOR SALE 60

SASH AND DOORS—O. B. WILLIAMS CO., 1943 First ave. So., Seattle. Chicken house sash, 20" wide by 25" high, 80c; a dozen different sizes in stock for immediate shipment. Skylights for chicken houses, 36"x40"; price, glazed, $2. This is the size recommended by the Western Washington experiment station. We carry them in stock for immediate shipment. Sash and doors for all purposes at lowest prices. All orders receive prompt attention. Our large illustrated catalog No. 35, showing full line of building material and built-in fixtures for the home, free on request. O. B. Williams Co. Established 1899.

LEAF TOBACCO—3 YEARS OLD. NATURE cured. Ever Ready safety razor and six blades, or imported briar pipe free with order. 10-lb. packages, select chewing, $3.50; select smoking, $3; medium smoking, $1.75. Pay for tobacco and postage when received. Farmers' Union, Hawesville, Ky.

PIPE—GET PARTICULARS ON OUR SPECIAL flue pipe, 1¼, 1½ and 2 inch. Big saving on it. We also have all sizes second-hand and new standard pipe at low prices. We also save you on roofing, belting, pumps, engines, cables, etc. Alaska Junk Co., S120 Adams, Spokane, Wash.

SPECIAL—ONE-POUND TIN "SATISFACTION tobacco" and pipe for $1. Smoking, chewing tobacco, cigars, cigarettes and complete line of pipes. Wholesale and retail. Peter M. Jacoy, 3 Washington st., Spokane.

LEAF TOBACCO—FIVE POUNDS CHEWING, $1.75; ten, $3; five pounds smoking, $1.25; ten, $2; twenty, $3.50. Send no money, pay when received. Pipe and recipe free. Cooperative Farmers, Paducah, Ky.

WALL BOARD—WRITE FOR SAMPLE OF Washington plaster wall board; won't warp, won't burn. Manufactured by Washington Building Products company, 6851 E. Marginal Way, Seattle, Wash.

ALL-WOOL HAND AND MACHINE KNITting yarns for sale from manufacturer, 95c, $1.35, $1.60 per lb. Golf and plain socks, $5 orders postpaid. Free samples. H. A. Bartlett, Harmony, Me.

LEAF TOBACCO—CHEWING, FOUR POUNDS, $1.40; fifteen, $4; smoking, four pounds, $1; fifteen, $3. Pay when received. Pipe and recipe free. United Tobacco Growers, Paducah, Ky.

TOBACCO—KENTUCKY'S PRIDE: EXTRA fine chewing; 10 pounds, $3; smoking, 10 pounds, $2; 20 pounds, $3.50. Farmers' Club, Mayfield, Ky.

NATURAL LEAF TOBACCO—CHEWING, 5 lbs., $1.25; 10 lbs., $2.50; smoking, 5 lbs., $1.25; 10 lbs., $2. Farmers' Union, Mayfield, Ky.

SELL YOUR MEATS AT RETAIL PRICES. Use portable smoke house. Write 20 Riverside ave., Spokane.

50,000 SACKS FOR SALE. INLAND HIDE & Junk Co., W21 Main, Spokane.

OASIS CIDER MILLS AND FRUIT PRESSES. 20 Riverside ave., Spokane.

MACHINERY—For Sale 93

DOLLARS IN YOUR POCKET ON OUR USED engines, wood sawing outfits, farm equipment. New sawmill outfits, etc. Fallquist Brothers, W201½ Riverside, Spokane.

OHIO SILO FILLERS, CARLEY FEED MILLS, Stewart portable elevators, centrifugal pumps, gas engines. Exchange Machinery Co., W20 Riverside, Spokane.

AUTOMOBILES—FOR SALE 112

SEE CHEVROLET FIRST—NEW AND USED cars at prices that will surprise you; stop in or write Inland Empire Chrevolet Cales Corp., 916 2d ave., Spokane. Open evenings. Open Sunday.

AUTO ACCESSORIES AND PARTS 119

PATRONIZE THE HOUSE THAT CAN GIVE you the best service. Complete stock of automobile repair parts. Wire and disc wheel sales and service. Pacific Gear and Auto Parts Co., 1022 First ave., Spokane, Wash.

STOVE REPAIRING 128

WRITE MYER RUBENS, SPOKANE, ABOUT stove repairs, welding broken parts, nickel plating.

FUR-BEARING ANIMALS 170

SILVER AND CROSS FOXES FOR SALE. William Rambo, 407 Sprague, Spokane.

PETS—Dogs, Birds, Etc. 171

FOR SALE—TEN HEAD BROKE BEAGLE hounds, 3 yr. old; also 4 trained coon hounds. Send on trial. B. S. Meckley, Glenville, Pa.

RABBITS and HARES. 173

RABBITS, TOULOUSE GEESE HAVE MADE my living for 10 years. Prize winning blue Flemish Giants, New Zealand Reds, Himalayans, at utility prices. Agnes Brenner, R4, Box 49, Tacoma, Wash.

POULTRY 174

ACCREDITED CHICKS—ALL OUR CHICKS for 1924 will be from accredited flocks mated with certified cockerels sired by hens with 225-egg record. A limited number of chicks from cockerels sired by our $1000 champion cockerel and our world's record pen of hens. Write for special prices for those who order early. Queen Hatchery, 1430 1st ave., Seattle, Wash.

CERTIFIED WHITE LEGHORN QUALITY chicks for summer and fall months, from selected free range, high egg producing breeding flocks, inspected and accredited by the Sonoma county farm bureau. Send for catalog and attractive prices. Safe delivery and full count guaranteed. Must Hatch Incubator Co., Inc., 345 Seventh st., Petaluma, Cal.

WHITE LEGHORN BABY CHIX FROM flocks mated to males having sire's dam record of 240 to 297 eggs per year. Full particulars and interesting literature on request. We are accredited by Sonoma county farm bureau. The Pioneer Hatchery, 422 Sixth street, Petaluma, Cal.

SUMMER SALE "HENACRES" PULLETS; best for fall and winter eggs, $1.25 to $2 each. Hens for breeders, $1 to $1.50 each. High grade stock at reasonable prices. Booking orders now for 1924 baby chicks. Free catalog and price list. "Henacres," Box A, Prosser, Wash.

BUY SONOMA COUNTY ACCREDITED Hatcheries chicks; electric hatched by the man who put electric incubation where it is today. I am the father of electric incubation. Stock the best. Prices right. Write for booklet. White Hatchery, Petaluma, Cal.

TURKEYS — HIGHLY BRED MAMMOTH Bronze, April hatch; 6 extra fine toms, $8 each; 25 toms, $5 each; 50 hens, $3.50 each, C. O. B. Grants Pass. References, City banks. C. M. Evans, Grants Pass, Ore. Route 2.

FARMERS' WANT ADS

This is the farmers' "want," "sale" and "exchange" department for small advertisements of farmers, including live stock and poultry.

Advertising rates for ads running 1 to 3 times, 10c per word per insertion, with a special rate to Farmer subscribers, as follows: Ads running 4 to 12 times, 9c per word per insertion; ads running 13 times or more, 8c per word per insertion.

All commercial and land advertising, 10 cents per word per insertion. Open also to nonsubscribers.

In using these columns advertisers must observe (1) No advertisement will be accepted for less than $1.00 per insertion. (2) Every word, number and initial, including name and address, must be paid for. (3) New advertisements, changes of copy or cancellations must reach general office, Spokane, Wash., 10 days in advance of publication date. (4) Cash must accompany order.

Above rates include insertion in The Washington Farmer, The Idaho Farmer and The Oregon Farmer, which constitute the Pacific Northwest Farm Trio, 46 Review building, Spokane, Wash.

POULTRY (Continued) 174

DANIEL'S "IDEALS"—WHITE ROCKS AND White Leghorns; 100 per cent trapnested stock used; place your 1924 baby chick orders now. Our capacity, 2000 chicks every seven days. Free list. Ideal Poultry Yards, Hoquiam, Wn.

DOLLARS FOR YOUR EGGS—WE PAY THE top market prices for your eggs and poultry. Daily cash remittances. McClintock-Trunkey Co., produce department, Spokane.

SPECIAL PRICES ON GUARANTEED DAY-old pullets; fall and winter delivery. Write for particulars. Eureka Hatchery, Petaluma, Cal.

WHITE LEGHORN COCKERELS, DIRECT from Tancred Farms, from 314 egg stock. W. C. Oicles, Rt. 2, Box 88, Chehalis, Wash.

TO MAKE ROOM, WILL SACRIFICE ROCK and Leghorn breeders. D. W. Allen, Laconner, Wash.

JERSEY BLACK GIANTS—YOUNG STOCK for sale, $2.50 and up. E. M. Chambers, Bovill, Idaho.

SHIP YOUR POULTRY AND EGGS TO THE Washington Meat & Poultry, Spokane, Wash.

LIVE STOCK 177

WE GUARANTEE TO PAY THE HIGHEST market price for your poultry and live stock. Veal market growing stronger. Owing to the constant changes in the market we are unable to quote prices in this paper from week to week. We will furnish tags and prices when you are ready to ship. Write us what you have to sell. Prompt returns. John Lewis & Co., Spokane, Wn.

WE PAY TOP PRICES FOR YOUR LIVE OR dressed veal, hogs and poultry. Your check by return mail. Shipping tags on request. M. & J. Packing Co., Spokane.

FOR SALE—REGISTERED SHORTHORNS; two yearling heifers, one two-year-old, one cow, eight years old. H. Nelson, Springdale, Wash.

TOP PRICES PAID FOR CREAM, EGGS, poultry, pork, veal. Inland Products company, Second at Cedar. Dept. E. Spokane, Wash.

FOR SALE—80 HEAD PUREBRED HAMPshire ram lambs; these are good; will sell singly or in lots. F. M. Rothrock Co., Spokane.

FOR SALE—TWO BULLS AND A FEW REGistered heifers from the famous Hood Farm strain of Jerseys. T. E. Bradley, Daisy, Wash.

HAMPSHIRE RAMS (REGISTERED); LARGE, well developed and vigorous. Stadacona Farms, Route 1, Spokane, Wash.

REGISTERED HOLSTEINS—BULLS, HEIFers and cows for sale; accredited herd. Oscar Dunlap, Junction City, Oregon.

FOR SALE—10 HEAD OF REGISTERED Shorthorns, priced for immediate sale. E. W. Haag, Sandpoint, Idaho.

O. I. C. REGISTERED PIGS, BREEDING gilts and boars; prices right. E. H. Thieman, South Prairie, Wash.

REGISTERED HAMPSHIRE BREEDING bucks and ewe lambs. Far Niente Farm, R2, Bothell, Wash.

FOR SALE—MILKING SHORTHORN HEIFers and bull calves. DeGraaff Bros., Lynden, Wash.

REGISTERED SHROPSHIRE RAMS. PRICES reasonable. Geo. H. Gilmore, Junction City, Ore.

REGISTERED SHROPSHIRE RAMS AND ewes. Write McK. Edwards, Valley, Wash.

MILK GOATS, FRESH IN AUGUST, $35. M. P. Eggers, Woodinville, Wash.

TWO VERY FINE BULL CALVES. EVA W. Duncan, Cove, Ore.

HARNESS and SADDLERY 189

SEND FOR FREE HARNESS AND SADDLE catalog today; cut out the middleman, buy direct from the manufacturer. Lowest prices in the west; satisfaction guaranteed. Established 1881. Write Pierce Harness Co., Dept. T, Spokane, Wash.

HAY FOR SALE. 200

ALFALFA HAY, GUARANTEED QUALITY; prompt shipment; buy direct and save money. Prices upon application. Richard Nyman, Walla Walla, Wash.

HOTELS 306

FAIRMONT HOTEL—RATES $1 DAY AND UP. 319 Riverside, Spokane. Free bus.

FAIRS. 370

WESTERN WASHINGTON FAIR, PUYALLUP, October 1-7, both inclusive. 133,000 in attendance last year. You are invited to participate. W. H. Paulhamus, manager.

NORTH PACIFIC LIVESTOCK SHOW, Everett, Wash., Oct. 11 to 14. Write for free premium list to T. C. Simmons, secretary.

JOB PRINTING. 372

WEDDING ANNOUNCEMENTS AND INVItations, catalogs, booklets, high school annuals, letter heads, envelopes, cards, butter wrappers, etc. Union Printing Co., 412 First ave., Spokane, Wash.

CLEANING, DYEING, Etc. 420

FRENCH DRY CLEANING BY PARCEL post. Ladies' and gents' suits, furs, hats, etc., prompt service. Address City Dye Works (Dept. A), E422 Sprague ave., Spokane, Wash.

TANNING 425

WE WILL TAN YOUR COW OR HORSE HIDE for robes or coats, and guarantee our work. We are custom tanners, manufacturers and taxidermists. Write for prices. Spokane Fur Tanning Co., 7 Pine st., Spokane.

ANY KIND OF HIDE TANNED WITH HAIR on, or for leather. Fur and taxidermy work done to order. M. R. Mohr Co., 321 Sprague, Spokane, Wash.

KODAK FILM DEVELOPING 472

FREE ENLARGEMENT WITH 75C ORDER high gloss print. Spokane Film Co.

FILMS DEVELOPED FREE—KODO, THE PICture King, 815 Stevens, Spokane.

MATERNITY HOMES 497

MATERNITY HOSPITAL; STRICTLY PRIvate; doctor in attendance; prices reasonable. Mrs. Elizabeth Peel, matron. W1324 Broadway, Spokane.

BUSINESS OPPORTUNITIES 516

OWNER OFFERS WHOLESALE AND RETail hay, wood, grain, feed, seed and flour business established four live towns, best grain and dairy section eastern Washington. Owns warehouses, trackage each point. One has hundred car apple storage plant, another fully equipped creamery additional above lines. Main point has modern grain elevator, feed mfg. plant, seed warehouse. Also half interest growing creamery, paying good salary and dividends. All operating good profit and growing. Splendid opening for man with sons to establish in business. Sell all or part. Prices run $5000 to $20,000; ¼ cash, balance five-year contract, 6 per cent. A 3, Washington Farmer, Spokane.

BUILDING MATERIAL 588

TURNS PLASTERING INTO PLAY—PERFECtion plaster wall board can be nailed on just like lumber, and makes a perfect plaster job. Western Wallboard Co., Seattle, Wash.

SEEDS 620

ORDERS FILLED PROMPTLY FOR VETCH, clover, pasture mixtures, gray and black oats, seed wheat and barley; hay of all kinds. Brownsville Warehouses. Chas. Sterling, owner, Brownsville, Ore.

LADINO CLOVER SEED, TESTING 99.26 PER cent pure; most profitable crop for Idaho soil, $2.50 per pound. George R. Johnson, Rural Route 2, Filer, Idaho.

FOR CLOVERSEED, PASTURE GRASSES, vetch, gray oats, etc., get latest prices, stating amount wanted. Lee Hershberger, Hubbard, Ore.

NURSERY STOCK 621

TREES—NOW BOOKING MAIL ORDERS AT reduced prices for limited time only. Apples, pears, peaches, nut trees, prunes, cherry, small fruits, etc. Live agents wanted. Lafayette Nursery Co., Lafayette, Ore.

NURSERY STOCK—PRUNES, WALNUTS, FILberts, fruit trees of all kinds, gooseberry and small fruits. Buy direct and save 50 per cent. Brooks Nursery, Lafayette, Ore.

BLUE GRAPE HYACINTH BULBS FOR FALL planting; doz., 25c. Mrs. S. A. Satrum, Florence, Wash.

FARM LANDS FOR SALE 651

1000-ACRE RANCH—TO CLOSE AN ESTATE we offer at sacrifice price, the Midway Ranch, Ltd., as a going concern. Ranch consists of 1000 acres low bench and flats on both sides of Kettle river at Midway, B. C., near international boundary. On line Kettle valley and Great Northern railways; sidetrack and flag station on property. On motor highway. Power line from Bonnington Falls runs through ranch. Land will grow any crop raised in country. Has produced finest wheat. Three crops of alfalfa possible under irrigation. Two orchards totaling 30 acres. 200 acres now under irrigation with development work done for irrigating 700 acres at small additional outlay. Irrigation system installed—dam, penstock, turbines and pumps operated by our own water power. Ample water rights guaranteed. Buildings consist of 10-room residence, farmer's house, bunk house, two hay barns, granary and all necessary buildings, tractor and all implements, horses, cows and pigs go with place. $65,000 has already been expended on development. We will accept a sacrifice price. With small additional expenditure placing 700 acres under irrigation purchaser can treble his money. We can arrange easy terms after first payment is made. For full particulars write J. H. Weeden, 1003 Credit Foncier bldg., Vancouver, B. C.

CUTOVER LANDS, EASY TO CLEAR; $8 TO $20 per acre; 25 miles north of Spokane; on hard surfaced highway; Great Northern and Milwaukee railways; excellent opportunity for dairying and stock raising with Spokane markets and creamery near at hand. Will help the man who will live upon this land and agree to clear a part each year by giving lumber to help start his buildings, and a pure-bred Jersey bull to groups of farmers. Interest and payments low. Write Milan Farms Development company, Dept. T, Old National Bank bldg., Spokane, Wash.

POTATO, POULTRY, BERRIES. ALL cleared and in meadow. A few feet from paved highway; located a half mile from railroad station, good store and sawmill; excellent neighbors, fine schools, close to several good towns. Priced at only $100 an acre. Sold in 5, 10 or 20 acre parcels. Small payment down, balance in 10 years at 6 per cent. This is the best land at the price that we know of. Write or call for full information. Carter, MacDonald & Miller, 208 Columbia st., Seattle, Wash.

5000 ACRES, NEWAUKUM RIVER VALLEY; highest type level farming land; all rich, productive soil. No gravel. No floods. No crop failures. Well developed district. Near Chehalis, Washington, 20 acres up, $15 to $50, easiest terms. Settlers can get steady employment years to come; good wages; and live at home. See local representative, St. Helens hotel block, Chehalis, or write Graham Land company, American Bank bldg., Seattle.

DO YOU WANT A HOME IN A RICH VALLEY near Spokane, on three transcontinental railroads? Where soil is perfect, rainfall ample. Summers cool, winters moderate? The kind of stump land that pays to clear? Timothy and clover, green eight months in year; natural stock country. Land cheap. 10 yearly payments at 6 per cent. Humbird Lumber Company, Box 00, Sandpoint, Idaho.

193 ACRES, WELL FENCED; 140 ACRES IN cultivation; ample, incontestible water; 25 miles south of Salmon City, Idaho, on Salmon river; fine stock range; six-room house; spring water piped into house; barns, corrals, good orchard; 300 tons hay; about 130 head stock cattle, 18 head horses, lots of farm implements. Price $17,000; cash, $11,000, balance easy time. Write or call on E. K. Abbott, Salmon, Idaho.

60-ACRE FARM, FAMILY ORCHARD, FAIR buildings; creek, two wells. A. Medack, Mt. Angel, Ore.

FARM LANDS FOR SALE (Continued) 651

ONE SURE WAY TO MAKE FARMING PAY. An all-cash crop, one-man farm in "Daly-acre," cream of the famous Marcus Daly estate, Bitter Root valley, Montana. Local creameries, canneries and cheese factories pay cash for cream, poultry, eggs, milk, strawberries, cherries, beans and peas. Mild, sunny climate, no rainy season, good schools; ideal living conditions. Write for free booklet "Where Farming Is Different." The Bartlett-Bolen Co., Hamilton, Mont.

FOR SALE—160 ACRES; 8 MILES FROM Loon Lake summer resort; 25 miles north of Spokane; 40 acres black bottom soil, subirrigated; 12 acres cleared, balance timber and pasture; 5 acres timothy and clover; full set of buildings, family orchard; good spring water can be piped to buildings; outside range; 1½ miles from state highway; $20 per acre; one half cash. L. C. Robinson, Loon Lake, Wash.

BIG OPENING SALE OF YAKIMA VALLEY farm land, under an assessed state and government approved irrigation project; best, deep soil; close to town and good roads. Price $25 per acre and up. Very easy terms. Western Lands, Inc., owners, 918 Green bldg., Seattle.

$50 TO $65 AN ACRE—GOVERNMENT dyked, cleared meadow land on main road near C. P. R. station, 26 miles from Vancouver, B. C.; 14 miles from New Westminster; in 20 and 40 acre blocks and larger. Owner, 1003-4 Credit Foncier bldg., Vancouver, B. C.

160 ACRES; 35 ALFALFA; 4½ MILES FROM Addy, Wash.; buildings, orchard, berries, running water; 26 head cattle, 12 giving milk; team, farm tools, household goods, 50 tons hay; $6500; federal loan, $1450, balance cash; trades. John Tracy, Addy, Wash.

BIG LUMBER COMPANY LAND SALE—IN Skagit county; 40-acre tracts, $1400; $200 cash, balance easy. Lots work for the settler. Splendid district, roads, schools, towns. Information free. H. C. Peters, 726 3d ave., Seattle.

DAIRY RANCH, 320 ACRES; 110 IN CULTIvation; good 6-room house; 30 to 40 acres natural meadow; 2 trout streams; best dairy ranch in Stevens county, Washington. $40 acre, easy terms. Groshong Land Co., Deer Park, Wn.

WHATCOM COUNTY, WASH.; 47 ACRES; EXceptional fertility; 2 springs, family orchard, etc.; fine dairy section. For quick sale $5250; terms if desired. Owner, Mrs. Laura Smith, 802 Cole ave., Los Angeles, Cal.

20-ACRE FARM; ON PAVED ROAD; RICH, level bottom land for variety choice crops; 12-cow pasture; 10 acres, $1250 down; terms, particulars. Owner, Box 324, Mt. Vernon, Wn.

IF YOU ARE THINKING OF COMING TO Yakima valley, let me know your wants, I have some bargains. Lands will advance. A. B. Capps, Grandview, Wash.

SELL YOUR PROPERTY QUICKLY FOR cash; no matter where located. Particulars free. Real Estate Salesman company, 501 Brownell, Lincoln, Neb.

40 ACRES AI LAND, UNDER WATER, IN city limits Preston, Idaho. Will grow everything. Price right. C. S. Springer, Ogden, Utah.

BARGAINS IN DRY AND IRRIGATED farms. Oregon Mortgage Co., Paulsen bldg., Spokane.

IMPROVED STOCK RANCH, STOCK, MAchinery, cheap. Wm. Albrecht, Republic, Wn.

320-ACRE FARM IN CULTIVATION; 10 MILES north Almira, Wash. Box 140, Twisp, Wash.

FARM LANDS—Wanted 654

NO COMMISSION — SELL YOUR FARM through Washington Farm Bureau Exchange, represented in 45 states. Lists of farms for sale by owner mailed free. 312½ Lindelle, Spokane.

WANT TO HEAR FROM OWNER HAVING farm for sale; give particulars and lowest price. John J. Black, Chippewa Falls, Wis.

I HAVE INQUIRIES FOR FARMS IN NORTHwest. Describe fully and state price. R. A. McNown, 310 Wilkinson bldg., Omaha, Neb.

FARM LANDS FOR RENT 657

FOR RENT—BEAUTIFUL IRRIGATED ONEman farm in Bitter Root valley, Mont.; 10 acres fruit, alfalfa, orchard; 10 acres river pasture; two miles on hard state road to county seat, with fine schools, big cannery, creamery, cheese factory, packing houses, theaters, hospital; school route passes door; 8-room modern plastered house overlooking Bitter Root river; hardwood floors, electric lights, water system, bath, full cellar, furnace; lovely lawn, shade and flowers; good barn for 8 cows; garage; ideal climate, with mild winters, no rainy season; wonderful hunting and trout fishing; an all spot cash product farm. Cows and poultry, with cherries, apples, strawberries, beans and peas for the canneries bring spot cash. Cash rent, $500, with option to buy. Act quick. Owner, Box 8, Hamilton, Mont.

FOR LEASE—440 ACRES DAIRY FARM; ON Puget Sound; low rent; part cash, part in labor. J. M. Dempsey, owner, 326 East 58th st., Seattle.

IRRIGATED LANDS—For Sale 663

CORBIN ADDITION TO GREENACRES—IN the beautiful Spokane valley; 30 minutes from Spokane paved road; 40 inches of water for irrigation; gravity flow. Ask for booklet with all information.

Return coupon—The Fred B. Grinnell company, Spokane, Wash. I am interested in the Spokane valley. Please send booklet and all information to

Name .....

Address .....

WE OWN 1000 ACRES WESTERN WASHINGton choice irrigated land, and sell in tracts of 5 acres upward; $100 or more down, balance 10 years. $40 per acre, unimproved, to $350 per acre for land in highest state of cultivation. Ideal location and climate for poultry, berries, dairying. Write for information. Washington Colonization company, Sequim, Wash.

A MONEY MAKER THAT WILL ALWAYS show handsome profits: 130 acres, near Yakima; good water rights; excellent buildings and well equipped; large dairy herd. Price $22,000; good terms. Western Lands, Inc., owners, 918 Green bldg., Seattle.

FIFTEEN HUNDRED IN FIVE TO TWENTY acre irrigated tracts, on state highway and railroad; send for particulars. J. W. Lindsay, Port Angeles, Wash.

FOR SALE OR EXCHANGE 702

102 ACRES IN FRANKLIN COUNTY, IDAHO, 60 in cultivation, under water; buildings, fences and good spring. Price $8000; terms, or will trade for city property, good dairy farm. C. S. Springer, Ogden, Utah.

THIRTY-ACRE DAIRY FARM, HIGHLY IMproved; ideal location; sell or trade for merchandise stock, registered Jerseys included. Wm. C. Postlethwaite, Caldwell, Idaho.

TO EXCHANGE—Real Estate 705

TRADE EQUITY IN 720-ACRE STOCK ranch; partly irrigated; on Crooked river, near Prineville. Getty Smith, Prineville, Ore.

Cattle Ranch To College

By Russell Doubleday Copyright by Doubleday & McClure Co

CHAPTER XIII.

Herding Horses and Panning Gold.

"Seems to me," said John to his new partner, Frank Bridges, "that this is a pretty tough gang. Half of 'em drunk, and the rest of 'em ready to take your head off if you speak to 'em."

"Oh, well," answered the other, "some of them got out of money quicker than others and so got out of liquor quicker. It's kinder hard to go back to work in the wilds after loafing round the town a good while. You'll find that they're not such a bad lot when they're sober and get to workin'."

The two were sitting on one of the scrapers that trundled behind the wagons—a vehicle which, though not exactly comfortable, was exclusive—they had it entirely to themselves. All day long they had traveled thus, except at dinner time, when a short halt was made. John said he would almost as lief ride a brake beam as a "break-back," for so he had christened this jolting equipage.

Long after dark they saw the white tents of the camp loom up, and in a minute after their arrival it was the scene of bustling activity. Orders were bawled, greetings were shouted, the teamsters yelled and swore at their horses. But above the din rose the voice of Old Murphy, the contractor: "Here, boys, rustle round and get these horses out of the harness. Worth, saddle up and take these horses to the other bunch and watch 'em all till morning." Then, turning to his foreman: "Ricks, get this fellow a saddle horse."

"The others are tied up yet, Mr. Murphy," the man ventured.

"What! Not out yet?" roared the boss. A regular tirade followed, and John realized that he must do his work well to escape a tongue-lashing. He was rather staggered at the order to saddle up and get out at 10 o'clock at night, with a lot of strange horses, in a country he did not know.

"Say, Frank," he said to his friend, who was busy unloading the rolled-up "beds" or bedding, "this is no joke; I don't want to lose a lot of horses and maybe kill myself in the bargain—it's going it blind with a vengeance."

"You'd better make a stab at it, anyhow," he was advised. "The old man's raging, and you might lose your job if you showed the white feather."

"You ready yet, Worth?" It was Murphy's voice, and John jumped at the sound of it.

"Give me a hand, Frank, will you? Bring the blasted old cayuse over here while I get the saddle ready. I'll do it or bust," and John suited the action to the word.

"You want to watch those horses like thunder, Worth," called out Murphy, who seemed to be everywhere at once. "They're strangers to each other, and they'll split up and scatter to the four winds if you don't watch 'em. Some's from Oregon and some's from Utah, and if they get separated it'll cost mor'n they're worth to get 'em again. You've got 56 head—keep counting 'em." The "old man" apparcently did not want him to get beyond the sound of his voice, but kept following and shouting instructions. Perhaps he realized that he was giving the boy a trying, and possibly dangerous task.

"All right," shouted John cheerfully, but at heart he was not so confident.

It was long after 10 and quite dark; the horses in front were mere shadows and could only be distinctly made out by the tramp of their hoofs. To count them exactly was almost impossible, for it was hard to tell where one horse began and another ended. The old beast John was riding, however, knew his business, and it was well he did, for it was necessary to trust almost entirely to his acuteness and keen sense of smell. Horses and herder splashed across the creek and pushed their way through the brush and up the hill opposite.

The boy realized that his work was cut out for him, and he determined he would see the thing through. The hills and gulches round about were new to him. There might be precipices, quicksand bottoms, bogs, and, worst of all, the night-rider's menace, old prospect holes. These were short, narrow, and often deep ditches dug by miners in their search for the precious metal. Besides all this, he was on a horse he had never thrown a leg over before and of whose disposition and capabilities he knew nothing.

"If I only had Baldy!" he thought as the cayuse he was riding plunged into the brush after the retreating bunch.

Immediately his trouble began. The old horses, old companions, jealous of the new-comers, tried to elude them, and the latter were none too anxious for their company. John could only gallop forward and back and all around, restraining this scattering tendency as best he could, and depending on his mount's sagacity to avoid holes and obstructions. A merry dance his charges led him—merry in the lively sense only—up and down, in and out, over what kind of country he could only guess. All he could see of his troublesome charges was a shadowy back now and then, or a high-thrown head silhouetted against a lighter patch of sky or a bank of sand.

He judged himself to be two miles from camp before the animals seemed to think of stopping to feed. Even then they were determined to separate, and it taxed John's vigilance to the utmost to keep them together. His horse began to tire, it was many hours before daylight, and something had to be done—at once. An old gray mare carried a bell on her neck and John noticed that the rest of the

"Oh, that? That's some sand and gravel I picked out down the creek."

bunch followed her blindly. If he could catch and tie her up the others might be more inclined to stay in one spot. How to do this was the question. She was too wily to be caught by hand, and if in throwing the rope the loop missed, she would scatter the entire herd in a minute. For a while he gave up the plan, but it grew more and more difficult for his weary horse to keep up the continued darting to and fro.

At last he decided to make the trial—it was the last resort and the cast must be successful. He made ready his lariat, holding a coil in his left hand and the wide loop in his right, and waited an instant for a good opportunity. The gray mare stood out more distinctly than the other horses and made a better mark, but at best it would be a difficult throw. For several seconds John sat still in his saddle, the noose circling slowly round his head, his arm still, only the supple wrist bending. The old mare was watching him. The rope now began to whistle as its speed increased. Suddenly the belled mare snorted and started off on a run; John shut his teeth hard, threw at what looked like a neck, took a couple of turns round the horn of the saddle with the slack rope, then waited.

Almost at once the line tightened. A gentle pressure was put on the bridle rein, and the pony's weight checked the mare in her flight. The throw was a good one, and the mare was caught. The shock was great, and John's pony was green at this sort of business and the tightening cinches made him jump in lively fashion. The mare, too, had not learned that it is useless to "run against a rope," and for a while kept John and his mount busy; but the increasing tightness of the slip noose round her neck soon quieted her and enabled the boy to tie her up short to a tree.

The remedy proved to be effective; soon all the horses were feeding quietly round the tied leader.

John congratulated himself on his success and prepared to take a much-needed rest, but was interrupted by the sound of another bell far up the gulch. Evidently there were other horses feeding near, and it was essential to keep them separated; so he trotted to a point between the herd and the place from which the ringing came. Again he dismounted from his sweating pony and sat down to rest, when, chancing to glance over his shoulder, he saw a small fire blazing a quarter of a mile away. "No rest for the weary," he grunted resignedly, mounted once more and started out to investigate. As he rode slowly nearer he made out a man sitting cross-legged by the fire, his face in strong relief, his back almost lost in shadow. Behind stood a saddled horse, barely showing in the gloom.

John rode up, slapping his chaps with his quirt to let the stranger know that he was a horseman also and giving fair warning of his approach. Otherwise he might be taken for a horse thief and shot on sight.

The stranger rose quickly and retreated into the shadow. John did not like this. "Hullo, pardner!" he called, drawing nearer.

"Hullo, stranger," replied the other. "Are you lost?"

"No. I'm Murphy's night herder. Pretty dark night, isn't it?"

The man returned to the circle of firelight, his suspicions allayed, thus evidencing his own honesty. John dismounted and came up to him, glad to have some one to talk and listen to.

"You night herdin', too? I heard a bell ringing up the gulch and I guessed there was another bunch of horses up there."

"Yep. I've got Brady's horses up there," and he nodded in the direction of a dimly visible lot. John described the difficulties he had experienced and asked if there were many prospect holes about.

"Yes, lots of 'em," answered the Brady man. "An' they're deep, too. I was ridin' along with my bunch last spring, spurrin' my horse to get ahead of the critters, when he went plump into a blamed hole—and he's there yet. I only got away by the skin of my teeth."

"I guess I'm in great luck to get through this safe," said John. "I was never on this range till after dark tonight."

"Horses all there?" inquired the other, nodding toward John's charges.

"Sure. But I guess I'd better count 'em."

"My horses are like a lot of sheep. I'll go along with you."

The two rounded the animals together again and counted them as well as the darkness would allow. They agreed that they numbered 56 and John breathed easier.

And so the first night passed, the two herders chatting pleasantly till dawn, when they parted, agreeing to meet some other night.

A little before daybreak John rounded up his bunch and began driving them in the direction of the camp. When daylight came he counted them again and to his satisfaction found them all there. In spite of the tiresome trip of the day before, the hard riding of the preceding evening, and the long night's vigil, he felt as gay as the lark that soared overhead pouring out a song entirely out of proportion in volume to its size. He hummed blithely an Indian war chant, made over for the occasion, and breathed in the early morning fragrance with a feeling of exhilaration that made him forget for the time that he had gone to work the night before supperless and had not put his teeth into anything edible since.

The sight of the cook preparing breakfast speedily reminded him that he had an "aching void," which seemed to extend to his very heels.

The boss's query, "Got 'em all, Worth?" was answered, with pardonable pride, in the affirmative. For John felt that he had done good work.

The breakfast was soon over, and what a breakfast! Baked beans, bacon, bread and coffee, a feast fit for the gods, John thought, as he rolled into the bed that Frank had previously showed him. He was sound asleep in a minute and entirely unconscious of the hustle and noise about him. Murphy was giving orders in stentorian tones that could be heard half a mile away; the unwilling horses were being harnessed to the big scoop-like scrapers and to the wagons containing tools; the men were divided into gangs, the new arrivals, cross, surly and suffering from aching heads, starting with irritating slowness. Soon all hands were hard at work, "moving hills to fill up hollows," making a level trail for the iron horse.

At this point there was much digging and scraping to be done, a deep cut and a long "fill" on the other side. At noon the men trooped back to dinner—silent until their hunger was satisfied, then noisy and boisterous—but John slept peacefully through it all.

About 4 o'clock he woke up and gazed about him wonderingly. He was lying in a tent, through the open flap of which the sunlight streamed.

A dip in the stream that ran close by refreshed him greatly and dispelled the sleepy, heavy feeling that had possessed him. The creek was clear and cool, and John lingered on its banks half clothed, digging in the sand and mud with his bare feet and hands. As he was dabbling in the moist earth, he came across some sand that had black streaks in it. His curiosity was aroused, for he had not seen the like before, and he gathered some in his hat, intending to ask what it was.

The cook was busy washing beans for supper, so John sat down on a log near by and watched him idly. His thoughts wandered back to the coal camps, and he wondered about Ben and Baldy; he longed for both, and for the moment was tempted to go home and see them; then he realized that he had chosen the path he was now traveling for himself and felt that he must follow it out to the end. He thought of the journey to Helena, of Jimmy the hobo, and of the life he had just left. His brown study was interrupted with a jolt. "What's that you've got in your hat?" It was the cook, speaking rather excitedly.

"Oh, that? That's some sand and gravel I picked out down the creek brought it up to ask what it is."

"Well, it looks to me like gold." Thi impressively.

"But it's black," objected John.

"Yes, the black is magnetic iron an often holds gold—maybe there's enough t pay. Do you know how to work th pan?" Cook was evidently interested.

The boy professed his ignorance, an the other volunteered to show him.

The pan, a flat, round, shallow tin affai was taken down to the spot indicated b John and the lesson began. A little grave which included some of the black san was scooped up. Then the pan was take to the creek, dipped under, and the wate was allowed to run out slowly. This wa repeated over and over, and each time little sand and gravel was washed ov the edge. At last only the black sand, b ing heavier, remained. This the coo showed triumphantly.

"Only a little black sand! Where's th gold? inquired John.

"It's in the sand, and has to be se arated from it by quicksilver, which a sorbs the gold; then you can throw awa the sand," explained cook, who had p away the residue carefully in a bottle a was dipping up more gravel.

"But how do you take the gold out the quicksilver?" The boy was determin to get to the bottom of this thing.

"Why, you can put it in the sun a let it evaporate, leaving the gold, or y can send it to town to be separated a run the risk of losing both quicksilver a some of your gold."

John tried panning, but he found needed a much more practiced hand th his; he spilled out water, gravel, and a or else he didn't accomplish anythin Cook's teaching was careful, however, a before long his pupil was able to gath enough sand, after sleeping and before ginning his night's work, to realize 50 60 cents' worth of gold when separated.

(To be continued.)

FAMILY CIRCLE

ALICE W. BARLAND
EDITORIAL CONTRIBUTOR

SHEPHERD'S-PURSE.
By Blanche Elizabeth Wade.

You know the common little weed
That grows along the country ways,
And shows its tiny clusters white,
Then small triangle purse displays.
At first it does not spend at all,
But hoards with care till seed-purse fills,
And then the miser suddenly
Repents, and out the whole wealth spills.

Now there are critics who would say
A man would be but silly dunce
To save so carefully while young,
And then to spend the whole at once.
But yet there is wide difference
Regarding who or what disburses.
The wise weed casts away its wealth,
That there may be more shepherd's-purses!

Experience Letters

Dear Mrs. Barland: As I have a son nd daughter nearly of age and both have fine name in the community I feel that have a valuable experience that may help ther mothers.

I always felt when my babies were lit-le that I wanted them to be as happy as could make them, happy in the right way. When they were still tiny tots I entered nto all their plans and listened to their ishes and desires and gained their con-idence. They sometimes repeated con-ersations of playmates to me which were ot good for them to hear, but I never ppeared shocked at anything they told me or ridiculed anything they said lest they ithdraw their confidence in me. I was o glad of this when one day my 8-year-ld daughter repeated some vulgar infor-ation she had heard from a girl only 7 ears old. This gave me an opportunity o tell my girl the story of love and life n a beautiful way.

My daughter still confides in me and hows me her love letters, but I never ead the letters of either of my children nless they tell me to do so.

I have parties for my daughter and go ith her to shows when at times every bone in my body aches. But as I am not very strong I would quite likely never go if I waited till I felt well. I feel rested afterward. When a boy becomes interested in my daughter he is invited to the house and treated as nicely as we know how. They have the parlor to themselves and can talk all they wish. If she goes to dances I accompany her unless they are in private homes and I shall do this until she is engaged. She has taffy pulls and "wienie" roast parties.

I have taught her to sew and she makes all her own clothes, including dresses, very nicely on very little money.

We are people of small means and it has meant much sacrifice many times to do these things for the children. We have a second-hand auto, bought also at a great sacrifice of other things, but we can all go to places together and can take along the friends of both the children, and husband and I figure that we won't have them with us much longer and we are happy in their happiness. After they are away for themselves we can get some of the things we are going without now.

As our children didn't have a chance to choose their parents I feel that they are entitled to a happy home and the best bringing up we can give them and really, dear folks, the things most worth while have nothing to do with money. Tender love, sympathy and kind deeds are among those things.

To me there is no greater honor on earth than to be the mother of good children whom I can present as jewels to God, who gave them into my keeping for a while.

MRS. A. E.
Washington.

Family Circle Girls

Dear Mrs. Barland: I have been a silent but interested reader of the Circle for some time, but never seemed to get up courage to write.

I think your letters of advice are splendid and I think if we younger folk would take heed to what our elders tell us we would be better off.

I think "A Grandmother's" letter was quite true, and I do hope the boys will read and re-read it, for it will not hurt them to do so. I think we girls have taken all the blame quite long enough.

I don't smoke, but I don't believe the boys have any moral right to do so either. I think there is much sense in the shorter skirts and the increased energy in the field of sports. Wouldn't you hate to see girls and women go back to an 18-inch waist, leg-o'mutton sleeves and hair twisted into hard knots and her face a picture of agony on account of uncomfortable dress?

What's wrong with bobbed hair I would like to know? It is far more comfortable and sanitary than long hair. Mine isn't bobbed, but it would have been long ago if I could get the consent of my mother.

I do dislike to hear men criticizing the styles of the present time. They wouldn't want the boys to wear yellow pants and plug hats as they did years ago, so why should we girls have to copy the heart sickening styles that our mothers wore.

Example and education will put right the faults of our country, but too much "thou shalt not" will get us nowhere.

A. M. K., Ore.

Family Circle Boys

Dear Mrs. Barland: A few weeks ago I read a letter in the Family Circle pertaining to the question as to who should go to high school and who should not.

I believe every one should continue in school, unless prevented by illness, until he has passed the eighth grade at least. All who have high ambitions should go to high school and after that most students will have a pretty fair idea what occupation they wish to follow and can act accordingly. They can go on to college or do as many girls do, find a home.

Some boys and girls go to school because they have high ideals and because they realize that an education is necessary if they are to make something of themselves, and they are usually at the head of things in school and are being trained in self government to take their places in our country and our government. People must be able to govern themselves before they can be trusted to govern others. That is one thing that school is for.

Some go to school because they want to have a "good time" or to avoid working. Such are backward in their lessons, causing trouble for the teachers and wasting the public money which is appropriated for education of the youth of our country.

This kind of students usually attend dances frequently, staying out late when they should be sleeping, smoking cigarettes and quite often are anything but saving of their kisses for the one man or the one woman.

Another question asked was "Who derive the most benefit from school?" The pupils who study because they wish to learn and not because they are compelled to, derive the most benefit and they are the ones who should always be allowed to go if possible. No person, no matter how poor a student, can go to school without deriving some benefit. I would say in regard to the case mentioned where the girl wished to go to high school but thought she shouldn't because her father would be so lonely if left alone. He no doubt realizes that the sacrifice you would make by giving up your education in high school would be greater than he would make to live alone and let you go.

He no doubt knows the value of an education and appreciates your need of it if you are to keep pace with the advancement of the present time. Is four years of "batching" for your father too great a price to pay for an education that will last you a life time?

A. M. N.
Washington.

USE A STIFF BRUSH.

A small, stiff brush is best for cleaning vegetables.

"Granny wishes she'd had such CORN FLAKES when she was little"

Never was such a delicious cereal as Kellogg's Corn Flakes to eat a lot of for breakfast or lunch or as late-evening snacks! Always wonderful in flavor, always crispy and crunchy, Kellogg's are simply the last word in a delightful, wholesome, satisfying food!

Do you realize that through the enormous demand for Kellogg's Corn Flakes, that Kellogg's are one of America's largest buyers of farmer's corn?

Each day more than a million packages of Kellogg's are made and sold. This means more raw corn for one day's use than a 450-acre corn farm can produce in one season!

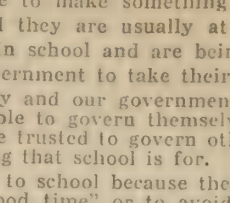
Kellogg's Corn Flakes are delicious with your favorite stewed fruit, or with bananas or other fresh fruit.

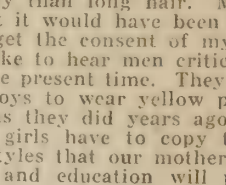
Kellogg's Corn Flakes are sold only in the RED and GREEN package that bears the signature of W. K. Kellogg, originator of Corn Flakes. None are genuine without it.

Kellogg's
CORN FLAKES

Also makers of Kellogg's KRUMBLES and Kellogg's BRAN

drink to your own health with Ghirardelli's





Ghirardelli's Ground Chocolate does a lot *for* you but not a thing *to* you. It is the cup of no regrets! No indigestion. No "jumpy nerves." Healthful. Easy to digest. Why? Because Ghirardelli's is a wonder-blend of fine cocoa and pure sugar. Only Ghirardelli knows the secret of this blend.

And only housewives who use Ghirardelli's every morning know what a quick breakfast-maker it is. Simply mix to a paste, add hot milk, stir, bring to a boil—and there's your breakfast-drink piping hot, fragrant, flavory, fine-for-all-the-family!

GHIRARDELLI'S GROUND CHOCOLATE

(28)

High Points in News of the Week

Whether Germany is to yield to the French in the controversy now being waged in the Ruhr district occupied by the French troops is being decided this week. The new German chancellor is holding conferences with his coalition cabinet and other government officials and is expected to announce his decision before the end of this week. The point at stake is whether or not he shall declare the so-called "passive resistance" of the German citizens in the Ruhr district at an end, or whether he shall urge in his official capacity that they continue to hamper the French in the administration of the district. It is apparent that negotiations of a definite nature between France and Germany for the settlement of the entire controversy are impossible until Germany has undertaken to cooperate with the French in the delivery of coal and other material reparations, to secure which the French entered the Ruhr district last January. While Great Britain is known to be strongly opposed to the French policy of occupying and administering the Ruhr territory, it is generally understood that she has recognized the determination and ability of France to carry out its policy, and in order to permit the resumption of the negotiations, has influenced German officials to yield to the demands of the French.

* * *

The people of the United States have contributed nearly $10,000,000 to the relief fund to be used by the American Red Cross in the district of Japan devastated by the earthquake three weeks ago. Reconstruction work is reported to be already under way notwithstanding the fact that earthquake shocks are still being felt in the district.

* * *

Starting from forest fire on the outskirts of the city of Berkeley, Cal., fire totally wiped out the residences in about 40 blocks of that city in the vicinity of the University of California last week. Property damage is estimated at between $5,000,000 and $10,000,000. It is estimated that 12,000 persons are homeless as a result of the fire, though no loss of life is reported.

* * *

Several cities in Oklahoma are under martial law under orders of Governor J. C. Walton. His action was taken because of alleged acts of violence on the part of the Ku Klux Klan organization. A special session of the Oklahoma legislature has been called to act upon the situation but the governor has declared that the legislature will not be permitted to convene. It is reported that 68 members of the lower house of the legislature, or a majority, are members of the klan. Governor Walton announced that he would require the national guard authorities to place members of the legislature who undertook to meet under arrest.

* * *

It is reported that President Coolidge expects to call into conference the governors of the various states of the Union about the middle of October for the purpose of considering the problem of law enforcement, especially with reference to the prohibition amendment and enforcement laws. The governors hold their regular annual meeting in Indiana, October 15, and the president's conference will probably convene immediately after.

* * *

Thomas Taggert, a national figure in the democratic party, is reported to be seriously ill at his summer home in Massachusetts.

* * *

Secretary of Agriculture Wallace has appointed Clyde W. Warburton to be director of the newly created office of extension work of the department of agriculture. Dircector Warburton's duties will be to coordinate all the extension activities now being carried on by the department. He is a graduate of the Iowa State college at Haines, and has been associated with the department of agriculture since 1903.

* * *

A movement is on foot looking toward a stricter medical examination of aliens before they are permitted to enter the United States.

Farm Business and Markets Outlook

(Continued from page five.)

390,000,000 bushels, or 10,000,000 bushels more than a month ago. but 61,000,000 bushels less than in 1922. Wisconsin shows the greatest decline. The carlot movement has not increased as much as expected in the last two weeks, but prices have been easy on the leading markets with the exception of Chicago. Western round whites are quoted at $1.85 to $2.25 per 100 pounds in Chicago and Kansas City.

The commercial apple crop was estimated at 33,320,000 barrels, based on the September returns, compared with 30,955,000 barrels in 1922. The principal increase is in Washington, which has 1,900,000 barrels more than last year. New York is the second state in total production, with 5,212,000 barrels, against 6,000,000 barrels in 1922. Apple prices have been steady to firm under a steadily increasing carlot movement from producing sections. Midwestern fall varieties are quoted at $1.25 to $1.50 per bushel in consuming markes.

The peach crop is now estimated at 45,400,000 bushels, which is about 2,000,000 bushels less than a month ago and 20 per cent less than last year. Peach prices have been firm in the last few days, as the carlot movement from producing sections is falling off rapidly.

LATEST QUOTATIONS.

The Live Stock Market.

PORTLAND, Ore., Sept. 22.—Cattle — Choice steers, $7.25@7.75; medium to good steers, $6.75@7.25; fair to medium steers, $5.75@6.75; common to fair steers, $4.75@5.75; choice heifers, $5@5.25; choice cows and heifers, $4.50@5; medium to good cows, heifers, $4@4.50; fair to medium cows, heifers, $3.50@4; common cows, $2.50@3.50; canners, $1.50@2.50; bulls, $3.25@4.25; choice feeders, $4.50@5; fair to good feeders, $3.75@4.50; choice dairy calves, $9.50@10.50; prime light, $8.50@9.50; heavy calves, $6.50@8.50; stags subject to dockage, $2.50@5.

Hogs—Prime light, $9.25@9.75; smooth heavy 230-300 lbs., $8.25@9.25; do 300 lbs and up, $7.25@8.25; rough heavy, $6@7.25; fat pigs, $8.25@9; feeder pigs, $8.25@8.75.

Sheep—East of mountain lambs, $10@10.75; choice valley lambs, $10@10.50; medium valley lambs, $9.50@10; common valley lambs, $8.50@9.50; cull lambs, $7@8.50; light yearlings, $8.50@9; heavy yearlings, $6@7.50; light wethers, $6@7.50; heavy wethers, $5@6; ewes, $1.50@5.50.

SPOKANE, Sept. 22.—Cattle—Prime steers, $6.75@7.25; good to choice steers, $6:25@6.75; medium to good steers, $5.50@6.25; fair to medium steers, $5@5.50; common to fair steers, $4.25@5; choice cows and heifers, $5@5.50; good to choice cows, heifers, $4.50@5; medium to good cows, heifers, $4@4.50; fair to medium cows, heifers, $3@4; canners, $2@2.50; bulls, $3.25@4; light veal calves, $8@9; heavy veal calves, $6.50@8; stockers and feeders, $4@5.25.

Hogs—Prime mixed, $9.50@9.75; medium, $9.25@9.50; heavies, $6.50@8.75; fat pigs, $9.25@9.50; stockers and feeders, $8@8.25.

Sheep—Prime lambs, $10@10.35; fair to medium, $8.50@10; yearlings, $7@8; wethers, $5.50@7; mutton ewes, $3@5.

The Grain Market.

PORTLAND, Ore., Sept. 22.—Grain futures: Wheat—Bluestem and Bart, September, October, $1.06; November, $1.05; soft white, September, October, $1.06; November, $1.04; western white, September, $1.05; October, $1.04; November, $1.03; hard winter, September, $1.02; October, November, $1.01; northern spring, September, $1.04; October, $1.03; November, $1.02; western red, September, $1.03; October, $1.02; November, $1.01.

Oats—No. 2 white feed, September, $28; October, $27.50; November, $27; No. 2 gray, September, $27; October, $26.50; November, $26.

Barley—No. 2, 46 pounds, September, $29; October, $28.50; November, $28; 44 pounds, September, $28; October, $27.50; November, $27.

Corn—No. 2 eastern yellow shipment, September, $37,25; October. $37; November, $35.50.

ODESSA, Wash., Sept. 22.—Bart and Bluestem, 88c; Marquis and Fortyfold, 86c; Turkey red, 84c; Jones Fife, 82c.

Hay and Feed Grain.

PORTLAND, Ore., Sept. 22.—Millfeed—City delivery prices; mill-run, $28 per ton; middlings, $40; scratch feed, $47; rolled barley, $39@41; cracked corn, $48; rolled oats, $39.

Hay—Buying prices, f. o. b. Portland: Alfalfa, $15.50@16 ton; cheat, $13@14; valley timothy, $18@19; eastern Oregon timothy, $20@22; clover, $13@14; oat, $14@15; oat and vetch, $15@16; straw, $8 per ton.

SPOKANE, Sept. 22.—Wheat, feed wheat, $36 ton. Oats, $36 per ton; rolled, $38. Corn, $44 per ton; cracked corn, $46 per ton. Barley, $34 per ton; rolled, $36. Bran, $25 per ton. Bran and shorts, $26 per ton. Shorts, $30 per ton. Hay, alfalfa, $20 ton in ton lots, $16@18 carload lots; new timothy, $20 in ton lots, delivered.

General Produce.

PORTLAND, Ore., Sept. 22.—Butter—Cubes, extra, 45@46c lb; prices, parchment wrapped box lots; cartons, 50c. Butterfat, 49c, delivered Portland; average station buying prices, 46c lb.

Eggs—Buying prices: White hennery standards, 40c; mixed color standards, 35c dozen. Selling prices: Front street, selects, 45c; candled ranch, 42c. Association selling prices, cash at store: Extras, 45c; pullets, 33c.

Cheese—Price to jobbers, f. o. b. Tillamook: Triplets, 23c; longhorns, 29c; loaf, 30c per lb.

Poultry—Hens, 15@24c; broilers, 26@27c; ducks, nominal; geese, nominal; turkeys, nominal.

SEATTLE, Sept. 22.—EGGS—Select local ranch, white shells, cases included, 42c per doz. f. o. b. Seattle; mixed colors, 38@39c per doz.; pullets, 31c per doz.; checks, 22c per doz.; cases returned to shippers, 1c less; do to country stores, f .o. b., 38c per doz.; loss off; eastern Washington, case count, 35c per doz.; f. o. b. Seattle.

BUTTERFAT — F. O. B. Seattle: A grade, 50c per lb.; raw milk, $2.35 per cwt.

Poultry—Hens, 4½ lbs. and up, 25c per lb.; do 3½ and under 4½ lbs., 18c per lb.; springs, 2 lbs. and heavier, 25c per lb.; do 1 to 2 lbs., 28c per lb.; hens, 3 to 3½ lbs., 13c per lb.; do dry picked, 3c above live; capons, live, fat, 6 to 10 lbs., 35c per lb.; do dry picked, fancy, dressed, 38c per lb.; do roosters, 11c per lb.; Belgian hares, 3½ lbs. and heavier, 13c per lb.; geese, fat, live, 12c per lb.; ducklings, live, 3½ lbs. and up, 17c per lb.; ducks, old, over 3 lbs., 15c per lb.; turkeys, fat, dry picked, 8 to 10 lbs., 30c per lb.; do live, 27c per lb.; squabs, large, dressed, $3.50 per doz.; pigeons, $2; guineas, $8 per doz.

Range of Live Stock Prices for Week Ending September 19

	Chicago.	Spokane.	Portland.	N. Salt Lake.
CATTLE.				
Choice and prime heavy steers (1100 lb. up)	12.00@13.00	.....	.....	.....
Good heavy steers	10.35@12.25	.....	.....	.....
Medium heavy steers	8.00@10.50	.....	.....	.....
Common heavy steers	6.35@ 8.25	.....	.....	.....
Choice and prime light steers (1100 lb. down)	12.00@12.75	.....	.....	.....
Good light steers	10.10@12.00	.....	.....	.....
Medium light steers	8.00@10.25	6.25@ 7.25	6.50@ 7.50	6.00@ 7.00
Common light steers	5.90@ 8.10	4.25@ 6.25	4.50@ 6.50	4.75@ 6.00
Common to choice butcher heifers	4.50@11.35	3.25@ 5.75	3.50@ 5.50	3.50@ 5.10
Common to choice butcher cows	3.40@ 9.00	2.75@ 4.75	3.00@ 4.75	3.25@ 4.75
Bologna and beef bulls	3.65@ 7.50	3.25@ 4.00	3.25@ 4.00	2.00@ 3.50
Canners and cutters, cows and heifers	2.60@ 3.50	2.00@ 3.00	2.00@ 3.00	1.50@ 3.25
Canner steers	3.25@ 5.75	2.50@ 3.50	2.75@ 3.50	.....
Medium to choice light veals	8.50@13.25	8.00@ 9.00	8.00@ 8.25	7.00@ 8.00
Common to choice heavy veals	3.00@13.00	6.50@ 8.00	6.50@ 8.00	.....
Common to choice feeders (750 lb. up)	5.50@ 9.00	.....	.....	.....
Common to choice feeders (750 lb. down)	4.50@ 8.50	4.00@ 5.25	4.25@ 5.25	4.50@ 5.50
Common to choice stocker cows and heifers	3.25@ 5.50	.....	.....	.....
HOGS.				
Top of market	9.35	10.35	10.25	8.85
Bulk of sales	7.85@ 9.20	8.75@10.25	8.75@10.00	8.00@ 8.75
Heavy (250 lb. up)	8.00@ 9.15	8.75@10.00	8.50@10.00	.....
Medium (200-250 lb.)	8.45@ 9.30	9.00@10.25	8.75@10.00	8.00@ 8.75
Light (150-200 lb.)	7.95@ 9.35	9.50@10.35	9.00@10.25	8.00@ 8.85
Light lights (130-150 lb.)	7.65@ 9.20	9.25@10.00	9.00@ 9.75	7.75@ 8.60
Smooth packing sows (250 lb. up)	7.35@ 8.00	7.50@ 8.00	7.25@ 7.50	6.00@ 6.80
Rough packing sows (200 lb. up)	6.75@ 7.55	7.00@ 7.50	6.50@ 7.25	5.00@ 6.00
Medium to choice pigs (130 lb. down)	6.00@ 8.25	9.50@10.25	8.75@ 9.50	.....
Stock pigs	.....	8.75@ 9.25	8.50@ 9.50	.....
SHEEP AND LAMBS.				
Medium to prime lambs (84 lb. down)	12.00@15.00	9.00@10.00	9.50@11.00	10.00@11.00
Culls and common lambs	9.00@12.75	7.50@ 9.00	8.00@ 9.50	9.00@10.00
Medium to prime yearling wethers	8.75@11.75	7.00@ 8.00	.....	5.85@ 6.85
Medium to prime wethers	5.25@ 9.75	5.50@ 7.00	.....	4.60@ 5.60
Common to choice ewes	3.75@ 7.50	3.00@ 5.00	3.25@ 5.50	3.00@ 4.35
Culls and canner ewes	1.00@ 3.75	1.00@ 3.00	1.50@ 3.25	1.00@ 3.00
Feeder lambs	12.00@14.00	.....	.....	.....

dust can't get in

"Caterpillar" Two-ton Tractor is completely protected against damage by dirt and dust. Engine, transmission and final drive gearing are all enclosed—even air entering carburetor and breather is filtered and cleansed. Ask for the rest of the story.

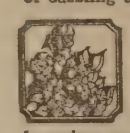
THE HOLT MFG. CO.
Stockton, Calif. Peoria, Ill.

Read the "Want Ad" page this week for good offers of all kinds.

Six trees and shrubs every home should have

Hundreds of people see the exterior, where only a few see the interior, of your home. Why not have consistency in the matter of outlay? A fifty dollar investment in shrubbery planted about your home this year will increase your property value two hundred dollars in two years. We especially recommend the following trees and shrubs:

Hydrangea Arborescens
This new American Hydrangea is one of the most beautiful hardy flowering shrubs. It blooms from early June till toward autumn. The shrub grows four to five feet and bears large, semi-circular trusses of beautifully formed flowers of dazzling snowy whiteness.



Spirea Van Houttei
One of the best and most ornamental of shrubs. It succeeds well in almost any location. The branches are upright, yet pendulous, giving a most graceful appearance. Flowers are pure white and borne in dense clusters along the whole length of the branches, often weighting them to the ground. Excellent as a single specimen or for planting in groups. Blooms in May.

Purple Lilac
The well known purple lilac of our grandmother's garden. Nothing quite equals the favorite, fragrant lilac, one of the most beautiful of flowers. It is a free bloomer, very hardy, and succeeds almost anywhere.

Elms
American—English
The Elm is one of the choicest and most stately avenue trees, erect and lofty with dark green foliage that remains several weeks longer in fall than most other trees. During summer they seldom shed their leaves and hence are very desirable for lawn plantings.

Norway Maple
One of our most beautiful street and lawn trees. Its large size, compact, symmetrical top, broad, deep foliage, and vigorous growth make it highly desirable. Attains a height of 70 to 100 feet.

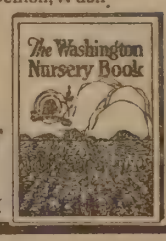
Roses
Without doubt the Rose has the most ancient ancestry and most interesting history of any plant in your garden. Six hundred years before Christ the Grecian Poetess, Sappho, wrote:

"Would Jove appoint some flower to reign
In matchless beauty on the plain,
The Rose (mankind will all agree)—
The Rose the Queen of Flowers should be."

Today the Rose still stands as Queen of Flowers. Appreciating the growing demand for choice varieties, our line has been selected from the most desirable new sorts, and the most popular old varieties. Over 100 distinct varieties from which to make your selection.

Washington Nursery Co.
Box Y Toppenish, Wash.

Plant WASHINGTON NURSERY Trees



FRUIT AND SHADE TREES

ASK FOR THIS FREE BOOK

Your Health

By Royal S. Copeland, M. D., F. A. C. S.

Your child is in school. You see him for a brief moment in the morning and catch a fleeting glimpse of him in the evening. Except at meal times you have little contact with the child. At the table everybody is busy, and little thought is given to individuals.

Dr. Copeland.

May I venture to suggest that every growing child should be "looked over" at least once a week? You must not trust to chance. Topsy "just growed," but you want your child to be cultivated a bit, and to be given help if need be.

When I was a public school lad I well remember that my dear little mother gave me a thorough inspection every Saturday morning. As I recall it, my hair and hands and certain areas of my ears seemed to be her greatest anxiety.

But what I want to talk about today are not the external and the trivial things. I want to suggest that many important defects may be overlooked unless there is systematic search for them.

Growing children may develop bone or joint diseases. The gait should be watched to see if there is lameness or faulty use of the feet and ankles. The position in standing should be considered. Make sure that the spine is straight up and down, and that the curve of the back and shoulders is correct. Tendency to round shoulders or drooping of one or the other shoulder should be discovered at once.

If the child complains of painful feet or if your inspection results in the discovery of redness, blisters or callouses of the feet, the shoes must be suspected as the offender against foot health. Lameness, pain in the hips or back and quick fatigue may be due to improperly fitting shoes.

This is a matter of greater importance than is generally supposed. Don't laugh at a child's complaint about his feet. You know how it hurts to have aching feet.

(Cintinued on page eighteen.)

Latest High Class Patterns for the Home

Please order the patterns you desire at least two or three weeks before you wish to use them. Desiring to obtain the latest high-class patterns for its readers, THE FARMER has made arrangements to have them sent direct from the east, and under present mailing conditions it takes about that time for them to reach you.

4486. Lady's Dress. Cut in 7 sizes: 36, 38, 40, 42, 44, 46 and 48 inches bust measure. A 38 inch size requires 5 3-8 yards of one material 36 inches wide. The width of the skirt at the foot is 2 1-4 yards. Price 10c.

4504. Girl's Dress. Cut in 4 sizes: 4, 6, 8 and 10 years. A 6 year size requires 3 yards of 27-inch material. Price 10c.

4484. Lady's Coat. Cut in 4 sizes: Small, 34-36; medium, 38-40; large, 42-44; extra large, 46-48 inches bust measure. A medium size requires 5 1-2 yards of 44-inch material. Price 10c.

4503. Child's Coat. Cut in 5 sizes: 2, 4, 6, 8 and 10 years. A 6 year size requires 2 3-4 yards of 40-inch material. Price 10c.

4499. Girl's Apron. Cut in 4 sizes: 6, 8, 10 and 12 years. A 10 year size requires 2 3-4 yards of 36-inch material. Price 10c.

4304. Lady's Dress. Cut in 7 sizes: 36, 38, 40, 42, 44, 46 and 48 inches bust measure. A 38-inch size requires 5 1-4 yards of 40-inch material. The width of the skirt at the foot is 2 1-2 yards. Price 10c.

3100. Set of Infant's Clothes. Cut in one size. It will require 2 3-8 yards of 36-inch material for the dress, 2 1-4 yards of 27-inch material for the petticoat and 2 yards of embroidery for the ruffle. The slippers require 3-8 yard of 18-inch material and the Barrie coat 3-8 yard of 27-inch material for band, and 1 yard 40 inches wide for skirt. Price 10c.

4322. Junior's Blouse Dress. Cut in 3 sizes: 12, 14 and 16 years. A 14-year size requires 2 3-4 yards of 36-inch material for the blouse, and 3 1-2 for the skirt. Price 10c.

4497. Girl's Dress. Cut in 4 sizes: 8, 10, 12 and 14 years. A 14 year size requires 4 3-4 yards of 40-inch material. Price 10c.

4128. Lady's Work or Porch Dress. Cut in 7 sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. A 38-inch size requires 5 7-8 yards of 32-inch material. To trim as illustrated requires 1 yard. The width of the skirt at the foot is 2 3-8 yards. Price 10c.

4079. Misses' Dress. Cut in 3 sizes: 16, 18 and 20 years. An 18-year size requires 5 yards of 32-inch material. The width of the dress at the foot with plaits extended is 2 3-4 yards. Price 10c.

4487. Ladies' "Cover All" Apron. Cut in 4 sizes: Small, 34-36; medium, 38-40; large, 42-44; extra large, 46-48 inches bust measure. A medium size requires 5 1-8 yards of 32 or 36-inch material. Price 10c.

Send 12 cents in silver or stamps for our up-to-date fall and winter 1923-1924 book of fashions.

Please fill in this order and mail with remittance to:
PATTERN DEPT., PACIFIC NORTHWEST FARM TRIO, Spokane, Wash.

Enclosed find ..... cents for which send me the following:

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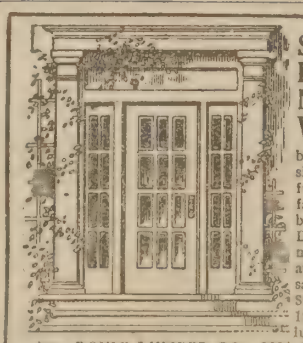

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beautifully designed, carefully manufactured from best material. Direct from manufacturer at real money saving prices. Send today for 1922 FREE illustrated catalog. ROVIG LUMBER CO., 2201 First Avenue South, Seattle, Washington.

RADIO OPERATORS WANTED.

60 to 100 new Radio Operators must be trained to meet the ordinary needs of the Steamship Companies and Alaska Fish Packers operating out of Seattle. Prepare now and be ready for one of these positions when the "rush" begins next spring. Travel, adventure, good pay, many opportunities for permanent positions and advancement. For complete information write to

YMCA

UNITED Y. M. C. A. SCHOOLS, Fourth and Madison, Seattle, Wash.

LOST If you can't locate a thing, it might as well be lost. Maybe the very thing you want is offered on our "Want Ad" page in this issue.

When answering ads, please don't fail to mention this paper.

In writing advertisers, be sure to say you saw their advertisement in The Washington Farmer.

Helen Raddtke writes about her little kitten, which is black and brown and gray spotted. Kitty is full of pranks and likes to run after a string when she trails it along the floor. Helen has four little ducks, too, of which she is very fond. She has good times with her cousins who live 10 miles out in the country, while Helen lives in town. Her home is in eastern Washington.

November 12, Freddie Billingsley, Grant county, Wash., will be 12 years old. Freddie has not been a cousin very long. This is our first letter from him. We hope we shall receive one often. His pets are five little kittens and a dog.

We have another letter from Marguerite Duffy, which pleases us very much. Marguerite was 11 August 25. (We do not give out the cousins' addresses any more, Marguerite.) This cousin lives in eastern Washington.

A farm in Thurston county, Wash., is the home of Dorothy Alice Hutson. She describes herself as follows: "I have blue-gray eyes, light brown hair and am 4 feet 10 inches tall. I weigh 80 pounds and am 13 years old." She is glad that school is to commence soon.

Pep is a dear little puppy belonging to Virginia Teague, a southwest Washington girl. Virginia's birthday is December 18 and she is 8. She has four brothers and three sisters. Her daddy takes THE FARMER.

Birthday Greetings

THURSDAY, September 27—MaCament Dickenson, 11 years old; Elsie Ledbetter, 11; Joyce McDonald, 9.

SUNDAY, September 30—Helen Hoffman, 11 years old.

MONDAY, October 1—Emrose Corbin, 10 years old; Elmer Lampi, 8; Sarah Moses, 11; Erma Woods, 11.

TUESDAY, October 2—Marjorie Dean, 9 years old.

WEDNESDAY, October 3—Inez Osterberg, 9 years old.

LETTERS WELCOMED BY AUNT NELLIE.

Among recent letters received by Aunt Nellie are those from cousins whose names follow. A few of these will be published each week in the regular edition of THE FARMER and others will appear from time to time in The Junior Farmer:

Marion Hamilton, Marie Wichert, Bernice Anderson, John Lincoln Warren, Hilma Hoikka, Linda Hoikka, Katharene Davis, Ruby Brown, Audell Wilson, Mabel Johnson, Zoe Ludwig, Gladys Main, Helen Broderick, Dorothy Cole, Marjorie Cuyle, Allen Davis, Amy Weber, Wayne Milam, Kenneth Arrasmith, Ruth Rand, James Miller, Emma Esther Simila, Alphild Johnson, Beatrice Hazleton.

BEDTIME STORIES

By THORNTON W. [illegible]

PETER AND JOHNNY HELP.

That this is true there's no denying—
There's nothing in the world like trying.

Then sometimes you find a way of doing the thing you want to do without knowing it just as Peter Rabbit did. Peter wanted to do something for Farmer Brown's boy in return for the things he had done for the people of the green meadow and the green forest. Jenny Wren and Welcome Robin and Tiny the warbler and a lot more of the feathered band were hard at work killing the bugs and worms in the old orchard and the berry patch and the garden so that the fruit and vegetables might have a chance to grow. Old Mr. Toad and Jimmy Skunk were helping, too. They were all doing it for Farmer Brown's boy because he had done so much to make life better and happier for the little people of the green meadows and the green forest, the smiling pool and the old orchard.

"Then you'll be doing something for Farmer Brown's boy, too."

But Peter doesn't like bugs and worms, and so he couldn't help. And he couldn't think of any other way to help. It had made him feel very uncomfortable and uneasy. He had been talking about it with little Mrs. Peter over in the dear old briar patch when he noticed Redtail the hawk sailing high up in the sky and right away it popped into Peter's head that the workers in the old orchard might be so busy that they would forget to keep watch. Off he started, lipperty-lipperty-lip, as fast as he could go for the old orchard. Sure enough everybody was so busy hunting for bugs and worms that no one was watching for danger.

Such a racket as those birds were making! Peter wondered how they ever did any work with their tongues going at such a rate. But they did and they were so busy that no one ever noticed Peter. He glanced over his shoulder and he saw that Redtail was headed straight for the old orchard. He had heard the noise and was coming to see what it was all about. Peter thumped the ground as hard as ever he could by way of warning. Nobody noticed him. He thumped and thumped and at last Jenny Wren spied him.

Peter just turned and pointed up in the sky, for he was so out of breath from running that he couldn't speak. Jenny looked and saw old Redtail very near now. Of course, she understood the danger right away. In an instant her shrill voice was giving warning. By the time old Redtail had reached the old orchard not a bird was to be seen; not a sound was to be heard. It was as still as if there never had been a bird in the old orchard. Redtail circled over the trees two or three times and then with a scream of disappointment flew away.

No sooner was he gone than out came all the birds from their hiding places and began chattering and working just as before. But Jenny Wren took time to hurry over and thank Peter for his warning. It gave Peter an idea. "Johnny Chuck and I will keep watch while you work," said he.

"Splendid!" cried Jenny Wren. "Then you'll be doing something for Farmer Brown's boy, too."

Peter looked puzzled. "I don't see how," said he.

"Why, if you keep watch so that we can work without worrying you'll be helping us, won't you? And if you help us you'll be helping Farmer Brown's boy, won't you? You know we're doing this for him."

A pleased look stole over Peter's face. "I never thought of that," he confessed. "I'll hurry and tell Johnny Chuck," and Johnny was just as pleased as Peter had thought he would be. So Johnny sat up very straight and watched this way and that on the other side of the old orchard, and all the birds hunted for bugs and worms among the trees of the old orchard, and each was doing it for Farmer Brown's boy. (Copyright.)

Your Health

(Continued from page seventeen.)

All the joy of living is taken away if the feet pain.

"Growing pains" and "rheumatism" in children are thought by many to be "natural" and not worth considering. I cry out against this. Discover why the child has pain, no matter when or how much it may be. It may be the tonsils, adenoids, bad teeth, intestinal disturbance or faulty kidney action that is causing the trouble. There may have developed poisons within the sysem which in their turn have caused the condition responsible for the "growing pains." Spare the child the danger of serious joint diseases by early attention to these forms of discomfort.

You should observe the color of your child's lips and skin. Excessive paleness may indicate anemia in boys, or chlorosis in girls. It may point to kidney trouble. This is particularly true of anemia associated with puffiness of the eyelids, other parts of the face, or of the ankles.

You should feel the neck, to see if there are lumps or swellings. There may be enlarged glands about the ear or under the angle of the jaw. These may be related to bad teeth, diseased tonsils, adenoids or a running ear.

SMUT In Wheat Can Be Prevented

by dusting 60 lbs. seed wheat with 2 ounces of our pure

Copper Carbonate

specially prepared as wheat fungicide. Much more effective than formaldehyde. Easy to apply. Saves seed. Write for particulars.

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Easy to Saw 15 Cords a day

Let me prove that you can do the work of 8 to 10 men with the OTTAWA Log Saw. Let me show you how easy one man, alone, falls trees, saws logs, buzzes up branches and does all sorts of belt work with this ONE-MAN Outfit.

4 H-P Motor, 4-Cycle type, FASTEST SAWING—wheel mounted—easy to move. Easy to start. Runs on Kerosene.

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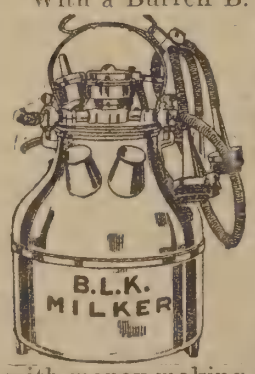
OTTAWA MFG. CO. 2595G Wood St., Ottawa, Kan.

Cuts Down Trees Level With Ground.

You Can Fight Low Prices With Lowered Costs!

When prices of farm produce are low—then more than ever you know the value of good dairy equipment from the Dairy Machinery Co.



With a Burrell B. L. K. Milker, for instance, one man and a boy will do the work of six men, and do it quicker and better. The milk giving capacity of your cows is increased and your milk is kept clean. Thus you save time and money and you keep up the quality of your product to the maximum.

For years we have been supplying farmers, dairies and creameries of the Northwest with money-making equipment. We have a complete line of dairy supplies—Burrell B. L. K. Milkers, Simplex Separators, Babcock Milk Testers, Barn Equipment, Buhl Sanitary Milk Cans, Papec Ensilage Cutters, General Dairy Supplies.

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Simplex Separators

JUST as you can buy a Ford today for less than several years ago, so today you can buy a Simplex Separator with a better value than formerly. The new Simplex is the supreme achievement of 42 years of separator building. It has two exclusive features not found on any other machine—the link blades and the patent cream regulator. Investigate the Simplex before you buy!

LIFE PRESERVERS FOR LIVESTOCK

By DR. E. E. WEGNER, W. S. C.

Hog Cholera.

There is a distinct movement at the present time to reinstate the hog on the farms of the northwest. There is no question that such a movement is a very natural one and one that well suits the needs of this section of the country. Every farm may well have some of these mortgage raisers, as they can usually be raised to advantage along with other farm activities.

The thought that always comes to me when I contemplate this certain movement is the danger from the most dreaded of hog diseases—hog cholera. The time was when this disease wiped out great herds of valuable hogs and left the owner stranded and often penniless. That was in the days when there was no known treatment.

Today we have a serum treatment that is being used with success wherever swine raising is important. The danger, however, is that the disease will not be properly handled after the animals are once taken sick. Too often the owner thinks that he can handle the situation without the help of his veterinarian or other sanitarian. Now, in some cases, he may be able to do so, but in some other cases the owners are not as successful as they should be for their own interests. Just recently I am advised that an owner tried to treat his herd of sick animals and continued in his efforts until all but three of his hogs were dead. He then wrote to his state college, asking what he should have done, after about $1500 worth of hogs were returned to the earth.

Unnecessary Losses.

Cases such as these cause me to feel that it is very unfortunate that the owners should take such tremendous losses when in all probability it was not necessary. The proper advice in the beginning would have resulted in saving quite a proportion of this herd, but the advice was not sought. I have only the owner's opinion that the disease was cholera, but it probably was, since it quickly went through the herd and killed rapidly.

Would it not have been much better for this owner to have secured the best professional advice that he could have obtained and have had his animals treated, with the possibility of saving a considerable percentage of them? It is often possible to save a great many after the disease has started in a herd if the animals are taken singly and closely examined and their temperatures taken to detect any that may be in the initial stages.

The ones that are found with a rise of temperature and already sick are almost certain to die, but this system of management enables one to ascertain the well ones and they should be carefully segregated. The well ones may be given the serum alone if the infection is severe and it seems likely that they have enough of the virus around the premises to insure their being exposed. The serum will protect them for a few weeks, and if they are exposed during that time they will develop a lasting immunity. If it appears that they are not likely to be so exposed, then they should be given the virus at the same time as the serum.

Who is to say what program should be followed? That is the question that often results in considerable loss. In the case above mentioned, the owner relied upon his own judgment and lost his entire herd. That, of course, is every man's business—to do as he pleases with his own property as long as he does not injure some one else, and if he preferred to treat his herd without being advised he had a perfect right to do so. But I feel that it is deplorable when a man loses his stock without knowing what to do or whom to ask.

The state college or the state veterinarian in any state will always be glad to recommend responsible veterinarians who can be obtained in such emergencies. It is unfortunate that there are not more veterinarians for such needed duties, but since they are somewhat scarce it may be difficult to obtain them on short notice, but when they can be secured they are usually the means of preventing the enormous losses that may occur when hog cholera gets a start in the herd.

SCHOOL FOR HOLSTEIN JUDGES.

Holstein breeders, judges and students of dairy husbandry will be given an opportunity this fall to become familiar with and acquire practical knowledge of the true type Holstein. Three schools will be conducted at three of the leading dairy shows under the direction of W. S. Moscrip of Lake Elmo, Minn., a veteran breeder, well-known judge and chairman of the true type committee of the Holstein-Friesian Association of America. These schools form a part of the regular extension program of education which had its beginning with the development of the paintings and metal models of the true type animals and the wide distribution of their reproductions. Two of these schools will be held at Springfield, Mass., and at Syracuse, N. Y. The third will open Thursday, November 8, at the Pacific International Live Stock exposition at Portland, Ore. Every one interested is invited to attend.

3 Speed transmission

Three speeds forward and one reverse—this is one more handy feature of "Caterpillar" Tractors. They have the pull for heavy work and the speed for light work. Write for full information.

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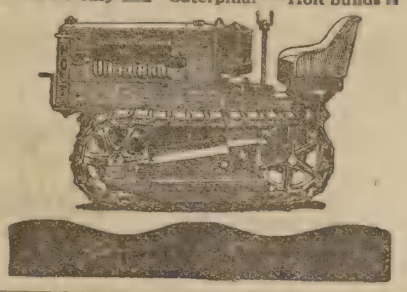
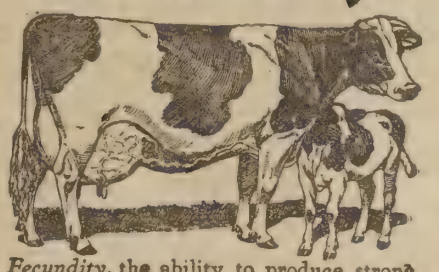


Fecundity!



Fecundity, the ability to produce strong, healthy calves regularly, is essential to a profitable dairy cow.

FECUNDITY IN HOLSTEINS MEANS:

Full value from prepotent sires --

Assurance of regular herd increases year after year -- Extra profit from sale of surplus stock --

Regular freshenings and consequent increased milk production for the whole herd -- Larger annual net profits.

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EXTENSION SERVICE,
The Holstein-Friesian Association of America
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We Buy and Sell
Grade and Pure Bred Dairy Cattle.
We can save you money whether you wish to buy or sell. One or a carload.
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NEAR CARSTENS' PACKING PLANT.

PACIFIC INTERNATIONAL Livestock Exposition, Nov. 3-10. Bigger than ever. $40,000 in premiums. Entries close Oct. 10. Write for Premium List. O. M. Plummer, General Manager, 311 N. W. Bank Bldg., Portland, Ore.

In writing advertisers, be sure to say you saw their advertisement in The Washington Farmer.

Breeders' Dept.

American Hampshire Sheep Association
has a valuable booklet with illustrations telling you the superiority of this breed. We believe the Hampshire to be the best all round sheep in the world. Also have list of breeders; some near you. This literature is free. Write
COMFORT A. TYLER, Secretary.
72 Woodland Ave., Detroit, Mich.

Oxford Downs I have 21 registered yearling rams for sale, well kept and large for their age. Can also spare a few choice ewes.
DAVID H. LOONEY, Jefferson, Ore.

Shropshires, Oxfords and Dorsets
Fitted show rams for good registered flock headers; range rams in lots to suit.
20 Shropshire ewes, sired by imp. Brewin 92; 20 Oxford breeding ewes, 40 Dorset breeding ewes and ewe lambs. All priced according to value.
FLOYD T. FOX, Silverton, Ore.

Choice Shropshire Rams Doerfler Farms offers a few yearlings, sired by imported rams. Flock noted for its fine wool.
F. A. DOERFLER, Silverton, Ore.

Ayrshires
The Perfect Cow.
A few registered bull calves, suitable to head any herd; also baby and heifer calves.
Federal accredited herd No. 19073.
All animals sold subject to 90-day retest t. b., and guaranteed breeders.
C. McCLURE, Jerome, Idaho.
Breeder of Registered Ayrshire Cattle.

Registered Ayrshire Bull
Yearling of excellent breeding, $100. Ready for light service.
J. U. SMITH, R. 1, Box 135, Newberg, Ore.

Fort Steilacoom Holstein Herd
Where the high records are made. Several exceptionally well bred bulls for sale at most reasonable prices, sired by Chimacum King Korndyke Sadie Vale or Carnation King Matador Mutual, son of a world record senior yearling.
WESTERN STATE HOSPITAL,
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Linn County Holsteins
Cows, heifers, bulls and calves.
LINN CO. HOLSTEIN ASSOCIATION,
GEO. A. McCART, Sec. Harrisburg, Ore.

Registered Holstein Heifer Ormsby breeding must be sold to make room for this year's crop; priced reasonable. Federal accredited.
GEO. W. SCHREPEL, R1, Corvallis, Ore.

Milking Shorthorns Senior herd bull, Foothills Corporal 150415, weight 2400; dam Glenrose Pearl, record 12,353 milk, 492 fat. Sire Corporal Clay. Kamaduk Herd.
J. E. DANILLS, Murphy, Ore.

Have you glanced over the farm bargains on the "Want Ad" page?

Jersey Type and Production
Two medal sires in service. Young bulls out of dams of heavy producing families.
J. M. DICKSON & SON. Shedd, Ore.

Richly Bred Jersey Bull Calf
Out of silver medal daughter of Belle's St. Mawes Lad, silver medal bull.
L. C. DANIELS, Tillamook, Ore.

Poland China Boars
About 25 "tops" out of 100 head, sired by Kin-Son Fashion, full brother of The Monarch, and by Paramount, the boar whose get has never been defeated, from 800 pound sows, every one a breeder. Every one of these is a herd boar prospect. Priced so that farmers or breeders can buy them. First come, first served. KIN-SON LIVE STOCK CO.
A. L. Wilson, Mgr., Route 5, Nampa, Idaho.

Spotted Poland China Hogs
Registered, either sex, any age. Purebred. Good blood lines. Satisfaction guaranteed. Buy in the west and save express.
HOWARD H. TUCKER & CO., Boise, Idaho.
Route 1.

Pioneer Herd Hampshire Swine
Lookout and Cherokee breeding. Nonrelated stock at all times. Twelve years a breeder and exhibitor of Hampshire swine. I will attend the fairs at Spokane, Salem and Yakima. See me if attending any of these fairs.
J. M. FRUITTS, Cambridge, Idaho.

Quarjo Hampshires
for sale now. Bred sows and gilts; spring pigs.
W. B. LINDSAY, Quarjo Ranch, Merlin, Ore.

Aviator-Pathfinder Durocs Fall and spring service boars and open gilts. Well grown, good individuals. Priced to sell.
M. AVERHOFF, Lebanon, Ore.

Duroc Jersey Boars A choice lot of spring boars—Pathfinder type—from prize-winning stock. Terms, C. O. D. Register free.
HILLCREST FARMS, R 9, Hillyard, Wash.

Choice Duroc Jerseys
Gilts, bred to farrow in September. Service boars. Sensation breeding.
GEO. DEBOK, Oregon City, Ore.

Double Your Money in Less Than a Year
$7000 Cash and 6 Pairs Foxes from 2 Pairs of Our Breeders in 15 Months

This was done by one of our purchasers. Ask about it. Raise ROOSEVELT STRAIN Mormon Foxes and you can do as well. All breeders purebred, registered, guaranteed.

UNITED STATES SILVER FOX FARMS CORPORATION
200 Hutton Building, Spokane.

FOR SALE

A choice lot of Holstein calves, both sexes, finest Hollywood breeding, excellent individuals. Several are out of yearly record dams. Have no room for them and they must be sold. Breeding and individuality considered, they are the very best bargain on the market. Write for prices and descriptions. Excellent heifers for calf clubs, fine bulls for bull associations.
A CALF OR A CARLOAD.
HOLLYWOOD FARM, Hollywood, Wash.

GOODIN'S JERSEYS AT AUCTION
St. Paul, Oregon, Wednesday, October 3, 1923.
Twenty-three Jerseys complete dispersal. Oxford You'll Do, Golden Cicero and Holger blood lines; heavy producers; several of show quality. Do not miss this sale to be held on the Goodin farm near St. Paul.
J. H. GOODING, Owner, St. Paul, Oregon.
E. A. RHOTEN, Sale Manager, Salem, Oregon.

THOMPSON'S GOLD MEDAL JERSEYS
AT AUCTION, EUGENE, ORE. OCTOBER 5, 1923
Included in the offering are four cows with official GOLD medal records, one a world's record class leader (gold and silver medal), six cows with silver medals, young stock, both sexes, from medal cows, sired by bulls of gold medal ancestry. The pedigrees of the offering are full of gold medal production records. For the convenience of the buyers the sale will be held on the Eugene fairgrounds. Catalog being prepared gives details.
COL. J. W. HUGHES, Auctioneer, Forest Grove, Ore.
OWEN THOMPSON, Blachley, Ore.
E. A. RHOTEN, Sale Manager, Salem, Ore.

LAWSON'S ST. MAWES JERSEYS
AT AUCTION, OCTOBER 9, 1923
On the Lawson Farm, just east of McMinnville, twenty-eight head, including twenty-two head from the herd of G. W. Lawson and six offered by John Michaelbrook—cows, bred heifers, bulls; many with R. of M. records, others on test, all rich in the blood of St. Mawes-Rosaire Olga Lad. The offering includes daughters of such bulls as Dufranas Poppy, Gertie's Poppy's St. Mawes, St. Mawes Golden Poppy, Golden Poppy's St. Mawes, etc. Mark this date on your calendar as a good day to buy St. Mawes Jerseys. Catalog upon request.
G. W. LAWSON, JOHN MICHAELBROOK, Owners.
COL. J. W. HUGHES, Auctioneer, Forest Grove, Ore.
E. A. RHOTEN, Sale Manager, Salem, Ore.

Read the "Want Ad" page this week for good offers of all kinds.

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New Shipments DIRECT FROM ARMY DEPOTS

U. S. Army Supply Store.

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Save 25% to 50% on Your Winter's Needs

This is the biggest sale we have ever attempted. Many thousands of dollars worth of brand new army goods have been thrown on the market and must be sold at sacrifice prices. The government's loss is your gain. Take advantage of it. Fill your needs for this winter and many winters to come, while you can, at these ridiculously low prices.

DELIVERED TO YOUR DOOR
For additional goods send for large Illustrated Price List FREE.

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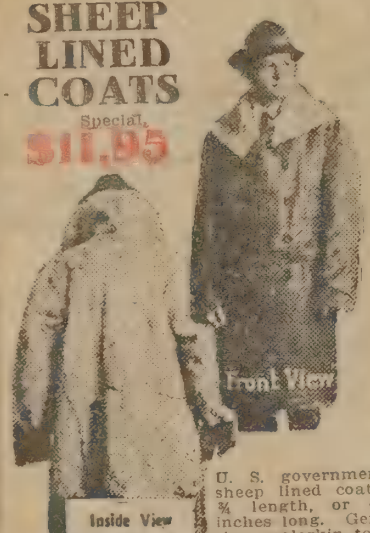
We have thousands of satisfied mail order customers.

Select what you want from this announcement and carefully address your orders: U. S. ARMY SUPPLY STORE, 1310 Pacific Ave., Tacoma, Wash. Make money orders payable to J. B. Robinson.

Important—We prepay all postage. Send enough to cover for merchandise. Reference—National Bank of Tacoma. Satisfaction guaranteed on every item.

SHEEP LINED COATS

Special, ~~$11.95~~



U. S. government sheep lined coats, ¾ length, or 48 inches long. Genuine moleskin top, lined with an extra heavy sheep pelt. Cost the government, we believe, about $35. All sizes. Reclaimed. Sale price ..... ~~$11.95~~

U. S. Army Black Slicker Coats. Waterproof, three-fourths length. Sale price ..... ~~$3.45~~

Gloves

Muleskin gloves, muleskin work golves in brown or O. D. color; strongest wearing glove for the least money.

~~43c~~

Jersey gloves in brown or O. D. colors; fine for driving. Price

~~23c~~

Union Suits

Heavy cotton union suits, in silver gray color.

~~$1.49~~

Gray wool union suits, in all sizes, Sale price, suit—

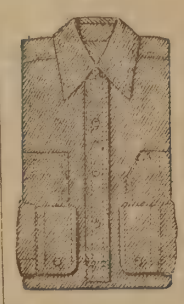
~~$2.29~~

Gray, 100 per cent wool union suits in all sizes. Special—

~~$3.95~~

Buckskin or gray color union suits, 50 per cent wool. Medium heavy weight. A wonderful buy. Sale price, suit

~~$3.45~~



Shirts

These are regulation army O. D. wool shirts, made of finest wool serge material, O. D. color; reenforced elbow; lined chest; two large breast pockets and flaps. Best shirt made. Would commercially cost at least $7. Sizes 14½ to 18. Extra special price.

~~$3.45~~

Flannel shirts. O. D. flannel shirts, made for hard wear. Won't show dirt.

~~$2.45~~

Genuine broadcloth C. P. O. shirts, used by U. S. navy; pure wool.

~~$5.45~~

Leather Suits

Motor transport suits, consisting of coat and pants, made of all pliable leatherette, moleskin lined, waterproof and wind proof. These suits cost the government, we believe, about $23. Special price

~~$8.45~~

Arctics

U. S. government 6-buckle arctics, made to withstand heavy snow and water. All sizes. Special

~~$2.45~~

Work Shirts

Heavy hickory work shirts, the strongest for hard wear. Price

~~79c~~

Army Coats

All wool army coats, O. D. serge lined. An exceptionally fine coat for work. Sizes 34 to 38 only. Reclaimed. Sale price

~~98c~~

O. D. all wool serge lined coat—Brand new. Worth up to $12. Sizes from 38 to 42 only. Sale price

~~$2.45~~

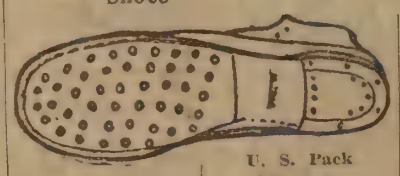
Extra Large

Pack Sack

Large pack sack with big straps to fit over the shoulders.

~~$2.35~~

U. S. Army Trench Shoes



Hob nailed trench shoes. All solid leather, finest quality for a heavy work shoe. Smooth side of leather on inside of shoe. Cost the government, we believe, about $8.65 a pair. Sale price

~~$4.45~~

Leather Vests

Brand new. An excellent vest for wear. Special sale price

~~$5.95~~

Brand new leather vest. All calfskin leather. Dark color. Leather sleeves. Jersey knit wool collar. Makes a practical outdoor vest. Sizes to 46. Sale price

~~$1.95~~

Leather vests. Sheepskin lined. Calfskin leather sleeves. Jersey collar and cuffs. Very warm. Price

~~$3.95~~

All leather vest, Made of the highest quality glove leather, all wool blanket lined. All sizes. Price

~~$9.95~~

U. S. Pack

Bags

Made with straps to tie around, and ties like small trunk. A handy article to store things away. Made of heavy canvas. NOW—

~~98c~~

Corduroy Pants

Dark color corduroy pants; wonderful wearing material. Special at—

~~$3.45~~

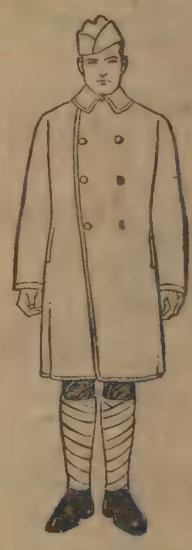
U. S. Army

Pup Tents

Pup tents, large enough for two people to sleep under; good for children's play tents or as waterproof covers. Special.

~~$2.95~~

U. S. army web belts 19c
U. S. army overseas caps ..19c



Overcoats

Brand new O. D. wool overcoats; medium length; for coldest weather; large collar to keep out wind. Special at

~~$5.95~~

U.S.Navy Pea Coat

Made of pure wool navy blue melton and broadcloth. Sold to the sailors on board of warships for about $21. All sizes. Sale price.

~~$9.85~~

U. S. Army

Breeches

Slightly used khaki breeches reclaimed, sizes 27 to 36.

~~98c~~

U. S. Army khaki new breeches; all sizes; best weight. Sale price—

~~$2.25~~

O. D. pure wool government issue breeches reclaimed; 27 to 36; price—

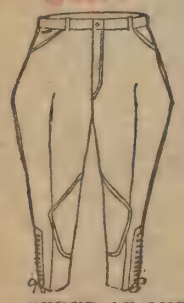
~~$1.95~~

Brand new O. D. government issue pure wool breeches; all sizes. Sale price

~~$3.75~~

Khaki whipcord pants; full length; new; sizes 30 to 36. Sale price—

~~$1.89~~



Government

Blankets

O. D. government pure wool blankets, reclaimed—now priced at

~~$2.75~~

O. D. government pure wool blankets—weight about 3½ or 4 lbs. Sale price

~~$3.45~~

No. 110, commercial double blankets; wool; size 66 x80; weigh over 4 lbs.; not camp or outing blankets, but home and bed blankets; dark gray.

~~$4.95~~

Heavy weight 100 per cent wool double blankets in plaids of all colors. Size 60x80 inches Sale price

~~$7.39~~

Pure wool O. D. sleeveless sweaters, made of very best wool yarn. All sizes, at—

~~98c~~

Extra heavy pure wool O. D. double sleeveless sweater, reversible; sale price—

~~$1.79~~

Sweaters

Genuine U. S. navy pure wool. Sale price

~~$2.39~~

O. D. heavy jumbo knit pure wool sweater, roll collar, no buttons; all sizes. at—

~~$4.95~~

U. S. Army Over-

OVERALLS

Brand new army overalls, sizes 34 to 42; without bib; extra heavy. Special 89c

Underwear

Mixed wool 2-piece underwear, all sizes, gray or striped; a big seller. Special, per garment

~~98c~~

U. S Army pure wool underwear; 2-piece suits, slip-over style shirts, all sizes. Sale price, per garment

~~$1.10~~

U. S. Navy Underwear

U. S. navy pure wool underwear made with sweater neck and the shirts are made double front and back. Price per garment

~~$1.49~~

Socks

Genuine worsted, all-wool "goat hair" sox, the famous army long-wearing sox. Per pair,

~~39c~~

Cotton sox, O. D color; the strongest sox made for hard wear. Price,

~~19c~~

Six pairs for $1.00
Doz. prs. for $1.75

Heavy weight wool sox, in O. D. or white; now on sale at

~~43c~~

ORDER AT ONCE—DON'T WAIT. This advertisement will bring thousands of inquiries. Write name an daddress plainly. State size and color desired. If not sure of size, give your weight and height. Make all orders payable to J. B. Robinson.

IMPORTANT--We Prepay All Postage

Send Enough to Cover for Merchandise. Reference—National Bank of Tacoma.

Order what you need from this list; also send for complete price list.

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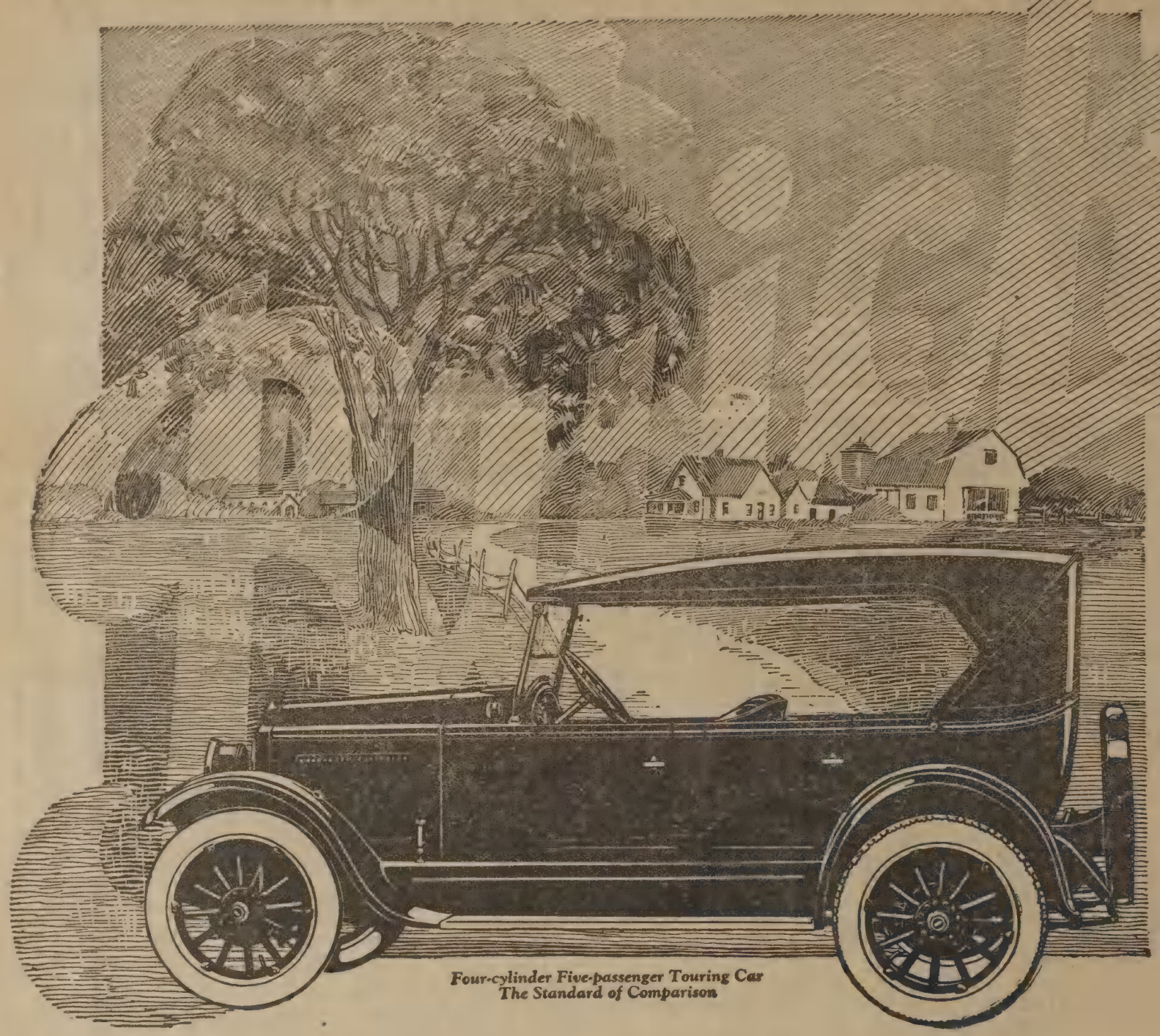
TACOMA, WN.

OCTOBER 4, 1923. Washington's Great Farm Magazine EVERY THURSDAY

THE WASHINGTON FARMER

ESTABLISHED 1894 SPOKANE. SEATTLE.

Whose Livestock Won Awards at the Washington State Fair?---Page 8



Four-cylinder Five-passenger Touring Car
The Standard of Comparison

A Better Buick for the Family!

It's a Buick—but a new and better Buick—the thousands of farmers who are Buick users will ask nothing further regarding this four-cylinder, five-passenger touring car. For Buick has been a proved friend on the farm of twenty years standing.

It has the new Buick valve-in-head engine providing greater power. There is complete and automatic lubrication of the motor—keeping the crank case filled to the proper level is all that is necessary. There are the four-wheel brakes [on all models] which add so much to driving safety. And also there is the greater beauty contributed by the distinctly new body design.

SIXES

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Five Passenger Touring	$ 965
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WHEN BETTER AUTOMOBILES ARE BUILT, BUICK WILL BUILD THEM

BUICK MOTOR COMPANY, FLINT, MICHIGAN
Division of General Motors Corporation

Pioneer Builders of Valve-in-Head Motor Cars — Branches in All Principal Cities—Dealers Everywhere

Would Cooperate to Regulate Price of Wheat

Farmers of Washington and Northwest Look Doubtfully on Federal Price Fixing

Farmers of Washington and her neighbor states are overwhelmingly in favor of price regulation through farmers' cooperative associations and not more than lukewarm to price fixing by the federal government. This is indicated in replies to a questionnaire sent by The Washington Farmer to a random list of 200 farmers in each state of Washington, Oregon and Idaho. The questions and the number of answers to each question in each state and the totals for all three states are given herewith. It will be noted that the last question, relative to cooperative organizations, is answered unanimously in favor of such organizations by all persons whose replies have so far been received. It will be noted that the first question relative to fixing of the price of wheat by congress shows a difference of opinion. Of 59 replies to this question, 22 per cent, or about one out of every five, are in favor of the fixing of the price of wheat by congress at $1.75 a bushel, while 78 per cent, or nearly four out of every five who replied are against such price fixing.

When it comes to a protective tariff for the wheat raiser, 73 per cent were in favor of the protective tariff and 27 per cent against.

As to the bounty system on wheat exports, the bounty to be paid by the farmers themselves, only 19 per cent favored the bounty, while 81 per cent were against.

The proposition to withhold from the market by the growers of 200,000,000 bushels of wheat under government financial assistance, 57 per cent favored the proposition, while 43 per cent were against it.

Another proposition submitted to the farmers was that of the federal government taking over the exportable surplus of wheat. This was favored by 43 per cent, while 57 per cent of the replies opposed the proposition.

Taking the three states respectively, the percentages for and against the six propositions vary, in some cases materially.

The Washington, Oregon and Idaho replies each are opposed to the fixing of price of wheat by congress at $1.75.

As to the protective tariff on wheat, Washington and Idaho replies are in favor and Oregon is opposed by only a slight percentage.

Washington, Oregon and Idaho are united in opposition to the bounty system.

The withholding from the market by the growers of 200,000,000 bushels of wheat is opposed by the Washington replies, is favored by the Idaho replies, the Oregon replies being evenly divided.

When it comes to the federal government taking over the exportable surplus of wheat, Washington and Oregon are in opposition, while Idaho favors.

As has already been said, replies from all three states are universally in favor of the last proposition, leaving the question of price and production to the farmers themselves. Here are the percentages from the three states:

The fixing of the wheat price by congress at $1.75 is favored in Washington by only 21 per cent of the replies received and is opposed by 79 per cent; in Oregon 100 per cent of the replies are opposed, not a single reply being received in its favor; while in Idaho 37 per cent of the replies favor wheat price fixing, leaving 63 per cent opposed.

The protective tariff on wheat, in the Washington replies, is favored by 87 per cent, leaving 13 per cent opposed; in Oregon it is more nearly balanced, 53 per cent being against the tariff and 47 per cent for it; in Idaho 81 per cent favored the tariff, 19 per cent being opposed to it.

The proposed bounty system on wheat exports received only 10 per cent in its favor in the Washington replies, 90 per cent being against the proposition; in Oregon 86 per cent were opposed and only 14 per cent favored it; in Idaho 25 per cent was in favor of the proposition, 75 per cent being opposed.

The proposition of withholding from the market by the growers of 200,000,000 bushels of wheat was favored in Washington by 40 per cent of the replies and opposed by 60 per cent; in Oregon 50 per cent was in favor and 50 per cent opposed; while in Idaho 72 per cent favored it and 28 per cent were opposed.

As to the federal government taking over the exportable surplus of wheat, 36 per cent of the Washington replies favored and 64 per cent were opposed; in Oregon 22 per cent favored and 88 per cent opposed; In Idaho 64 per cent favored and 36 per cent were opposed.

To the last question, as to the wheat farmers themselves fixing the prices of wheat through cooperative associations, and limiting production when necessary, there were 100 per cent favorable replies, no farmer replying in the negative.

These are the results of the questionaire printed herewith, which was sent out with the following letter:

"Would you like to know what the farmers of Washington think of wheat marketing situation, of price-fixing by the government, of bounty on export wheat, of the protective tariff on wheat, of limiting production and otherwise fixing the wheat price by the wheat growers themselves through cooperative organization?

"If the 200 farmers, picked at random throughout the state, including yourself, answer the questions on the return card sent herewith, and these answers are summarized in THE FARMER, you will get a pretty good idea of what the farmers generally think on this question.

"You need not sign the card, only express your opinion by marking a cross under the 'Yes' or 'No' to the questions asked."

A similar communication was sent on the return post card to 200 scattered farmers throughout each of the other two states.

The questions asked and the returns totaled are given in the accompanying table.

Seventeen replies were received from the following counties of Washington: Chelan, one; Clarke, one; Cowlitz, two; Lewis, one; Lincoln, four; Pend Oreille, one; Pierce, one; Snohomish, two; Spokane, one; Stevens, one; Whatcom, one; Walla Walla, one.

Nineteen replies were received from the following counties in Oregon: one from Baker, one from Benton, one from Clackamas, one from Crook, one from Deschutes, one from Malheur, four from Marion, one from Multnomah, three from Polk, one from Umatilla, one from Wasco, two from Washington and one from Yamhill.

Twenty-five replies were received from the following counties in Idaho: Bonner, one; Canyon, one; Cassia, one; Franklin, one; Fremont, one; Gem, one; Gooding, two; Idaho, one; Jefferson, one; Kootenai, four; Latah, one; Lewis, one; Lincoln, one; Madison, one; Nez Perce, two; Payette, two; Power, one; Twin Falls, two.

What might appear discrepancies in tabulations of the figures in this report is due to the fact that some who replied did not answer all questions.

Summary of Replies to Questions Asked Farmers

	Wash. Yes	Wash. No	Ore. Yes	Ore. No	Idaho Yes	Idaho No	Total Yes	Total No
1. Do you believe that congress should fix the price of wheat at $1.75?	3	11	1	18	10	17	13	46
2. Do you believe in a protective tariff for the wheat raiser?	13	2	8	1	22	5	43	16
3. Do you believe in the bounty system on wheat exports, the bounty on exported wheat to be paid by the wheat farmers themselves, with the expectation that it would increase the price of wheat consumed in the United States?	1	9	2	12	5	15	8	36
4. Do you favor the withholding from the market by the growers of 200,000,000 bushels of wheat under government financial assistance?	6	9	9	9	18	7	33	25
5. Do you favor the federal government taking over the exportable surplus of wheat?	5	9	4	14	14	8	23	31
6. Do you believe that wheat farmers themselves should fix prices for wheat through cooperative associations, limiting production when necessary, the same as manufacturers fix prices and limit output of their products?	14	0	18	0	24	0	56	0

President Seeks Farm Information

Herewith is reproduced a letter from President Calvin Coolidge to the editor of The Washington Farmer indicating the desire of the president to receive practical suggestions from the Pacific northwest as to effective methods by which relief may be brought to the farmers of the country. On this page is also given the result to date of a questionnaire sent to representative farmers throughout this and neighboring states by THE FARMER. In the belief that the replies to this series of questions are a fair representation of the feeling among farmers of these states on the important matters involved, the editor is forwarding to the president a compilation of them as a part of THE FARMER'S answer to his letter of inquiry. Below is the letter from President Coolidge:

THE WHITE HOUSE
WASHINGTON

PERSONAL September 25, 1923.

My dear Mr. Smith:

I am anxious to have the opinion of all those who are sincerely interested in solving the problems which confront the agricultural industry as to the best method in which the Government may act to extend effective aid and encouragement. I am sure that you have had exceptional opportunities to study the situation, and I shall be very grateful to you if you will let me have the benefit of any suggestions, or any plan which you may have formulated, for carrying out this object. Should you, by any chance, be in Washington in the near future, I should be very glad to have you come in and see me and discuss the question further.

Very truly yours,

Calvin Coolidge

Mr. Edwin A. Smith,
Washington, Oregon & Idaho Farmer,
Spokane, Washington.

Why the Decline?

Grain Statistics Do Not Justify It

George C. Jewett, general manager of the American Wheat Growers', Associated, reports that, while Minneapolis and Chicago wheat markets were stronger Saturday than on the preceding Monday. Pacific coast prices ran several cents lower at the end of the week than at the beginning. Mr. Jewett said that dumping of wheat by unorganized Inland Empire wheat growers had piled up an excess of from 1500 to 1600 cars at Portland and Seattle, with the result that the prices dropped 5 cents a bushel in two days.

The decline at the Coast cities, furthermore, is in the face of an official report from the special representatives of the United States commerce department at London, hat Europe will import more wheat this season than had been predicted. Early threshings of the European grain crop indicates a decrease in the yield as compared with August prospects, and the same adviser reports that previous imports of European wheat are likely to be exceeded because of the decrease in the potato production, and because certain countries, notably Poland, will try to build up grain reserves. Moreover, stocks of imported wheat in course of shipment to Europe are well below stocks in transit at this time last year.

The American wheat grower stands at a disadvantage this year, for the Canadian crop, which has been grossly exaggerated, is close at hand and visible, while the conditions of European countries and the needs of wheat-importing lands are thousands of miles away across the Atlantic, and it is especially difficult, since the war, to get accurate and dependable information about agricultural conditions there. In consequence the European importers and the American "bears," who are buying for them, play up the Canadian crop and put the soft pedal on the bread needs of the European countries.

Wheat prices in the United States are consistently hampered by the agents of foreign buyers and other exporters, and by American millers, who naturally and constantly want cheap wheat—first, because the cheaper they buy the less will be their losses if prices should go still lower, and the greater their profits if prices should go up; and, second, because the lower the price of wheat the larger the foreign market for their flour.

Copper Carbonate

Must Be Good to Get Best Results

Experiments in the use of copper carbonate in the treatment of seed wheat for the prevention of smut and the reduction in the quantity of seed required have convinced experimenters that there is a wide difference in the effectiveness of the various brands of copper carbonate being used by the farmers. While no hard and fast set of rules has yet been worked out regarding the kinds and quantities of these products to be used under varying conditions, the college pathologists and county agents are in position to give personal advice to farmers who inquire for information concerning the individual problems which confront them in the warfare against smut. It is known that the copper carbonate containing low percentage of metallic copper is much less effective than that containing high percentage. For instance, it is the opinion of George L. Zundell, extension plant pathologist of the state college at Pullman, that three ounces of the standard 50 per cent copper carbonate is as effective as four ounces of the usual lower standard product when applied to a bushel of seed wheat. It is also indicated that a simple test to determine the adhesive ability of the copper carbonate dust is desirable. This test may be made by any one by the use of a small bottle. A little wheat is placed in the bottle and a small quantity of the dust added. The bottle is then well shaken. If the greenish dust clings to the kernels of the wheat in an even coat, it is an indication that it will prove effective; if it does not cling to the kernels evenly it is taken by the experts to indicate that it will probably not be satisfactory.

Farmers who are uncertain as to the kind of copper carbonate to use should write Mr. Zundel or get into personal touch with their county agents and secure their personal advice.

SAYS DAIRYING SAFEST.

Ed Cross of Oakville, Wash., declares dairying about the only line of farming by which the man on the farm can make a living in these times. Mr. Cross had 16 head of registered Holsteins of excellent breeding. About three years ago he bought Cox DeKol Butter Boy from Deval Falconer of Michigan. The bull's heifers are now just about ready to freshen.

THE WASHINGTON FARMER

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Take Care of the Clubs

Every year a considerable number of boys and girls, the pick of the many hundreds engaged in club work throughout the state, attend the state fair at Yakima to demonstrate their title to awards and honors for their practical knowledge and skill in the things that club work teaches. Their part is one of the most valuable at the fair, not only to the boys and girls who attend, but to those who are inspired to strive for the privilege the following year and to those older persons who gain inspiration from club accomplishments.

Club participation has become a permanent feature of the Washington state fair, as it has of nearly all the leading fairs of the country. It deserves as liberal consideration from the fair management and from the people of the state as a whole as any division of the fair's activities. In certain respects it deserves greater thoughtfulness, for the boys and girls who compete at the fair are, in a great many cases, long distances from home. They are accompanied in some instances by parents; otherwise by a local or county club leader, whose duty it is to encourage them, inspire them, look after their needs and protect them from undesirable influences.

The Washington state fair has been a little slow in providing adequate, permanent quarters for its boy and girl guests. Many another less favored state or smaller district has done more for the care of these future leaders in farm life than has Washington. It is not uncommon for fair managements to secure from one source or another sufficient appropriation for the construction and maintenance of good buildings and sanitary equipment of permanent nature for the use year after year of this growing feature of their fairs. Washington has not yet done this. Its club members are sheltered in two tents—one for the boys and one for the girls. Club leaders have general supervision of the camp, and one or more remain at each tent during the night. Otherwise no special protection is afforded. No private places of retirement are provided for either boys or girls. The result is not entirely satisfactory, in the minds of many who are devoting their time, effort and best thought to club work. It is not as stimulating to the young folks as it should be. And, what is even more vital, club workers report instances in which misguided individuals have committed or attempted to commit highly improper acts in or about the club camp.

Our purpose in taking up this subject is not one of criticism, but one of constructive suggestion. The agricultural and industrial exhibits at the state fair are housed in permanent buildings; the live stock barns are reasonably adequate in both form and space. Washington can not afford to care for its live stock and farm crops better than it cares for its boys and girls.

If steps are taken, as they should be and as we have faith that they will be, before another fair time arrives, for betterment of the club quarters on the state fair grounds, the management should receive the support not only of club workers, but of every resident of the state who realizes the importance of stimulating and protecting the men and women of tomorrow.

No Cause for Immediate Worry

There is a growing sentiment in favor of the production of forage crops, especially alfalfa and sweet clover, on the wheat lands of the Inland Empire. That some such steps must be taken to make the soil of this area permanently productive is evident. The question has been raised at once, though, what can be done with the forage and hay crops so produced? The fear has been freely expressed that it would lead to excessive live stock production with inadequate markets for the animal products.

While real progress has been made during the past few years in introducing legume crops to the wheat lands, there appears no ground for worry at the present time. There are yet in the wheat-growing sections scores and scores of farms that produce no pasture crops on their wheat lands. The overwhelming majority of those that are producing such crops are doing so on only very small areas. Until a majority of the farms are producing some forage crops and doing so on considerable acreages, there need be no fear that the thing will be overdone. To be sure, the great Palouse wheat region and similar wheat-producing areas must always make wheat their main crop. The legume will be but a side issue for the production of live stock as a wheat farm by-product and the improvement and maintenance of soil fertility for the more profitable production of wheat. The problem now is to get enough live stock feed with its consequent live stock production on these lands. The immediate danger of their overproduction has been considerably overestimated.

That the Future May Enjoy It

The Kiwanians evidently believe that there is something worth while in planting trees that others in the future may enjoy the shade and the fruit.

A plan is being perfected to plant English walnut trees along the highway between Colfax and Pullman, in the Palouse country, as a monument to the Kiwanis International.

The walnut trees will be planted at some distance apart and maple trees will be set out between them in the hope of beautifying the drive at once, as the walnuts are of slow growth. When the permanent trees have reached maturity the maples will be removed.

The nursery at Washington State college will furnish all the trees. Planting will take place in the near future.

Harrowing of Doubtful Value

The State College of Washington, through its experiments on the college and sub-station farms, has arrived at the conclusion that it does not pay to harrow fall wheat. There may be occasional instances where, under local conditions, harrowing is desirable, but as a rule the college discourages it, having found that no benefit is obtained or at least not enough to pay for the expense incurred.

Makes Work Worth While

It is not drudgery to work with a good piece of machinery or with good tools. Neither is it drudgery to work with high class live stock. You can hardly blame a boy for leaving a farm if he has to get along with a scrubby team or a gallon-a-day cow. But enable him to take pride in what he has and what he works with and he will take pride in the acomplishments for which he strives.

Washington State Gleanings

The first order for lumber for reconstruction of Japan, about 80,000,000 feet, has been received, R. B. Allen of Seattle, manager of the West Coast Lumbermen's association, has announced. The order has been placed with exporters in Vancouver, B. C.; Portland, San Francisco and Seattle.

CROP ESTIMATE IS CONSERVATIVE.

Although the crop estimate for the Wenatchee district is officially placed at 17,500 cars, District Horticultural Inspector Frank C. Nielson says that this estimate is conservative and practically every large packer and shipper in the district is of the opinion that the crop will exceed 18,000 cars, while some place it at 20,000.

SHOW TREATING OF SEED.

Professor George L. Zundel, plant pathologist of the extension service of Washington State college, recently gave demonstrations of the copper carbonate method of treating seed wheat at Meyers Falls, Rice, Daisy, Chewelah and Springdale. The meetings were held under the auspices of H. J. Plumb, county agricultural agent.

SETTING HEN TAKES RIDES.

Covering a setting of eggs in a nest in a corner of a hayrack, a hen was given daily rides during the haying season on Albert Ford's farm, near Pomeroy. Biddy had built her nest in a protected corner and care was taken not to disturb her. She would leave the nest at times to forage in the field, but always returned. Toward the close of the haying season she hatched a fine brood, according to report.

WANT STANDARD HISTORY TEXT.

Yakima County History Teachers' association has appointed the following committee: Mrs. Rose Palmquist, Naches; Miss Emma Cawdry, Zillah, and E. J. Arntzen, Wapato, to make a thorough investigation of the principal books on civics and history in use in the schools and report to the meeting of the association to be held December 8, when an effort will be made to seek standardization of these text books in the county school.

MOSSYROCK COMMUNITY FAIR.

On October 5 and 6 the Mossyrock Community fair will be held at the grounds at Mossyrock. Officers in charge are Ted Landes of Mossyrock, president; Jim Tucker of Silver Creek, Walter Young, Mallie Damron and Miss Mabel Hinshaw of Mossyrock, directors. The latter is secretary. Miles Coleman of Mayfield has charge of the live stock division; Clyde Morgan of Mossyrock will have charge of the agricultural and horticultural division; Miss Effie Jordan of Ajlune will superintend the women's department and Miss Mabel Hinshaw of Mossyrock will be in charge of the educational department and school work.

MANY GATHER HUCKLEBERRIES.

Hundreds of people are going and coming from the huckleberry fields in the vicinity of Stevenson every day, laden with all the fruit they can carry. It is estimated 500 gallons of berries are gathered every day, and the harvest will continue as long as the weather is fit. When the snow comes tons of berries will still remain untouched, for the berries cover thousands of acres. Berries are larger and more plentiful this year than for many seasons.

Next year it is thought the new roads in the forest will be completed enough so automobiles can be driven directly to the fields.

BERRY CROP BRINGS $100,000.

Gross volume of business done at the Chehallis cannery for the present season by the North Pacific Cooperative Berry Growers aggregated almost $100,000, according to figures presented at the meeting of southwest Washington berry growers.

In addition to 14 carloads of strawberries shipped fresh from the Chehallis plant, a tonnage of 384,052 pounds of strawberries was packed, mostly barreled. Tonnage of other berries handled follows: Raspberries, 42,972 pounds; loganberries, 101,256 pounds; gooseberries, 10,936 pounds; cherries, 4594 pounds.

The bulk of the barreled goods has been sold and it is anticipated that before the end of the year growers will have been paid practically in full.

PLAN RODENT CAMPAIGN.

The complete elimination of the orchard mouse is aimed at in the fall campaign being waged by the Chelan county and state horticultural departments in the Wenatchee section, aided by the United States department of agriculture. Leo K. Couch of the biological survey has been on the trail of the mouse, the gopher, the ground hog and other predatory animals among the orchards of the Wenatchee district and the wheat fields of the northwest for several years and he will assist in the final drive this fall.

Experiments show that the best results are obtained by a wet solution of poisoned grain. In the past poison was mixed and distributed to the growers, but in the future the poison mixture will first be prepared, then applied to grain and the finished product sold to fruit growers at cost. This is suitable for either mice or gophers and it is hoped to rid the orchards of both pests this year.

BANNER CROP NEAR ODESSA.

The 1923 grain crop produced in the Odessa section of the Big Bend country, in Lincoln county, is proof of the productiveness of this country's soil. The territory adjacent to Odessa produced in the neighborhood of 2,000,000 bushels of wheat, the largest single crop in its history. The average for the entire wheat section is exceptionally good and is estimated at between 20 to 25 bushels per acre for spring wheat and 30 to 35 bushels for winter wheat.

An illustration of the good average is the yield received by David Hardung, a farmer eight miles southeast of Odessa, who harvested a 1000-acre field, on which he received over 31,000 bushels of wheat. This was partly spring wheat and the average for the entire field is 33 1-2 bushels per acre. This has probably never been surpassed in this country, even during the banner crop years of 1907 and 1915.

Farmers also report exceptionally large hay yields throughout the entire farming section, furnishing ample feed for horses and other stock on the farms for the coming year. Most of the wheat has been testing No. 1 and as high as 63 pounds to the bushel, and warehouses are being crowded by heavy wheat hauling, which will continue throughout the months of October and November until the large crop is marketed.

Relieve Wheat Situation

At the Same Time Afford Practical Aid to the Japanese

The Pacific Northwest Farm Trio gladly seconds the helpful suggestion made by the Orange Judd Farmer in the following letter to Secretary of Commerce Hoover:

Dear Sir: The frightful calamity in Japan which has so deeply aroused the sympathy of America, calls for the most prompt and effective possible action in the way of food relief. With this in view permit us to call to your attention the situation regarding wheat in the Pacific coast states. Fortunately the wheat crop this year in the Coast states and in Idaho is very large, much above normal. The total crop in the four states reaches nearly 130,000,000 bushels. Their domestic requirements may be regarded as approximately 45,000,000 bushels, thus leaving a surplus this year of some 85,000,000 bushels, or very much more than usual for these states.

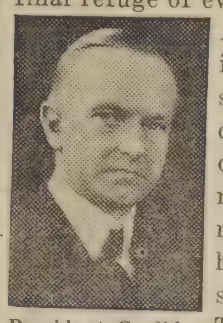
Japan is the one oriental country that is already familiar with the use of wheat flour. She produces approximately 30,000,000 bushels each year herself and imports an additional substantial amount. Wheat is the cheapest food now to be had, and with the Japanese people already familiar with it, with large quantities immediately available at practically Pacific tidewater and with our Coast wheat of a character and quality to which the Japanese people are already accustomed, we beg to suggest that this readily available food supply be promptly and heavily drawn upon to relieve the suffering of a stricken people.

Here is a sensible, practical suggestion that would be to the mutual benefit of the stricken Japanese people and the distressed wheat growers of the United States. Japanese capital, engaged in the stupendous task of rebuilding the wrecked cities, willl draw heavily on the lumber resources of the Pacific coast states. Already the large lumber associations of Washington and Oregon are asking the eastern trade to draw lightly on stocks in this region until the pressing needs of Japan are provided for. Japan could also draw quickly upon the wheat reserves of the Pacific states.

The Japanese government and people are especially grateful at this time to our government. The $5,000,000 to be expended by the American Red Cross has already been oversubscribed. In other ways the government at Washington is properly doing all it can to relieve the dreadful distress of the stricken Japanese nation, and a suggestion from Secretary Hoover and other members of the government at Washington, of willingness to cooperate with the Japanese government and Japanese importers in the purchase and transportation of American wheat, undoubtedly would be received in a friendly and responsive way.

Final Refuge of Every Right

The constitution of the United States is the final refuge of every right that is enjoyed by any American citizen. So long as it is observed, those rights will be secure. Whenever it falls into disrespect or disrepute, the end of orderly organized government, as we have known it for more than 125 years, will be at hand. The Constitution represents a government of law. There is only one other form of authority, and that is a government of force. Americans must make their choice between these two. One signifies justice and liberty; the other, tyranny and oppression. To live under the American constitution is the greatest political privilege that was ever accorded to the human race.—President Coolidge.



President Coolidge.

Secrets Not for Man

Old Question Remains, "Canst Thou by Searching Find Out God?"

The secret things belong unto the Lord.—Deuteronomy 29:29.

Man is delving deeper and deeper into the mysteries of plant and animal life. Day by day the soil is giving up more and more of her secrets. Marvelous strides are being taken into the mysteries of electrical energy.

Yet the question is still asked: "Canst thou by searching find out God?" We are constantly falling back to that couplet:

God moves in a mysterious way
His wonders to perform.

It may be just as well to confess first as last that there are unexplainable things in human life, that there are secret things that belong unto the Lord. It was because Job was convinced that there were secrets in the keeping of his God that he was enabled to say: "Though he slay me, yet will I trust in him."

ARE PROUD OF THEM.

Indiana Farmer's Guide: If there were no other benefit to keeping better stock than the feeling of pride that comes with their possession, it would be worth while. It is something to be able to show off one's flocks and herds and say they are of good breeding. When the wife's uncle comes out from town for a visit, it is satisfying to point out the herd bull and say, "He's a purebred. See what a fine-looking animal he is." Or to call the hogs up to the barn and boast that every one in the lot is of pure breeding. No one can become very enthusiastic over a scrub. And it is the stuff one is enthusiastic over that usually proves the most profitable, for it is apt to get the extra feed and care that will make it so.

BREEDING BY PERFORMANCE.

Wallace's Farmer: Breeding by performance rather than by looks has made tremendous gains possible in the producing quality of dairy cattle. It is doing the same thing in the development of high yielding strains of corn and of other farm crops.

FARM BUSINESS AND MARKETS OUTLOOK

WHILE the United States will have a surplus of about 160,000,000 bushels of wheat this year, there is actually a shortage in this country of good milling wheat. The monthly review of the Continental and Commercial bank of Chicago concludes that the yield this year of hard red wheat, the basis of milling in this country, is likely to be 130,000,000 bushels short of the average.

That is the chief reason why American millers are paying more than export prices.

But, while there is a shortage of good milling wheat in the United States, Canada has a gigantic surplus of good milling wheat,

Representative Sydney Anderson of Minnesota, president of the national wheat council, is urging President Coolidge to act under the provisions of the present tariff law, which permit him to increase by 50 per cent the tariff rate of 30 cents a bushel on imported wheat. That would make the tax 45 cents a bushel and tend still further to shut out Canadian milling wheat.

A Washington, D. C., dispatch says that it appears to be the conclusion of the president and the cabinet that the present tariff is operating to the benefit of the wheat farmer and that the spread between Canadian wheat and wheat grown in the United States is about 28 cents a bushel. The president is said to have been much impressed by the opinion of Congressman Anderson and others that the tariff holds out the quickest and best solution of immediate relief.

Late dispatches from Washington indicate that there is slight possibility of a government price-guarantee of $1.75 a bushel, as proposed by Senator Gooding of Idaho. Secretary Wallace of the department of agriculture is against that plan. He says he has little faith in arbitrary price-fixing of any one crop. "Even if it should afford temporary help," he says, "it would almost certainly within a short time make conditions worse for the farmer instead of better."

If congress should be called in special session by the president, a step that is not probable, undoubtedly there would be opposition to the proposed guarantee. It would be argued that a guaranteed price on wheat would have the effect of inducing farmers to grow still more wheat and to cause many of them to drop other crops.

On the other hand, it would be argued by the friends of a wheat price guarantee, that they were not asking for this as a permanent policy, but only as a temporary relief.

But the answer would be shot back against that explanation, that if the government entered upon a policy of buying wheat above the market price, even temporarily, how could it consistly refuse to buy other agricultural products at prices above the market, if those prices should fall below the cost of production? "This year," the objectors would say, "it is wheat, but next year it might be corn, or cotton, or tobacco, or apples, or potatoes, or hay, or dairy products, or wol, r sugar beets.

We may be mistaken in ur survey of the situation, but we do not believe that the price guarantee is the horse that will pull the wheat grower out of his trouble. We do not believe, in the first instance, that the president will call a special session, nor do we believe that if a special session were convened there would be any probability of a majority of the house and the senate's passing the Gooding bill.

Big Run Weakens Cattle Market.

Cattle markets have staggered under the heaviest load of the season during the last 10 days. Prices were pared most rapidly in the early part of this period and losses compared with a week ago are slight. Dressed beef trade has been uneven, partly because of Jewish holidays, which will cease to be a factor after this week. Western cattle are showing fairly high finish and are being substituted for short-feds at much higher prices.

Low grade steers as well as cows and heifers held fairly steady throughout the period, but these kinds are sure to become more numerous in a few weeks and sell at greater discounts. The veal calf market took another spurt, with prices the highest of the season. Larger receipts in this division are due in the next few weeks.

New Crop Hogs Arrive.

New crop hogs are showing up in larger numbers right along. Many lack finish, a reflection of high-priced corn, and a preference is being shown for heavier weights which are in better condition. Also the spread between butcher and packing grades has narrowed materially, owing to a change in relative numbers.

Packers appear anxious to readjust prices down to a new crop basis at the earliest opportunity, so that it is probable that the highest prices of the season have been passed, although numerous upturns are likely to take place from time to time. The market has declined about $1 from the September high spot, with greatest losses on lightweights and pigs.

Export demand for hog products appears to be excellent most of the time.

Lamb Market Deluged.

Lamb markets were deluged last week, with the largest run in practically two years. Prices declined, but, supply considered, the slump was not sharp. Western lambs carried a higher percentage of feeders than heretofore or values might have been swatted harder.

Wool buying has been in larger volume in the last 10 days than for a number of weeks. Mill holdings are gradually being worked off and the goods market is more healthy. Imports are much below the monthly average requirements of foreign wools. Foreign markets are firm. The London auction continues on a steady basis and the first sale of new clip Australian wools opened unchanged on merinos and 5 to 10 per cent higher on crossbreds than last June.

Wheat Regaining Strength.

Wheat prices have shown surprising strength in the last week. Most of the loss since the announcement of the record yield in Canada has been regained.

That the market has been able to advance in the face of the evidence of wheat abundance, both immediate and prospective, points to large buying power.

Corn at Season's High Mark.

Cash corn buyers at present are paying the highest prices of the season.

Oats prices advanced with corn to the highest point on the new crop.

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The rye market is following wheat, but is in a stronger position than the latter.

Cash Grain Markets.

The range of cash grain prices for the week ended September 26 was a follows:

CHICAGO—Wheat—No. 2 red, $1.02 3-4@1.06 1-2; No. 2 hard, $1.05@1.11 1-2; No. 33 hard, $1.01 1-2@1.06 1-2.

Corn—No. 2 mixed, 87 1-2@91 3-4c; No. 3 mixed, 87 1-2 @91 1-2c; No. 2 yellow, 88 1-4@92 1-4c; No. 2 white, 87 3-4 @92c.

Oats—No. 2 white, 40 1-2@45c; No. 3 white, 39@42 1-2c; No. 4 white, 37 1-2@41 1-2c.

Rye—69 1-4@70 1-2c.

Barley—51@72c.

Seed and Feed.

Red clover seed prices advanced sharply last week and are now about $4 a bushel above the low point of the season.

The feed market is easier, especially mill feeds, as producers are using wheat instead. Bran prices are quoted $2 lower in some markets. Linseed meal production is heavy, with mills operating at capacity. Favorable pastures are delaying as well as reducing the fall demand.

Hay Market Less Firm.

Receipts of hay are light, but demand is more limited and prices are not so firm as recently. Immediate needs at the large markets seem to have been supplied. The demand for alfalfa from the south has improved.

Setback in Egg Market.

The egg market is experiencing its first real setback since the fall advance started. Receipts are running heavier than usual at this time of year, but they are gradually shrinking and will probably decline another 50 per cent in the next two months, so that prices will soon resume their upward trend. Storage eggs are in rather weak position, as the reduction in holding during August was much less than indicated in the government's preliminary report and, even though stocks are larger than a year ago, they have not been reduced as rapidly thus far in September as in 1922. Low grade fresh eggs are affected more or less by the storage situation.

Butter and Cheese.

The advance in butter prices was checked last week. Distributors did less buying for future requirements and a great deal of storage butter which now shows a handsome profit was pushed on the market. Production reports show that the make is running 5 to 8 per cent larger than at the corresponding time last year, but it is decreasing from week to week in accordance with seasonal tendency.

Cheese distributing markets closed practically steady last week.

Fruits and Vegetables.

Shipments of potatoes from producing sections have practically doubled in the last two weeks. Prices weakened as the larger supply reached wholesale markets. The big fall movement generally reaches its peak from the second to the fourth week in October. Northern round whites are quoted at $1 to $1.30 per 100 pounds in the CChicago carlot market, while Rurals are $1.65.

Apple prices have been practically steady, with fall varieties at $4 to $5 a barrel at Chicago. Washington fancy Jonathans, medium to large, are selling at $2.50 to $3 per box, with extra fancy at $3 to $3.50. Carlot shipments from producing sections are above normal for this time of year. The peak of the movement is usually reached from the second to the fourth week in October.

Onion prices were slightly lower last week, with yellow varieties quoted at $3 to $3.25 on the Chicago market. The outlook for the sale of the late crop is considered excellent, as the yield is 10 per cent under last year and the season has opened on a much higher price level than in 1922.

(Continued on page twenty-four.)

How Prevent Wheat Burning After Legume?

By F. J. SIEVERS, Head Department of Soils, State College of Washington

The increases in land values as a result of the war, together with the high cost of agricultural production, and a lack of and consequent proportional increase in the value of many farm products has confronted the farmer with a problem the solution of which may mean changes that will affect his entire system of farm management. The wheat raising sections of the country have possibly been as hard hit as any, and in this respect the Inland Empire, and especially the Palouse region of eastern Washington, is no exception. Because of the fact that it has been proven, experimentally and otherwise, that this region receives sufficient precipitation annually to make continuous crop production possible without the necessity of summer fallow, it is impossible for many free advisers of the farmer to appreciate why diversified farming is not more generally followed. The practice of summer fallow wheat production is still quite general here in spite of the fact that such crops as clover, peas, alfalfa, sweet clover, sunflowers, potatoes and possibly corn are climatically well adapted and can be grown at a profit. Furthermore, a wheat crop following most of these other crops enumerated will generally produce a higher yield than is obtained on average summer fallow land.

Those who have made a study of the agricultural practices the world over agree in general that the system of farming followed in any one community or locality at any particular time is the most profitable and best adapted system from the standpoint of the farmer. This speaks well for the farmer's judgment and it also indicates that changes if necessary in the system of farm management of any locality must and will be made gradually and consequently revolutions should not be expected in this field. Changes in field practices that appear comparatively simple to the outsider oftentimes offer almost insurmountable problems to the man close to the soil.

Difficulties Encountered.

There are several soil fertility difficulties encountered by the Palouse farmer when he attempts to diversify or get away from the summer fallow practice. In sections like the corn belt where summer rainfall is liberal there is always sufficient moisture in the soil during the growing season to promote the decay of crop residues, like stubble, straw or manure, resulting from the preceding crop. In the Palouse region, where the summers are exceeding dry, all fields cropped to cereals become decidedly droughty near the surface very early in the spring. Unless a crop is grown that requires some kind of tillage which will retain the soil moisture near the surface the crop residues above referred to will accumulate or decompose so slowly as to have a depressing effect on the yields. The farmer fully apreciates this depressing effect of crop residues on the yield of small grain and in his attempt to continuously grow cereals (the only crop for which there appeared a ready market) he has frequently seen fit to burn the straw as well as even the stubble of the preceding year. Manure, too, has been allowed to accumulate in the barnyard or to be hauled on the road for the same reason. This destruction of organic matter is anything but encouraging from the standpoint of maintenance of permanent productivity of the soil. The scientific fact at the basis of this practice is that all crop residue, like straw or strawy manure, which have a low nitrogen content, when first applied to the soil will not only interfere with the accumulation of available soil nitrogen, but will cause such soil nitrogen as is already available and ready for use of the growing plant to become at least temporarily insoluble and unavailable. Available nitrogen is the only element of plant food in which Palouse soils are deficient, and the yield of wheat in an ordinary season is directly proportional to the amount of this element of plant food within reach of the plant. Summer fallowing is practiced in that portion of eastern Washington where the rainfall is 18 inches or above for the prime purpose of promoting moisture conditions in the soil that make for greater accumulation of available nitrogen. This same amount of rainfall occuring in the same amount of available occurring in the season would make summer fallowing unnecessary. From the standpoint of profitable production, continuous cropping with cereals causes the development of plant food problems that alone make this practice impossible, without even taking into condition the weed problems that generally become so prominent as to be a deciding factor where such a system of cropping is followed.

What a Legume Does.

When legumes like clover, alfalfa, sweet clover or peas are substituted for the summer fallow, they not only do well following a cereal crop because they depend upon the air for a large amount of their nitrogen supply, but they also return a residue that has a high nitrogen content, which upon decay leaves a large amount of nitrogen available for the succeeding crop. That legumes have this power of enriching the soil is a generally recognized fact in all agricultural sections and plays an important part in the selection of a satisfactory crop rotation system. In the corn belt it is considered poor practice to follow a legume sod with a small grain crop because the large amount of available nitrogen in the soil will cause a very heavy vegetative growth, and lodging invariably follows. In general field practice, corn, a crop that can not easily be overfed, is commonly grown immediately following a legume, and this works out splendidly where corn is climatically so adapted that its production on a large scale is justified.

The "Burning" Problem.

In the Palouse region, however, wheat is the farmer's "first love" because the cool nights, low humidity and short growing season, together with the extremely rolling topography, make corn or other intertilled crops less well adapted. He has attempted, therefore, to follow the legume crop with wheat. The result has been that his wheat here, due to the large amount of available nitrogen, tiltered or stooled very profusely and promoted the development of a large amount of vegetative growth similar in this respect to what is true for the corn belt, but with this difference: In the corn belt where summer moisture is plentiful the grain lodged before it became mature; here in the Palouse, where the summers are dry, the grain dried up before it matured, resulting in a condition commonly referred to as "burning." Both burning and lodging are very undesirable because they have about an equally depressing effect on the yield.

In spite of the fact that such intertilled crops as corn, potatoes and sunflowers can be grown with some degree of success it is very evident that the Palouse farmer must adapt for the most of his land a rotation system consisting of legumes and wheat, where each is grown about 50 per cent of the time. In other words, when diversified farming becomes the accepted practice it will mean that the acreage of wheat will remain about as at present and that the next best crop, legumes, will be grown on land now in summer fallow. This will necessitate the development of some plan that will serve as an insurance against the loss from "burning."

A Clew to the Solution.

It has been shown that straw and other residues low in nitrogen when applied to a soil will retard the development of available nitrogen, while the soil following a legume sod contains this available plant food in excess. What suggests itself at once?

Incorporate straw with the soil at the time the legume sod is plowed up. Acting on this suggestion, the soils department of the Washington experiment station has conducted investigations along this line with the result that it was found where from one to two tons of straw were appied to a legume sod (alfalfa) just before plowing the undesirable effects of the legumes were temporarily overcome, no crop burning was experienced and normal yields were obtained.

This practice when once generally accepted also provides an opportunity to conserve those crop residues which are now largely wasted, thus causing the soil organic matter to be maintained. The general result is very desirable. The physical condition of the soil is improved, the fertility is maintained, the production per acre is practically doubled, the cost of production is decidedly decreased, while the profit to the farmer is greater and the agriculture of the Palouse is put on a permanent basis. Diversified farming with legumes in the rotation in place of summer fallow is not only essential if yields are to be maintained, but it is the only system on the basis of which present land values are justified.

In eastern Washington, where the annual rainfall is 18 inches or more, summer fallowing is necessary if proper crop rotation is practiced. The piles of wheat here shown are significant. At the left is an acre's production of wheat after wheat, or 21.5 bushels. In the center the production of wheat after peas (a legume), or 47 bushels. At the right the production of wheat after summer fallow, or 31.5 bushels.

Unity Gets Results in Whitman

What can be done in one month, with the backing of the farmers, business men, bankers, commercial clubs and farm bureau, was evidenced in the community exhibits and boys' and girls' club entries at the La La Lalouser fair, held in Colfax, Whitman county, September 6-8. This section of the fair was conducted by the Whitman county farm bureau, under the management of Brick Burford, secretary, and was the first of its kind at Colfax.

A hay palace, topped by a canvas roof, contained the community exhibits of Whitman county, which consisted of everything that can be raised on a farm.

The districts represented were Hubbard, which won first prize on the 148 varieties displayed; South Palouse, second; Colton, third; Diamond, special mention, and the Almota fruit exhibit, which was brought in by Mrs. Mary C. Spaulding as a community display.

The farm bureau women's department had a display of hats, dress forms and sewing, and the Whitman county public health service had a booth in conjunction with the anti-tuberculosis league.

Exhibits brought in by the boys and girls plainly showed that club work in Whitman county is distinctly "on the map" and that the club leaders, business men and women and parents of the club members appreciate its value.

Business men and banks of Colfax gave every aid toward the furtherance of this work in the county and the commercial clubs of St. John and Garfield paid the expenses of their boys and girls and the taking back and forth of their pigs to the fair.

The county commissioners, P. M. Price of Colfax, William McCoy of Oakesdale and A. L. Maxwell of Palouse, are sure that club work is an asset to any community, and to prove their faith they gave a prize of $5 to each boy and girl who entered a pig.

In the pig club entries Garfield, under the leadership of Houston McCroskey; Thornton, under M. B. Jacques; Pullman, under L. S. Tromenhauser; the Eccles district of St. John, under Norman E. Crane; the Hulin district, under Jerry Hodge, and the Wilcox district, under B. F. Kammerzell, were represented by 20 club members and 82 pigs. Many of the boys could not come because of the late harvest. Myrtle Scott of the Eccles district came over with a litter of 13 pigs, and her father and mother suspended work at home to come with her.

Three breeds of pigs were shown—Chester White, Duroc Jersey and Poland China. Each class was judged by C. M. Hubbard, swine specialist of Washington State college, then turned over to the boys and girls for judging.

Prize money for the club contests and best pigs entered were given by the La La Palouser management, the Colfax State bank, Colonel L. Strobel, Colfax; National bank and Lou Brunning, Colfax. B. F. Kammerzell of Colfax gave a purebred Poland China boar pig for the best litter of Poland China pigs entered.

In the judging contest Anton Harms, Pullman, won first prize; Henry Schafer, Garfield, second; Johnny Hinrichs, Pullman, honorable mention.

For the best litter on the grounds, all breeds considered, Myrtle Scott was first with her Duroc Jerseys; Louis Chesnut, Colfax, second on Chester Whites; Joe Kincaid, Pullman, third, on Duroc Jerseys. The Kammerzell prize for the best litter of Poland China pigs went to Guy Hughes, Thornton.

Poland Chinas, sow pigs—First and second, Edgar Halling, Colfax; third, Guy Hughes, Thornton. Boar pig—First and

(Cintinued on page eighteen.)

GENERAL ADVERTISING.

Swedish Inventor Has New Oil Light

Claims Whiter and Much Cheaper Light Than Electric or Gas.

Edison enabled us to enjoy the benefits of electric light, Count Welsbach's mantle made it possible to have the incandescent gas light, but it remained for a Swedish engineer named Johnson, now living in Chicago, to devise a lamp that would burn ordinary, every day kerosene oil and produce a light said by the many scientists who have seen it to be whiter than electric. The lamp is as simple to operate as the old style oil lamp, burns without odor, smoke or noise and is proving a sensation where oil light is needed.

Mr. Johnson offers to send a lamp on ten days' free trial and will even give one to the first user in each locality who will help introduce it. A letter addressed to W. R. Johnson, 31 N. Fifth St., Portland, Ore., will bring full particulars about this wonderful new lamp. He has an interesting agency to offer, too.—Adv.

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Special Mixtures for Wet Land, Dry Land, Burns, Permanent Hay Crops and Pastures
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Warm! Stylish! Dressy!

This smart model is made of reliable quality warm winter weight all wool velour. The back has two full length box plaits, and artistic fiber silk embroidery stitching at waistline. Striking button trimmed patch pockets on the front. Warm button-up collar of the velour. Coat has all around button trimmed belt, button trimmed cuffs and is cut in correct 48-inch length. Unlined. A remarkable value.

WOMEN'S AND MISSES' SIZES—34 to 46 inches bust measure. State size. Shipping weight, 6 pounds.

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The Season's Smartest Style

15N2698D—Black Vici Kid.
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This is one of the greatest shoe values ever offered—all the appearance of a high grade oxford at an extremely low price. Comes in real black vici kid or brown Russia. Rubber heel. Where else in the U. S. A. can you get a good looking an oxford for so little money?

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Shipped from SEATTLE store.

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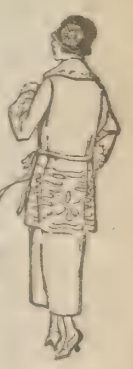

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All Wool Serge

This smartly tailored Suit, in all wool serge, possesses both style and wearing quality. The trim straight line 32-inch coat shows lavish adornment on collar, bell sleeves and skirt, both front and back, of fiber silk braid embroidery. Neat all around string belt ties gracefully at left side. The lining is of good quality printed sateen. Tailored skirt has slashed pockets, and shirring in back beneath detachable belt.

WOMEN'S REGULAR SIZES—32 to 44 inches bust; 30 to 38 inches front length of skirt. State exact size. Shipping weight, 4 pounds.

17N49285D—Navy blue.
17N49286D—Black.

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Charming Fur Choker

Approved by fashionable women this season is the new fur here pictured. Chinchillette coney, made from selected coney skins in wonderful imitation of the rare chinchilla fur. This scarf is also offered in genuine gray squirrel fur. Double furred style. Length, 24 inches. Shipping weight, 1¼ pounds.

17N6675D—Imported Gray Chinchillette Coney ..$5.98
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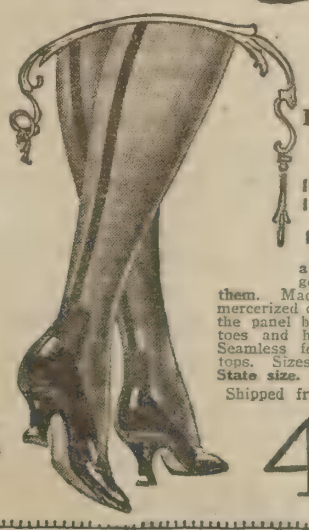

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16N20360D—Black.
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They're fine in quality and dependable—you'll get loads of wear from them. Made of a good quality mercerized cotton. Fashioned with the panel back. Reinforced soles, toes and high spliced heels. Seamless feet. Double garter tops. Sizes, 8½, 9, 9½ and 10. State size. Shipping wt., 3 oz.

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Live Stock Awards at the State Fair

In last week's issue of The Washington Farmer the awards in the hog department of the Washington state fair were reported in full. The awards in the other divisions of the live stock show are herewith given:

The Beef Cattle.

Strong competition in the Hereford section was the most notworthy feature of the beef cattle show, though even this competition did not bring out quality of exhibits superior to those of the Shorthorns and Aberdeen Angus. Three of the five breeders exhibiting the white faces were from outside the state and none of the championships remained in Washington. The beef Shorthorn show was a strictly home affair, with one West Side and one East Side herd competing. Likewise, the milking Shorthorns and the Aberdeen Angus were all Washington cattle, the former coming from the Northwood of west Washington and the latter from the Congdon & Battles herd of the Yakima valley. The awards in the beef cattle division follow:

The Herefords.

Bulls: Three bulls, any age—1, O. A. Boggs & Sons, Daysland, Alberta; 2, Diamond B. Ranch, Lowell, Ore.; 3, Herbert Chandler, Baker, Ore.; 4, Weatherford Bros., Dayton, Wash. Two bulls, any age—1, O. A. Boggs & Sons; 2, Herbert Chandler; 3, Diamond B. Ranch; 4, Weatherford Bros. Aged bull—1, Boggs & Sons, on Alberta Panama (senior and grand champion); 2, Diamond B. Ranch, on Don Fairfax; 3, Chandler, on Debonair 119th; 4, Alf Goode & Sons, Yakima, Wash., on Menlo 6th. Two-year-old—1 and 2, Boggs & Sons, on Dudley's Panama and Alberta's Panama 3d; 3, Herbert Chandler on Money Prince 2d; 4, Weatherford Bros., on Don Blanchard 3d. Senior yearling—1, Chandler, on Prince Donald; 2, Diamond B. Ranch, on Dan Rupert 7th. Junior Choice Gomez (junior champion) and Oregon yearling—1 and 2, Diamond B. Ranch, on Gomez; 3, Boggs & Sons, on Shadeland Panama 5th; 4, Chandler, on Donald Rupert. Senior calf—1, Chandler, on Donald Rupert 9th; 2, Boggs & Sons, on Columbus Don Junior; 3, Weatherford Bros. on Don Blanchard 25th; 4, Goode & Son, on Teddy. Junior calf—1, Chandler, on Prince Weston; 2 and 3, Weatherford Bros. on Don Blanchard 27th and Don Blanchard 30th; 4, Goode & Son, on Tamico.

Females: Aged cow—1 and 2, Boggs & Sons, on Panama Lady 2d and Miss Panama; 3 and 4, Chandler, on Semolina 2d and Mary Debonair. Two-year-old—1 and 2, Boggs & Sons, on Lady Panama 3d (senior and grand champion) and Miss Columbus Panama 2d; 3, Chandler, on Princess Donald; 4, Diamond B. Ranch, on Illah Fairfax. Senior yearling—1, Weatherford Bros., on Betty Blanchard 19th; 2, Goode & Sons on Leah; 3, Harold Holmes, Mabton, Wash., on Eliza 2d. Junior yearling—1, Chandler on Bonnie New Year (junior champion); 2 and 3, Boggs & Sons, on Lady Dudley 2d and Panama Lady 4th; 4, Weatherford Bros., on Lady Blanchard 24th. Senior calf—1, Weatherford Bros., on Betty Blanchard 37th; 2, Chandler, on Hazel; 3 and 4, Boggs & Sons, on Miss Columbus Panama 3d and Miss Alberta Panama.

Herds and groups: Aged herd—1, Boggs & Sons; 2, Chandler; 3, Diamond B. Ranch; 4, Weatherford Bros. Yearling herd—1, Chandler; 2, Boggs. Calf herd—1, Weatherford Bros.; 2, Boggs & Sons; 3, Chandler; 4, Diamond B. Ranch. Get of sire—1 and 2, Boggs & Sons; 3, Chandler; 4, Weatherford Bros.

The Shorthorns.

Bulls: Three bulls, any age—1, Frank M. Rothrock Co., Spokane, Wash.; 2, J. D. McGuire, Tenino, Wash. Two bulls, any age, bred by exhibitor—1, Rothrock Co.; 2 and 3, McGuire. Senior yearling—1, Rothrock Co., on Hercules Marshall; 2, E. W. Taylor, Sunnyside, Wash., on Viceroy. Junior yearling—1, Rothrock Co., on Hercules Brilliant; 2 and 3, McGuire, on Oak Grove King and King's Perfection. Senior calf—1 and 2, Rothrock Co., on Hope. Junior calf—1, McGuire on Oak Grove Hercules Emblem (junior and grand champion) and Hercules Favorite; 3, McGuire on Baron Gainford; 2, Rothrock Co., on Hercules Gloster.

Cows: Aged cow, with calf at side—1, McGuire Chief's Hope (senior champion). Three years or over—1, McGuire, on Escana Lady. Two year olds—1 and 2, McGuire on Hercules Missie 3d and Mayflower Rose. Senior yearling—1 and 2, Rothrock Co., on Hercules Silvia 3d (junior and grand champion) and Hercules Missie; 3, McGuire, on King's Hope. Junior yearling—1 and 2, Rothrock Co., on Golden Margaret 9th and Hercules Topsy 6th; 3, McGuire, on Oak Grove Lady. Senior calf—1 and 2, Rothrock Co. on Hercules Silvia 5th and Hercules Rose 4th; 3, McGuire, on Oak Grove Rose.

Herds and groups: Yearling herd bred by exhibitor—1 and 2, Rothrock Co.; 3, McGuire. Pair of calves, 1 bull and 1 heifer—1 and 2, Rothrock Co.; 3, McGuire. Get of sire—1 and 2, Rothrock Co.; 3, McGuire.

Aberdeen Angus.

Only the herd of Congdon & Battles of Yakima, showed in the Aberdeen Angus department. It made up an excellent show of well filled classes and received the following awards:

Bulls—1 and 2, on groups of three, any age, and 1 and 2 on groups of two, any age. Aged bulls—1, on Prizemere 10th. Two-year-olds—1 and 2, on Queenmere 14th (senior and grand champion) and Eileenmere 6th. Senior yearling—1 and 2, on Blackmere 16th (junior champion) and Ericaman C. B. 8th. Junior yearling—1 and 2, on Prideman C. B. 22d and Blackmere 15th. Senior Calf—1 and 2, on Prideman C. B. 25th and Barbarian of Rosemere 7th. Junior calf—1 and 2, on Irenmere 6th and Prizemere 30th.

Females: Aged cow—1, on Pride of Rosemere 37th (senior and grand champion). Two-year-old—1 and 2, on Pride of Rosemere 40th and Queen of Rosemere 15th. Senior yearling—1 and 2, on Barbara C. B. 2d (junior champion) and Erica C. B. 6th. Junior yearling—1 and 2, on Queen of Rosemere 16th and Meadow Lark C. B. Senor calf—1 and 2, on Blackcap of Rosemere 20th and Pride of Rosemere 49th.

Herds and groups—1, on aged herd; 1 and 2, on yearling herd bred by exhibitor; 1, on calf herd bred by exhibitor; and 1 and 2 on get of sire.

Baby Beef Clubs.

Aberdeen Angus Steers—1, 4 and 7, Thomas Newton, Cle Elum, Wash.; 2 and 3, Alva Pays, Cle Elum, Wash.; 5 and 10, Rodger Pays, Cle Elum, Wash.; 6 and 8, George Hliboky, Cle Elum, Wash.; G. Harvey Varnum, Mabton, Wash.

Shorthorn Steers—1 and 4, Thilmore Wilson, Ellensburg, Wash.; 2 and 3, Erling Hanson, Ellensburg, Wash.; 5 and 6, Carol Robinson, Ellensburg, Wash.; 7 and 8, Eugene Wilson, Ellensburg, Wash.; 9 and 10, Walter White, Ellensburg, Wash.

Champion steer of all breeds—Thilmore Wilson on Shorthorn.

Fat Cattle.

Steer or heifer one year and under two—1 and 2, Congdon & Battles on Aberdeen Angus; 3, Thilmore Wilson, Ellensburg, Wash., on Shorthorn; 4, Thomas Newton, Cle Elum, Wash., on Aberdeen Angus.

Steer or heifer under one year—1, Jogh Mathison, Zillah, Wash., on Shorthorn; 2, Congdon & Battles on Aberdeen Angus; 3, G. Harvey Varnum on Aberdeen Angus.

Grand champion animal—Congdon & Battles on Aberdeen Angus.

Milking Shorthorns.

The high-class herd of Northwood farms of Redmond, Wash., made up the entire milking Shorthorn show. This herd won all awards as follows:

Bulls—Three years or over—1 and 2, on Gretna Challenger (senior and grand champion) and Northwood Defender. Two years old—1, on Northwood Pride. Yearling—1 and 2, on Northwood Salem (junior champion) and Northwood Julian 2d. Under one year—1 and 2, on Northwood Monarch and Northwood Oxford.

Females—Three cows in milk—1, on Lilly L 3d, Lady Susie 3d and Northwood Baroness. Five years or over—1 on Lilly L 3d (senior and grand champion). Three years and under five—1 and 2 on Lady Susie 3d and Northwood Baroness. Two year old—1 and 2 on Annabel 2d and Northwood Winnie 2d. Yearling—1 and

(Continued on page nineteen.)

IRRIGATE

Rife Rams provide a continuous supply of water night and day, winter or summer, without fuel, labor or repairs. A stream with 3-foot fall and 3-gallon per minute flow will operate it. Over 20,000 in use.

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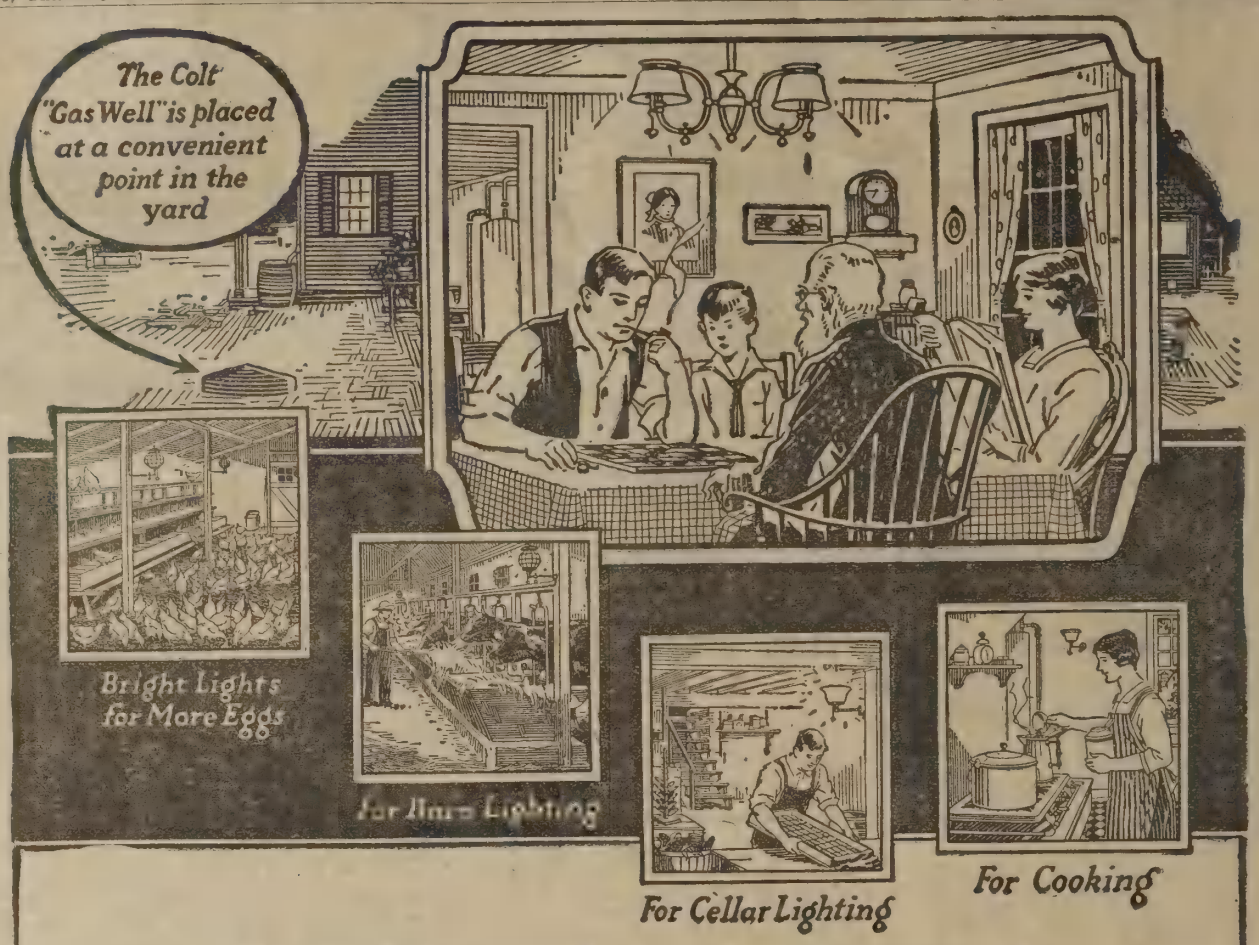
If you want something not offered among our classified ads this week,



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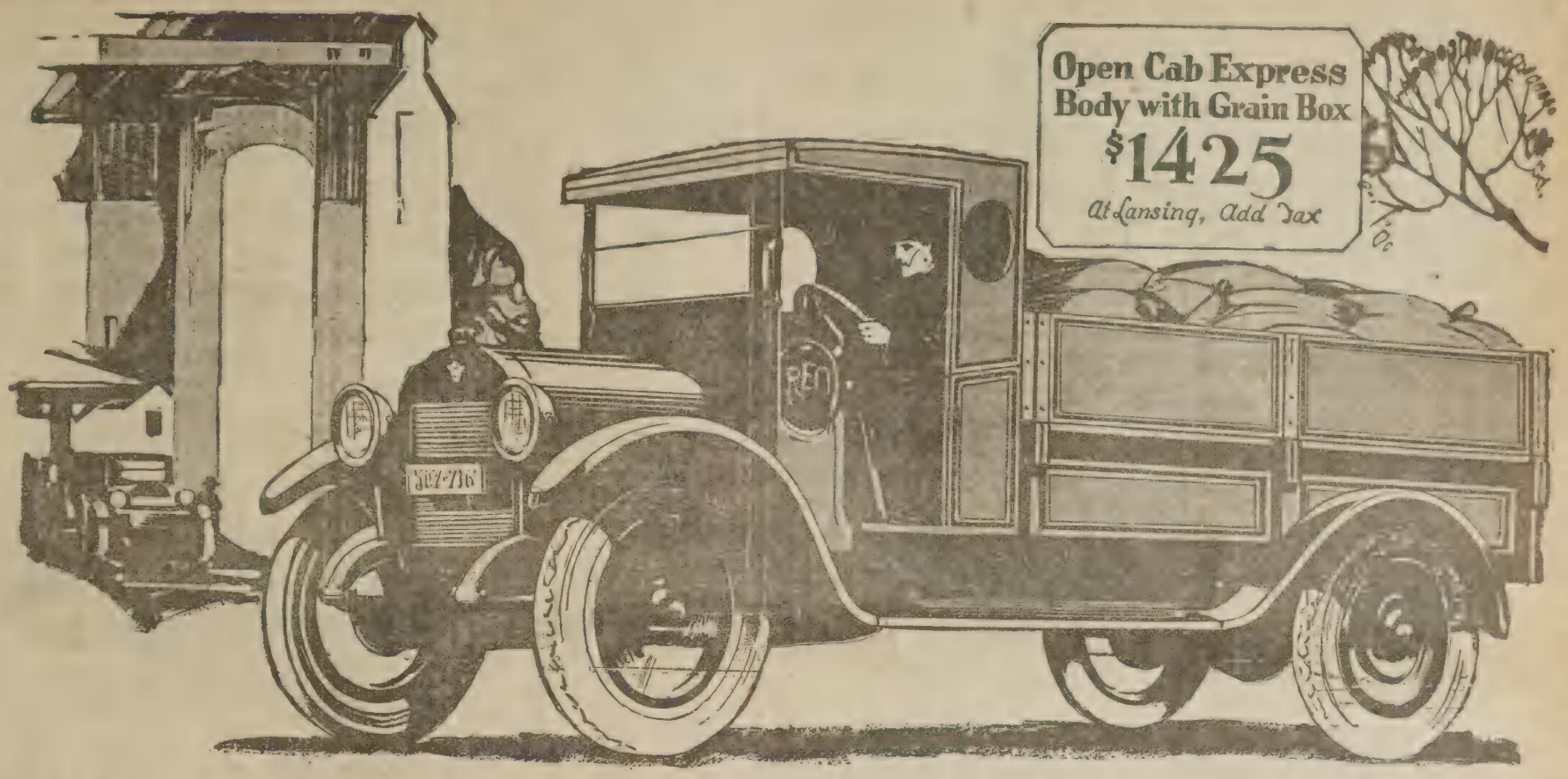

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No single feature alone is responsible for Speed Wagon dominance. To *balanced goodness* goes all the credit. Nearly a hundred thousand are serving and saving because the Speed Wagon is designed and manufactured as a complete unit in the big Reo shops,—not assembled!

Twelve standard bodies. Capacity 500 to 2500 pounds.
Chassis, $1185 at Lansing; add tax.

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LIVESTOCK AND DAIRY

Blackleg Control

Immunization by vaccination is the only practicable and effective means of protecting animals against blackleg and eventually ridding pastures of the infection, says the United States department of agriculture in Farmers' Bulletin 1355, prepared by Dr. John R. Mohler, chief of the bureau of animal industry. This disease, which is found in all climates and altitudes in practically all parts of the world, is the cause of great losses in this country, particularly in the great cattle raising and feeding sections of the west.

In the new bulletin all of the important information on this disease has been brought together in concise form. The nature of the malady and the characteristic symptoms are so described and compared with those of other diseases that there can be little danger of confusion. Cattle, especially young animals from 6 to 18 months of age, are most susceptible, but sheep and goats also are subject to it, and in exceptional cases hogs have contracted it. Man, horses, dogs, cats and fowls appear to be immune from the infection. Improved animals seem to be less resistant to it than common or low-grade stock. Spring and fall are the seasons of greatest prevalence, but blackleg may occur at any time of the year.

Medicinal treatment has been found worse than useless as animals sick with the disease are sure to die, and the longer they are kept alive the greater the danger of infecting others in the herd. Those sick with blackleg should be killed and burned or buried deeply in quick lime. Protection against infection is afforded by vaccination, and there are a number of reliable preparations on the market. Formerly the department of agriculture manufactured and distributed blackleg vaccine (but as a result of an act of congress, this distribution was discontinued beginning July 1, 1922.)

Copies of the bulletin may be had, as long as the supply lasts, by writing to the department of agriculture, Washington, D. C.

The Hambletonian

By E. L. POTTER, O. A. C.

Will you please tell me whether the Hambletonian is a thoroughbred horse? R. H. J.
Huntington, Ore.

The Hambletonian is a strain of the American trotter descended from the famous horse, Rysdyk's Hambletonian. The value of Hambletonian blood has been such that at the present time practically all of the American trotters descend from this one horse and it would probably be difficult to find a horse registered in the American trotting register that was not a descendant of Hambletonian. Since the Hambletonian blood has permeated the entire American trotting breed, the word Hambletonian has fallen into disuse.

The word "thoroughbred" should be used correctly as designating the English running horse, which, of course, is the same breed as is used for running races in this country. The American trotter, which of course includes our pacers, was developed from a thoroughbred foundation, but is now a separate breed. The original horse, Hambletonian, had doubtless a good deal of thoroughbred blood in his veins, but would not be considered strictly a thoroughbred horse, especially since his merit lay in his ability to sire horses that were fast at the trot and pace rather than at the gallop.

Of course the word "thoroughbred" is often used as meaning the same as purebred and hence might be applied to any breed; for instance, we speak of thoroughbred American trotters, thoroughbred Percherons, or thoroughbred Shorthorns. The use of the word thoroughbred in this manner is not considered correct, and while so used by many farmers and horsemen in their conversation it is not used in that manner by any of the standard horse periodicals or by any of the better writers on horse subjects.

In closing, will call attention to the peculiar spelling of the word "Hambletonian." Mr. Rysdyk, the owner of the original Hambletonian horse, was an illiterate man and spelled the word in the manner indicated and it has been so spelled in all the official records of the American trotting register, although doubtless the word was intended to be "Hamiltonian."

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A Shoe Boil, Capped Hock or Bursitis
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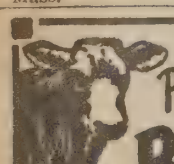
TRADE MARK REG. U.S. PAT. OFF.

will reduce them and leave no blemishes. Stops lameness promptly. Does not blister or remove the hair, and horse can be worked. $2.50 a bottle delivered. Book 6 R free.

ABSORBINE, JR., for mankind, the antiseptic liniment for Boils, Bruises, Sores, Swellings, Varicose Veins. Allays Pain and Inflammation. Price $1.25 a bottle at druggists or delivered. Will tell you more if you write.

W. F. YOUNG, Inc., 571 Lyman St., Springfield, Mass.



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CULTURAL GERM-FREE VACCINE

Scientifically Prepared and Tested
Consult your veterinarian or druggist.
Write for booklet on blackleg prevention.
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VETERINARY

By DR. S. B. NELSON.

Bloody Milk—We have a heifer with her first calf that gives bloody milk.
Shelton, Wash. MRS. V. B.

Give the cow 1 teaspoonful of hyposulphite of soda in the drinking water, morning and night for some time.

Sore Teats—What can I do for a cow that has sore teats? Every time I milk the left teats she kicks. There is no noticeable sore on her teats or swelling.
Tacoma, Wash. J. E. J.

Apply a little lanolin to the teats after milking. Wash the teats in hot water for four or five minutes before milking. Dry and milk.

Cream Tainted—We have a cow and the cream on her milk tastes musty, even when sweet. The milk does not taste, though. She runs on pasture and we feed about two quarts of bran and shorts twice a day. C. B. J.
Eatonville, Wash.

Give your cow one and one-half pounds of epsom salts. Three days later begin giving her a heaping teaspoonful of hyposulphite of soda in a pint of water morning and evening.

Use Teat Knife.—I have a cow just fresh with second calf. She had a caked udder with her first calf and one teat failed to function, but there was no soreness or any seeming soreness. With this calf the udder seems normal, as does the teat, and it is full of milk but gives out at one or two strokes and refills slowly. I am bathing the udder and rubbing it with grease. I have read that there is a way of cutting the duct. The udder is hard at that quarter but normal in size and subnormal before she had the calf.
Vancouver, Wash. W. G.

The opening in the membrane at the base of the teat near the udder has partially closed. The treatment is to procure a small teat knife, which consists of a very fine knife that works on a hinge so that it may be concealed in the small tube which acts as its handle. When the knife is inside the tube, the tube is pushed up into the udder and up through the membrane. Then the knife blade is released and the knife is drawn down through the membrane. The knife blade is hidden in the tube again and pushed up into the udder, turned one-fourth of the way around and then drawn down again. This is repeated four times until four slits have been made in all four directions of the compass.

Be sure and put the blade back into the tube again before the knife is drawn out through the lower opening of the teat. The teat should be dipped in tincture of iodine and the knife should be thoroughly boiled before it is inserted into the teat.

The Bergmann "Sport Pac"

Sold by leading shoe stores or direct if no dealer near you.

"True Value All Thru"

This shoe has been declared the greatest outdoor shoe ever built. Bergmann has been repeatedly criticized from a business standpoint for building it too well.

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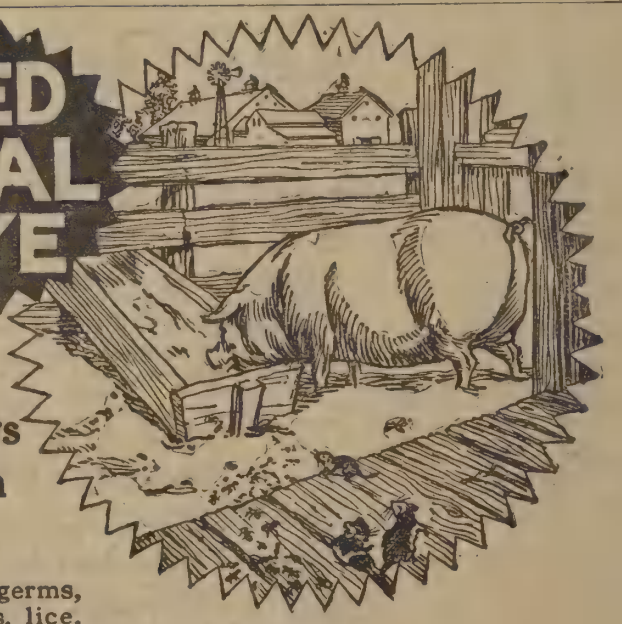
Ask for your copy of this book.

BERGMANN Outdoor SHOES

RED SEAL LYE

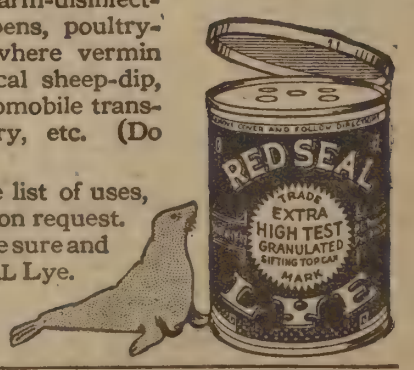


Destroys Pig-Pen Pests

— disease germs, worm-eggs, lice, insects, etc. Drives out rats and mice. Sweetens the swill. Kills odors. Makes hogs healthy.

RED SEAL Lye is the best farm-disinfectant to be used in stables, pens, poultry-houses; in fact, any place where vermin breed. Also makes a practical sheep-dip, tree-spray and cleaner for automobile transmission-cases, farm-machinery, etc. (Do not use on aluminum.)

Booklet containing complete list of uses, with description of each, sent on request. Full directions in every can. Be sure and buy only the genuine RED SEAL Lye.



P. C. Tomson & Co.
PHILADELPHIA, PA.

The department editors of this paper are anxious to be of service to you. Do not fail to write to us if they can be of help to you.

Room for More Farm Flocks

Sheep Offer Opportunity to the Washington Wheat Farmer

By C. M. HUBBARD, State College Live Stock Extension Specialist.

"I would not farm in this wheat section without sheep," says George Iceus, a well-known farmer near Palouse. "We had practically no weeds in our summer fallow this year, but keeping 30 ewes and their lambs on 90 acres. We make our easiest money from sheep, and the greater share of what they eat is ordinarily wasted in this section."

"My flock of Shropshires lambed 125 per cent this year and show an average wool clip of 10 pounds," said J. N. Meyers of Uniontown. 'While we have only 25 breeding ewes, we need 100 head, as they pay more than any other farm stock under our conditions. They eliminate the weeks and, on the whole, consume a great deal of roughage which is of little value, changing it into lambs and wool. Our community would be better off with more farm flocks."

Such was the tenor of the remarks from some 10 Whitman county farm flock owners, when recently interviewed as to their farm-flock experience.

This naturally suggests the question: "What is the outlook for the farm flock in Washington? What is the place of the farm flock in this state?"

A short review of sheep history for the last 23 years is of value in this connection and, while too many statistics may be tedious, a few are of value in presenting the case for the farm flock in the northwest.

Going Down.

In 1900 we had 61,504,000 head; in 1910 52,447,000 head; in 1920 39,925,000 head and in 1922 around 37,000,000 head of sheep in the United States. Our wool production is also on the decline. In 1919 219,958 pounds; in 1920 235,005 pounds and in 1921 224,564,000 pounds. We manufacture into clothing over twice as much as we produce. A nationwide decrease in lamb production is in line with the decrease in ewe stock.

This decrease in sheep and wool production is due to several factors, including the breaking up of range area through homesteading, changes in the lamb and wool tariffs, a lack of realization of the profit to be obtained from sheep, an unfounded aversion on the part of certain farmers, intestinal parasites in the cornbelt and south, destruction by dogs, etc. Unfortunately, the decrease in range stock has not been made up by a corresponding increase in our farm flocks. A permanent system of agriculture, wherein the farm flock has a definite niche to fill, has not been definitely settled on by farmers, as a whole, in many of our states. The great farming state of Ohio, entirely lacking in range territory, carries 1,957,000 sheep on the farm flock basis. Totaling range bands and farm flocks, we have in Washington only 500,000 head. The larger share of these are range ewes. Oregon has a total of around 1,823,000 adding to her agricultural wealth.

What the Future Holds.

Farmers interested in starting small flocks this fall naturally ask, "How about the future of the farm flock?" Indications point to several years of sheep prosperity, but the "wave" or "tide" of sheep and wool values fluctuates. This is true of all farm crops and stock, however. Each of the last two years has seen high wool values; this being especially the case with fine wools and the various medium wools shorn from the so-called black-faced breeds. Lambs have sold at good figures, generally speaking, especially if they were marketed reasonably early in the season. Prices on good high-grade ewes are climbing. Considering the underproduction of wool and lambs in the United States and granting no revision downward in the tariff, farm flocks should increase materially in the next few years to the greater profit of the farmers concerned. Every farm-flock owner approached in one county stated that there undoubtedly should be more farm flocks in their community.

Farmers have heard for years of how sheep utilize the cheaper roughage of the farm, the weeds, the summer fallow, pea straw and the stubble fields, turning them into valuable lambs and wool; that little labor is required and the per cent of returns is high on the capital invested.

Where can ewes suitable for farm-flock purposes be obtained and at what prices? Farmers may obtain old ewes, bred, with sound udders and in fair condition, of Lincoln-Rambouillet or Rambouillet breeding, from range men, at around $8 from Yakima and a few other Ellensburg points. These ewes have served their alloted time on the range, but are good for another year or so of use under farm flock conditions, if given good care and proper feeding. Bred to Hampshire rams for early March lambing, the resulting quality lambs can be marketed in July and the ewes themselves in August. If the farmer so desires, the resulting ewe lambs may be saved to start a permanent farm flock. This method will appeal to the farmer with a small amount of available cash—and most farmers are in that position.

Good, young ewes of Rambouillet, Lincoln-Rambouillet breeding, or grade blackface ewes of Shropshire or Hampshire breeding will cost from $11 to $13 this fall. As these prices are above the average for young ewes over a series of years, many farmers will undoubtedly prefer the older ewes, marketing them in August, when they will have had a chance to put on flesh after their lambs have been sold.

Nothing for In-and-Outer.

To the thrifty farmer, inclining toward diversification and a permanent type of agriculture, the farm flock should appeal. The "in-and-outer," who jumps from one kind of live stock or farming to another from year to year, will not get anywhere with sheep. Naturally this statement holds true with every phase of agriculture.

If one makes a little study of sheep, their breeding, proper feeding and what makes for good management, there is no reason why the farm flocks of Washington should not be as profitable as they are in the other good agricultural sections of our country.

Robert Cissna

The Washington Farmer is grieved to learn of the death of Robert Cissna at Yakima, age 72 years. Mr. Cissna was widely known as one of the largest and most practical beekeepers in the west. He had the sympathetic support and help of his wife in his favorite occupation. Mr. and Mrs. Cissna made successful honey exhibits for nearly 20 years.

Robert Cissna was born in Indiana in 1851, and spent nearly half his life in that state. He came west and settled in western Washington, coming from Bellingham to the Yakima valley nearly 22 years ago. He suffered much during the last of his sickness, being afflicted with cancer for about three years.

He is survived by six children, two brothers and one sister. The children are: Mrs. Arvilla Waples, Lynden, Wash.; Leroy Cissna, Chicago; Earl, Harry, Eleanor and Bertha at Yakima.

Sale of Hampshire Rams

The auction sale of registered Hampshire rams held at the Kittitas county fairgrounds on Friday during the fair brought an average of $27.61 for the entire 63 head entered. The top price was $52.50 for a yearling ram consigned by W. L. Coburn of Ellensburg and purchased by Stanley Coffin & Son of Yakima. Had it not been for a few of the lambs that were undersized the average would have been closer to $35, according to members of the Kittitas County Hampshire Breeders' association, who put on the sale.

The range sheepmen have been coming to this valley for many years for their ram lambs and the demand has been strong enough to warrant a large percentage of the breeders to keep only one breed, the Hampshires. As a general rule each man has planned on disposing of his surplus lambs by private sale, but the auction sale method met with a decided success this year in connection with the county fair at their new grounds.

The consignors who sold lambs were: S. P. Wipple & Sons, E. W. Wilson, Carol Robinson, Peter Wipple & Son, Lynch & Hubbard, W. L. Coburn, all of Ellensburg, and Verbal Hall of Thorp.

Those who purchased lambs from the breeders were: Stanley Coffin & Son, Yakima; Archie Prior, Yakima; E. T. Cranmer, Wenatchee; R. M. Lindsay, Stanwood; F. M. Rothrock company, Sprague; C. M. Richards, Ellensburg; F. H. Zentner, Waterville; K. O. Kohler and J. L. Kay of Ellensburg and J. F. Sears of Yakima.

Honor Guernsey Breeders

An interesting feature of the Guernsey breeders' banquet held at Yakima during the state fair, was the presentation of two trophies, one to H. E. Angel of Mabton and the other to Wallace & Fordyce, who will disperse their herds this month. The trophies were given as a token of appreciation for the work done in the advancement of the breed that the breeders have carried on since beginning their work in this state. The presentation was made by Leland J. Clark of Bellevue, secretary of the Washington State Guernsey Cattle club. George Gue of Auburn acted as toastmaster and called upon Axel Hanson of Minnesota, who judged in the dairy department; E. L. French, director of agriculture, and E. L. Westover, western representative of the American Guernsey Cattle club. There were about 40 present at the banquet which was held at the Hotel Commercial.

AGRICULTURAL EXPOSITION.

An international agricultural exposition is to be held in Adana, Turkey, next November, under the auspices of the ministry of national economy. The exhibits will comprise specimens of agricultural products, draft animals and products of industries affiliated with agriculture. Foreigners may take part and exhibit farm machinery and draft animals.

WOLVERINE

1,000-Mile Shoes

Cordovan Horsehide Double-Tanned

Redfield, Ia., May 29, [illegible]

I have your good letter returning my money which I sent for shoes.

Now I want the shoes. I am wearing a pair of them now and they may wear out some day, although I doubt it.

I have been getting your shoes through my father, A. E. Smith, who is one of the oldest business men in Redfield, but he is not handling shoes.

Can't we fix it some way so that I can keep on wearing Wolverine shoes? You might send the order I gave you to A. E. at your present price C. O. D. Postage not included.

I particularly want the pair of work shoes, so let me know if there is any way I can get them. You have no regular dealer in this territory that I know of.

Yours very truly,
W. L. SMITH.

Ask for

Hi-Cut King of Storms

For oil man, hunter or woodsman, there's no shoe like this. It fits ankle and instep as comfortably as a low shoe. Almost impossible to wear out. Dries soft after wetting.

Dries Out Soft After Wetting

Easy to Wear but Hard to Wear Out

All leather used in Wolverine 1,000-mile horsehide work shoes is double-tanned by our own private process in our own tanneries.

We make no other shoe. Our entire organization is devoted to producing the world's strongest work shoe. We do our own tanning because it assures us the best leather. Horsehide is naturally the toughest leather used by man. For centuries it has been known as the strongest leather for dress shoes. Big league baseballs have horsehide covers because it is the only leather strong enough to stand such hard knocks. So we use it exclusively in Wolverine work shoes.

By our exclusive method of double-tanning we make it soft and pliable as buckskin. And it always stays soft. Other leathers dry out hard after wetting. Wolverine horsehide shoes dry soft as velvet. Wear them in water, mud and slush as often as you please. They'll always dry soft and comfortable.

We buy select horsehides for our leather. And only the choice Cordovan cut is used in Wolverine 1,000-mile shoes. Notice how thick the leather is—yet how soft it feels. Double-tanning means double wear and double comfort, too. You can wear these shoes in all kinds of weather. No matter how wet they get they dry out soft and pliable.

Wolverine Comfort Shoe

Tenderfeet welcome these shoes. They're soft and flexible as a moccasin. Yet [illegible] like iron. And so light and easy, you'll never know they're on duty. For tenderfeet, or where you do not encounter wet weather, wear this comfort shoe.

You'll find real economy in the wear they give. Wolverine horsehide shoes usually wear at least 1,000 miles. We are told they actually wear 3,000 and 4,000 or more. If you are naturally hard on shoes, you'll find them the most economical shoes you ever wore. And you'll enjoy new foot comfort at the same time.

There's a Wolverine horsehide shoe for every need. For farm or railroad, mines, oil field or woods, there's a special model that exactly suits conditions. And all are the same tough, pliable double-tanned horsehide.

If your dealer cannot supply you with Wolverine 1,000-mile shoes we'll see you are supplied by our nearest dealer. Write for catalog.

Wolverine Shoe and Tanning Corp.

FORMERLY MICHIGAN SHOEMAKERS

Dept 131 Rockford, Mich.

POULTRY AND RABBITS

Pullets or Hens?

Which Are Best for Reproduction?

Members of the newly formed Washington Accredited Hatchery and Breeders' association may continue their plans to raise chicks from pullet eggs, in spite of the fact that many of the members preferred that only mature hens be used as breeders. This subject was the center of interest at the Seattle meeting, September 10, which, by the way, was one of the liveliest meetings ever held by the association. There were representatives from 10 western Washington counties, several of which have organized local accredited hatchery associations, which had instructed their delegates how to vote.

A peculiar situation arose at the beginning of the meeting. An examination of the records showed that, although the association had been properly organized, there had never been any dues collected from any one, as required by the constitution. They, therefore, had an association technically without members. The secretary called for a general contribution of dues from the delegates present in order that the meeting might continue and any business transacted be held valid.

The question then arose as to the officers, and a vote was called to sustain the officers who were elected at the June 4 meeting. They were: Jay Todd, Seattle, president; E. R. Wells, Prosser, vice president, and P. S. Dickey of Puyallup, secretary and treasurer. Since there was a majority who were not in favor of sustaining these officers a new election resulted, and B. C. Young of Bellingham was elected president, while the other two officers were reelected. Another vote was called for, which placed Mr. Todd on the executive board, according to the constitution, which requires that the past president act as the fourth member of the board.

The Pullet or the Hen?

The remainder of the day was spent in a discussion of the rules and regulations, and particularly to rule No. 5, which deals with the hatching of chicks from breeders under 18 months old. Seven of the county associations had previously declared that they would not support the state association if the rules and regulations were to allow this pullet clause, according to W. D. Buchanan, since they felt that a better chick could be raised from a hen over 18 months old. Those who favored pullets argued that a young bird properly raised would produce as good a chick as would an older bird, and they defied any proof to the contrary. The discussion simmered down to an admission that all were working for the better interests of the poultry industry and to establish a plan that would guarantee a high grade of chicks and at the same time keep out any unscrupulous person who might take advantage of the rules and force pullet breeders so that they would not produce good, strong chicks.

Harmony was at last reached when both sides agreed to compromise by leaving section 5 as it stood, and amending section 2, with the following clause: "All hatcheries must designate whether they are hatching from pullets or hens over 18 months old, and also agree to furnish a list of the number of each class, the list to be published at stated intervals."

A further change in the rules was made by amendment to section 12, which will allow counties having a local organization with a secretary in the county, who will cooperate with the supervisor in securing better supervision, to retain one-fourth of their fee collected on breeding stock, to be used the local organization sees fit.

The only other change was in the by-laws in article 4, this being the requirement for membership. The accepted amendment now reads, "any one interested in accredited hatchery work who pays in advance and agrees to comply with the rules of the association is eligible to membership and shall be considered a member, unless he fails to comply with the rules within 60 days after the annual meeting."

Before the meeting adjourned Professor J. S. Carver, the newly appointed head of the poultry department at the state college, was called upon for a short talk.

The application blanks, which are being sent to all members of the Accredited Hatchery and Breeders' association, include three divisions, namely, the accredited flock, the accredited hatchery and accredited trapnesting. This plan allows for any poultryman to sign up under any one, or all three branches, as he so desires.

TURKISH EGGS.

The principal centers of production of Turkish eggs are Bartin, Samsun, Inebol and Ada-Bazar in Anatolia; and Cuzun-Kenpru and Adrianople in Thrace. The average annual production approximates 150,000 cases of 1440 eggs each, according to the foodstuffs division of the department of commerce. From 50,000 to 60,000 cases are yearly exported to Marseilles and Barcelona; the rest being consumed locally. Wholesale prices this summer have ranged from 190 to 200 piasters ($1.24 to $1.31) per 100 eggs.

$5 for Your Opinion

The Washington Farmer will award three cash prizes amounting to $10 to the three best articles on the following subject:

"What Advertisements in the four October Issues of the Washington Farmer appealed to most strongly and why."

Each article must not exceed 100 words. First prize, $5; second prize, $3; third prize, $2. All entries must be received by November 1. Address:

"Opinion" Dept.
THE WASHINGTON FARMER,
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ORCHARD AND GARDEN

Five Carloads

Is Yield of 700 Pear Trees

A total of five carloads of pears from 700 trees on the Stanley Millichamp orchard, west of Wapato, is said to be one of the best production records in the valley. The orchard has some trees that are 10 years old, while some are only 5 years. The record of the boxes in one of the cars shows that it contained 52 boxes of 70s, 231 boxes of 80s, 113 boxes of 90c, 98 boxes of 100s, 10 boxes of 110s, 3 boxes of 120s and 4 boxes of 135s. This record is typical of the sizes in all the five cars. The total number of boxes was 2445.

There was a 5-year-old tree which bore nine boxes and some of the 10-year-old trees went as high as 15 1-2 boxes to the tree. The pears were packed in lined boxes and corrugated cardboard was used in the bottom and top of boxes. Two of the carlots were sold at $2.25 a box for the fancy grade, which is 25 cents a box above the market. The balance of the crop, Mr. Millichamp will put on the New York auction.

Mr. Millichamp attributes the fine crop and large size to his method of pruning. He prunes heavily and finds that it promotes bearing and the production of high quality fruit. Blossom pruning was tried on one tree, with the result that there was a lesser crop of pears on that tree than on trees of the same size near it that were treated according to his method.

Storage for Apples

It is not a difficult matter to have a packing house that will keep apples or other fruit cool in the summer months, as well as keep them from freezing later in the fall and winter seasons. A. J. Linstad of Vashon, King county, has recently completed a new packing and storage house that will suit any purposes of this kind.

The building measures 18x30 feet and has double walls which are filled with sawdust to keep an even temperature inside. It has a capacity for about 1500 boxes of apples, but as a general rule the space is not all used for storage, but part of one end is used for packing and making boxes. The entire structure was built by the owner at a cost of $265, which is for material only.

"I find that it keeps the fruit plenty cool in the summer months if I leave the doors open at night and close them during the heat of the day," said Mr. Linstad. "It is not a hard matter to hold the temperature at from 60 to 65 degrees, even when the days are warm, but care must be taken to keep all doors closed tight and there can not be too much running in and out, as that will let in too much warm air. In the fall when the nights are frosty the temperature can be held down as low as 65 degrees, if desired."

The storage house is used during the winter months to keep the fruit from uneven temperatures and there is very little danger of loss from heavy freezing weather when the fruit has been picked and stored in such a building. Very often such houses are built with cheaper construction by having a covered pit with doors at the end large enough for driving a team of horses in.

Mr. Linstad has a large part of his home orchard planted to the red Gravensteins and finds them a profitable apple to sell on the local markets. This year the crop will not be as large, since there were not as many apples set on as there have been in ordinary years. There are also a few trees of the Duchess, which are an early variety and ripen in August. They sell fairly well, but are more sour and do not have the flavor of the Gravensteins.

Use Much Superphosphate

The use of superphosphate and barnyard manure has been demonstrated and found to be the most effective fertilizers on Thurston county soils, according to demonstrations put on in different parts of that district by E. B. Stookey, county agent.

One of the demonstrations is on the L. M. Goldsmith farm, near Yelm, and consists of two main plots. He got an increased yield from one of the small plots treated with superphosphate over a similar plot adjoining which had been cultivated but not fertilized. In three years the treated plot has maintained a consistent lead over the other one, and this season shows a difference of 41 per cent. The same comparative increase is shown where superphosphate is used as a supplement to barnyard manure.

On another farm at Hunter's Point the first year's fertilization on strawberries showed an increase of 6 per cent from the use of superphosphate. Nitrate of soda showed a somewhat better increase in this trial.

On strawberries at Yelm the first year's trial showed an increase of 10 per cent.

On wheat and vetch and on clover and grass at A. R. Dull's, south of Yelm, superphosphate has made a wonderful showing the last two years.

On fall-sown wheat and vetch a spring application of superphosphate caused a 13 per cent increase on the J. D. Smith farm south of Oylmpia.

On strawberries the first year at Grand Mound, Charles Moore got an increase of 16 per cent from superphosphate.

The demand for superphosphate in the county this fall, according to Mr. Stookey, may require several carloads. The market project leaders in the various communities are making plans to take orders with the idea of pooling them, as has been done successfully the last two years.

SMOKER GENERALLY SATISFACTORY.

I read recently about using chloroform to rob bees. Would this be harmful to bees in any way? If it is all right to use chloroform, what time of day would be the best to use it? MRS. G. S. L.

This question was referred to H. A. Scullen, specialist in bee culture, who says: "I would suggest that you use chloroform with caution. I have never heard of it being used and would not advise it generally. Ordinarily a good smoker properly used is all that is necessary. In regard to the time of day to make examination, will say that as a rule it is better to examine bees during the middle of the day, when they are working well on honey plants."

SUCCEEDS WITH BLACKCAPS.

R. H. Dunnington, living on a 35-acre farm a mile north of Mabton, on the Yakima river, in Yakima county, last season picked over 100 crates of blackcap raspberries from his one-year-old acre of this fruit. He received from $2.50 to $3 a crate for them and says that he received more benefit from this acre of berries than from half the rest of his ranch. Next season he expects to harvest 500 crates.

REMEMBER YOUR SUCCESS.

If the varieties in your garden are satisfactory or unsatisfactory this year, remember it, so as to profit from the experience next year.

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If you want your hens to moult naturally—

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Then you must make sure that your moulters are healthy and hungry.

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100 hens, the 12-lb. pkg. 200 hens, the 25-lb. pail
50 hens, the 5-lb. pkg. 500 hens, the 100-lb. drum
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Horse or Cow hide. Calf or other skins with hair or fur on, and make them into coats (for men and women), robes, rugs or gloves when so ordered; or we can make your hides into Oak Tanned Harness or Slaughter Sole or Belt Leather; your calfskins into Shoe Leather. Colors, Gun Metal, Mahogany, Russet or lighter shade. Calfskins tanned in the lighter shades of shoe leather, also make elegant robes and table covers; great for birthday, wedding and holiday gifts.

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freshen, repair and reshape them if needed. Furs are very light weight, therefore it would cost little to send them in to us by Parcel Post and get our estimate of cost; then we will hold them aside awaiting your decision. If you say "go ahead," very well; we will do so and hold them free of storage until you want them. If you say "no," we will return them post-paid.

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Cattle Ranch To College

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CHAPTER XIV.

A Migration.

All that summer John tended the work stock, keeping them together on good feeding ground during the short night and driving them into camp soon after daylight.

Much of this work was very pleasant; the two herders, Curran and John, met regularly and many were the long talks and interchanges of experiences they enjoyed.

The rainless summer nights were cool enough to be refreshing and yet warm enough to make the time spent in the open air delightful. But when rain came all this was changed. The horses became nervous and restless and required constant watchfulness and continual riding, regardless of treacherous foothold and hidden, water-filled prospect holes. The long, yellow "slicker" or oilskin coat, being cut deep in the back and hanging over the rider's legs to his spurred heels, served but poorly to keep out the driving rain, and by morning he was fairly soaked. Arriving in camp with his dripping charges, he would dismount stiffly, and after a half-cold breakfast crawl into a damp bed under an oozing tent.

John, however, learned to take things as they came, good or ill, gathering valuable experience from right and left. Curran was a horseman of long standing, and gave the fast-maturing boy a great many points that served him in good stead later in life. He taught him how to detect any uneasiness in the stock that might grow into fright and start a stampede; how to check this by voice and by constant active presence; and, above all, by force of example he showed that only through quick thought and unhesitating exposure of himself to danger could harm to his charges be averted. By nature courageous, almost to recklessness, John learned these lessons unconsciously.

And so the summer passed—herding horses at night, sleeping and panning gold by day. By the latter operation he was able to add, on an average, 50 cents a day to his hardly princely income of $7 a week.

As the warm season drew to a close, the night wrangler's work became more of a hardship and less a pleasure; only by dint of constant exercise and a roaring fire was the life made endurable. The night's work over, horse and rider would come in stiff with cold and not infrequently wet as well.

"Well, kid, the outfit breaks camp this week," said cook to John one cold, wet morning in November as he slid off his patient beast. "Here's your coffee; keep it out of the wet."

"Can't break any too soon for me," said John, sipping the steaming beverage and clinging tightly to the tin cup with both hands for the sake of the warmth it contained.

"Must be pretty tough this time o' year," said cook sympathetically. "More coffee?"

"You bet," answered the other. "I couldn't stand it if I wasn't all-fired tough. I'll have to be tough if I go range ridin' this winter."

Curran put this thought into his head, where it had been growing until it became a resolve.

"So you're goin' range ridin', eh, kid?"

John nodded and asked the cook where he was going.

"Well, I'll tell yer," he said, stopping to wipe his hands on the flour bag that served for an apron, "I'm goin' straight back east where my folks live; soon's I get back to town I'm goin' to buy a railroad ticket east and go right off."

"Good enough," said John confidently, but rather skeptical at heart, for he knew of many men whose good resolutions melted under the direful influence of the first glass of whisky that went down their throats. "Well, I'm off to bed," he concluded, making for the bed that Frank had vacated but a little while before. He knew he needed all the rest he could get. The following morning, as he came near the collection of tents with the horses, he heard Murphy shouting: "Rustle round now, boys; get the cook outfit loaded, the tents down, and your beds rolled up—quick. We'll be in town by noon."

The work was taken up with such a will that John barely got his share of coffee, bacon, beans and bread before the cook's stores were stowed away ready for traveling.

It was a very different crowd that now set out for the town, and yet it was the same lot of men. Nine months' heavy, open-air work had dispelled weakness and brought strength, had replaced bad temper with cheerfulness and had, moreover, filled pockets with Uncle Sam's good coin.

Frank and John, his chum, again sat on the scraper that trailed behind a wagon, not now for fear of contact with ill-tempered, almost desperate men, but for the sake of comparative quiet and to escape the practical jokes that none in the wagon could avoid.

"Well," said Frank, "would you rather wrestle dishes in Helena or wrangle horses in the open?"

"I'd rather wrangle than wrestle," said John, taking the cue with a laugh, "weather or no; and I'd like to go out again soon."

On reaching town the men parted company, each to seek the pleasure that most attracted him. John at once hunted up Tom Malloy, who was still prosperous and evidently glad to see him.

"Well, kid, how did you get along?" he said, in his old, familiar, kindly way. The boy first paid him for the saddle he had borrowed, to which he had become accustomed and attached, and then told in detail of his experiences.

"Do you want to get back to pot-wrestling?" asked Malloy at length.

"No; not on your life!" and John told him of his liking for work in the open and his distaste for town life.

"Right you are, kid," said Tom encouragingly, "the town's no place for you, or for me, either," he added rather sadly. "I'll be done up some day"—a prophecy which proved but too true.

John and Frank took lodgings together, and for a time did nothing but travel round the town, noting the changes that had been made since they had been away and taking in such cheap amusement as the place offered. It was on one of these jaunts round the streets that John met his friend, the cook, blear-eyed, slouchy and dirty, the bold mustache he was usually so proud of drooping dismally.

"Why, cook, I thought you were in the east by this time," said the ex-wrangler, remembering the solemn resolution confided to him a few days before.

"No, I just stopped for one drink and that settled it," confessed the other. "Haven't a quarter to buy a dinner with now."

John took him to a restaurant and fed him.

This was the first of a series of encounters with ex-campmates. The first feeling was one of wonder and disgust that the demon of drink could make such short work of a man; and then came the fear that the constant drafts upon him would use up his small savings.

"Frank," he said one day, "I've got to get out of this or I'll be stone broke; do you know of any fellow that will take me on a range?"

"Why, what's the matter?"

"Oh," said John, "this gang takes me for the treasurer of an inebriates' home, I guess, and will soon scoop every cent I've got."

"That's it, eh?" returned Bridges. "Well, I'll go down the Missouri with you. I'm pretty well acquainted 150 miles or so below, and I know where I can go range ridin' for a big cattleman any time."

"If you think you can work me in, I'll go," exclaimed the younger. "I'll buy that sorrel cayuse from Murphy. I can get him for fifteen, I guess, and we'll go tomorrow—that is, if you can work me in." This last was spoken rather dubiously, but Frank assured him that he would fix it somehow, and the compact was sealed.

The balance of the day was spent in getting their outfit ready. Frank was already provided with horse, saddle and bridle and the other appurtenances of the rider: chaps, spurs, oilskin slicker and blankets. Some of these John possessed also, but he still lacked a horse; a few simple necessaries in the shape of a frying pan, tin cups, coffee, flour, sugar and the inevitable beans must be supplied for both. The dicker for John's sorrel was made in short order, and by nightfall all the outfit was complete. At daylight the following morning they were busy making up the packs, and a hard job they found it, for nothing seemed to fit, and apparently there was enough stuff to load a whole train. It was made up at last into two packs and lashed securely behind the saddles; they mounted and rode out of the fast-awakening town. One of the two at least was leaving it for a long time, to return under very different circumstances. Nothing of this sort entered their minds, however, and they went out as unconsciously as if off for a half-day's trip.

Frank knew the country pretty thoroughly, having been over it once or twice before, so it was plain sailing most of the time. Day after day they traveled along at a dog's trot—a gait that the western horse can keep up all day and one which a rider brought up to it finds perfectly comfortable, but which would shake the teeth out of an easterner. The trail was clearly marked, easily followed, and much of the way wide enough to allow the horsemen to ride side by side.

Though the two had been partners for several months they had seen but little of each other; during the day at the railroad camp Frank worked while John slept, and during the night the reverse was the case. This was the first chance either had of really knowing the other, and both were well pleased. There was plenty of time and opportunity to talk, and they soon found that they had plenty of acquaintances in common.

"Ever been to Miles City?" John said one day as they were trotting steadily along. The leather of the saddles creaked and the cooking utensils made a regular accompainment to the thudding hoofbeats.

"Sure. Two years ago this spring."

"That was about the time Dick Bradford and Charley Lang shot each other, wasn't it?" John was referring to a "killing" that was famous the country round.

"Yes, and I was right there in Brown's place at the time."

"Tell me about it, Frank. Some say Bradford was to blame and some say that Lang deserved it. I knew Charley Lang a little and thought him a nice fellow."

"Well," said Frank, "it isn't a long story; it all happened the same day, the quarrel and the killing. For some reason there was bad blood between them; both had been drinking, and a little dispute was enough to make them ready to pull their guns on each other."

"Charley was pretty quick with his gun," interpolated John, full of interest.

"So was Dick; but their friends took their shootin' irons away from 'em, and for a time there was no further trouble, but the old hands feared that the business would not end there. Both men came to Brown's place before supper. Maybe you know the joint—a good many things have happened there, and Brown himself could tell enough stories to fill a dozen dime novels."

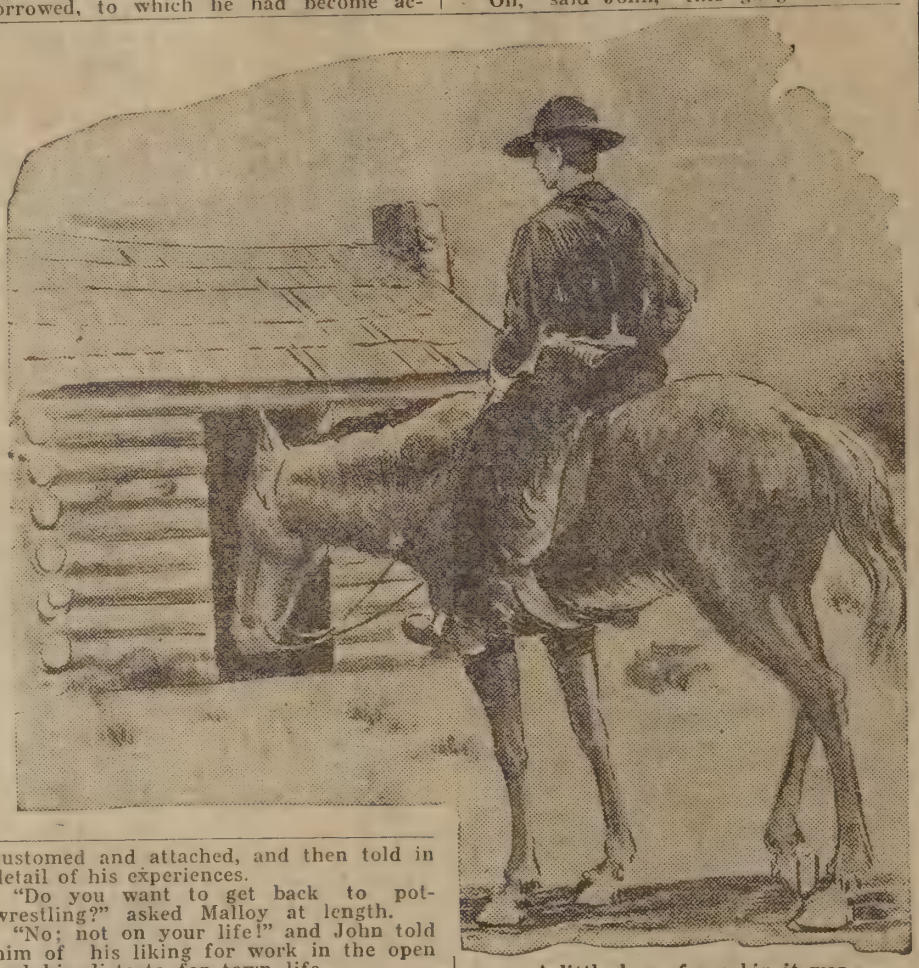
John nodded.

"It wasn't very pleasant there then; the two were plainly looking for each other's gore, and we all wished we could put a couple of hunderd miles between them. Well, anyway, Dick saw Charley and called him an ugly name and then invited him to take a drink. He might has refused; that would have been bad enough, but he did worse, accepted, and took the glass in his left hand—which, as everybody knows, is a deadly insult, to accept a man's hospitality with your left hand, leaving your right free to pull your gun."

"But I should think it might just happen so," suggested John.

"So it might, but Charley made the meaning clear by the look he gave Dick. Nothing occurred then—neither had a gun—but after supper they managed to get a six-shooter apiece and soon turned up at Brown's again. When I came in Charley was sitting on the end of the bar, talking to the 'barkeep,' his hat on the back of his head, his legs swinging, the spurs on his heels jingling when they touched—the most unconcerned man going. Dick was leaning against the wall the other side of the room. He was mad clean through. A couple of fellers were with him, but they couldn't stop him from jerking out his gun. He fired, but Charley had had his eye on him and reached for his six-shooter. The same instant the ball hit him in the chest. He slid off the bar, but as he fell he fired twice, and both shots went through Dick's heart. Dick died right off and Charley lived only a few minutes—he died in my arms."

(Continued on page twenty-one.)



A little box of a cabin it was.

Bits of Fun For Everyone

Our Boarding House.

"What's the matter with the third floor back?"

"Growling at his bed."

"What's wrong now?"

"Said he thought the house might at least start the year with a clean sheet."

Real Test of Pressure.

This machine here," explained the professor, "is for testing cement and building stone. You can not imagine the pressure it exerts to crush the material."

"Oh, I don't know," remarked the sunburned student, "did you ever go barefooted and have a mule step on your foot?"—Capper's Farmer.

Using His Head.

Citizen—That's my car. A thief is just fixing a blowout.

Policeman—All right. I'll go over and arrest him.

Citizen—Sh-h-h! Wait till he gets the tire pumped up.—Toronto Telegram.

Hero of His Class.

"How do you get on with spelling?" Harry's mother asked him, after his first day at school. "You look so pleased that I'm sure you did well."

"No, I couldn't spell much of anything," admitted Harry, "and I couldn't remember the arithmetic very well, nor the geography."

But mother showed her disappointment, but Harry had consolation in reserve.

"But that's no matter, mother," he said: "the boys admire me; they say I've got the biggest feet in the class."—Chicago News.

But He Didn't Go.

A man "butted in" at a waiting line before the railroad ticket window at New York and the men who were in a hurry glowered.

"I want a ticket for Boston," said the man, and he put 50 cents under the wicket.

"You can't go to Boston for 50 cents," returned the ticket seller.

"Well, then," asked the man, "where can I go for 50 cents?"

And each of the 14 men in that waiting line told him where he could go.

'Nuf Sed.

"Do you find it hard to write?" asked the friend of the would-be-author.

"Ah, no," he sighed, "writing is as easy as running into debt, but getting anybody to buy the stuff is as hard as paying the debts."—Cincinnati Inquirer.

Welcome Visitor.

The little boy met the expected visitor half way down the garden path.

"Are you Mrs. Robinson?" he asked, anxiously.

"Yes, dear," was the reply. "Are you glad to see me?"

"Rather! Mother's sure to cut the cake now!"

A Substitute.

Minister—My good man, do you keep the 10 commandments?

Drug store clerk—No, but we have something just as good.—Carolina Tar Baby.

Simply Unbeatable Prices on the World's Best Fall Styles

Yes, prices that are absolutely rock-bottom. Sharood invites you to order any of these amazing bargains on approval. Don't send one cent. Just a letter or postcard brings you any of these smashed price bargains. Merely give Name and Number of each Article You Want. Also State Size and Write Your Name and Address Plainly to Avoid Delay. Pay nothing till goods arrive, then only the amazing bargain price and postage. If you are not delighted with your bargain for any reason at all, simply return the goods and your money will be cheerfully refunded. ORDER NOW.

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Sporty Style Silk Seal Plush Coat For Women and Misses

$10.98

Where else can you buy a genuine silk seal plush coat of this jaunty style and splendid quality for such a low price? Beautifully modeled of soft, warm, lustrous, deep pile silk plush with full lining of beautiful flowered sateen. Newest loose back flared style with belt. Wide 10-in. shawl collar, two pockets and roomy bell sleeves. Length about 34 inches. Women's sizes 34 to 44; Misses 32 to 38 bust measure. State size. **Order No. 52E-7000. Send no money. Pay $10.98 and postage on arrival. Money back if not satisfied.**

Manchurian Wolf Scarf

$3.69

Beautiful, soft, inexpensive Manchurian wolf scarf lined with Messaline silk,. Length about 44 inches. Width about 12 inches Tail 13 inches long and bushy. **Order black scarf by No. 52H9000. Order brown scarf by No. 52-H9001. Send no money. Pay only $3.69 and postage on arrival.**

Bulgarian Effect Gabardine Frock For Women and Misses

$2.98

An exceptionally attractive fine quality cotton gabardine dress for women and misses. Long roll collar in shawl effect, sleeves and belt piped in red. Entire front of blouse enhanced with exquisite allover embroidered design in Bulgarian effect with rich harmonious colors. Two streamers at both sides and front. Wide belt embroidered to match blouse. Sizes for women, 34 to 44 bust; for misses, 32 to 38 bust. State length desired. Colors, navy or brown.

Order navy by No. 52E7500. Brown by No. 52E7502. Send no money. Pay $2.98 and postage on arrival for either color. State size.

Fur Trimmed Thibet Coat For Women

$5.98

Another sensational value in a warm winter coat. This becoming model is of splendid Thibet cloth in choice of rich brown or navy blue. The ample collar is of genuine brown Coney fur. Coat is finished with all-around self material belt and two patch pockets, trimmed with pretty buttons. Imitation cuff is also button trimmed. Coat measures about [illegible] inches long, and comes in sizes 34 to [illegible] bust.

Order brown by No. 52E7094. Navy by No. 52E7096. Order black by No. 52E7095. Send no money. Pay $5.98 and postage on arrival. State size.

Fur Trimmed Coat for Girls and Children

$3.48 Up

Girl's stylish coat of polo with warm Coney fur collar. Two novelty pockets. All around belt. Novelty buttons, trim pockets and belt. An amazingly low price. Sizes 7 to 14 years. Navy No. 52E7308. Brown 52E7310. **Send no money. Pay $4.48 and postage on arrival.** Same quality for children, sizes 2 to 6 years. Navy 52E7458. Brown 52E7460. **Send no money. Pay $3.48 and postage on arrival. State size.**

Women's Fleece Lined Soft Black Kid Finished Comfort Shoes

$2.29

Give Size.

Positively America's greatest bargain in women's shoe of this kind. Soft kid finished, pliable leather uppers have heavy splendid lining that keeps feet warm and toast in most severe winter weather. Excellent grade natural oak leather soles and low rubber heels. A roomy last that is also dressy in appearance. Simply unbeatable value at Sharood's low price. Women's sizes 3 to 9, wide widths. **Order No. 52A880. Send no money. Pay $2.29 and postage on arrival.**

Heavy Fleeced Union Suit

89c Up

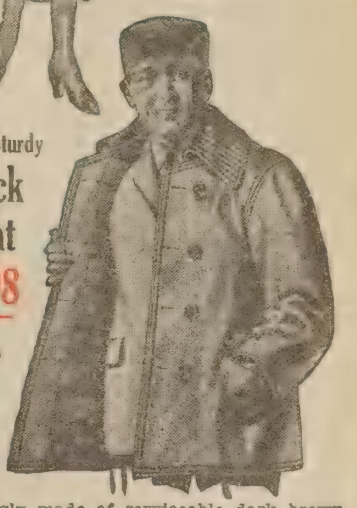
Men's heavy flat knit union suit of good quality cotton yarn, with heavy, fleece lining. A sure protection from cold. Closed crotch, flap seat, flat seams. Knit cuffs at wrist and ankle. Sizes 34 to 46. **Order tan Jaeger color by No. 52C1279. Order gray Random color by No. 52C1280. Send no money. Pay $1.29 and postage on arrival.**

Order boys' sizes, 22 to 34, natural Jaeger color, by No. 52C1358. Pay 89c and postage on arrival.

Men's Sturdy Duck Coat

$2.98

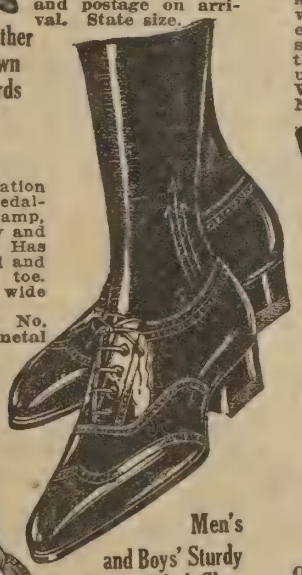
Always Give Size



Strongly made of serviceable dark brown duck with heavy blanket lining. 2 large set-in pockets with flaps. Wide corduroy collar. Patent riveted-on buttons. Double stitched seams. Length 32 inches. Men's sizes, 36 to 46 chest. **Order No. 52B2314. price $2.98. Same style in boys' sizes, 8 to 8 years, No. 52B2358. Price $1.98. Boys' sizes, 10 to 14 years, No. 52B2359. Price $2.49. Send no money. Pay bargain price and postage on arrival. State size.**

Women's Patent Leather Gun Metal or Brown Calf Finished Oxfords

$1.98



Made with imitation shield tip and medallion perforated vamp, perforated lace stay and circular foxing. Has medium rubber heel and medium pointed toe. Sizes 2½ to 8, wide widths.

Order patent by No. 52J121. Order gunmetal by No. 52J122. Order brown by No. 52J123. Send no money. Pay $1.98 and postage on arrival.

State size wanted

Men's Four-Buckle All Rubber Arctics

$2.79

State size.

Order Quick.

Guaranteed best quality all rubber 4-buckle hi-cut arctic for men. Made with double thick soles and seams reinforced, snow-excluding tongue. Furnished in men's sizes 7 to 15. Wide widths. Sensational value. Send quick. **Order by No. 52A990. Send no money. Pay $2.79 and postage on arrival.**

Popular One-Strap One-Buckle Pump

$1.98

Always Mention Size When Ordering

One-strap one-buckle pump of rich black patent or brown calf finished leather. Fancy perforation on vamp, strap and quarter. One-piece medium extension oak sole; low flapper walking heel with rubber top lift. Sizes 2½ to 8; wide widths. **Black patent No. 52A20. Brown calf finish, No. 52A21. Send no money. Pay $1.98 and postage on arrival for either leather. State sizes.**

Dressy Kid Finish Walking Boot

$1.98

Women's black or brown kid finish leather walking boot, in hi-cut lace style. Fancy perforated stitched tip with medallion on toe; neat perforations at vamp and lace row. Medium extension oak sole with proper height walking heel rubber tipped. A distinct Sharood bargain, suitable for dress or street wear. Soft kid finish leathers are dressy and comfortable. Sizes 2½ to 8; wide widths. **Order brown kid finish by No. 52J-195, $1.98. Order black kid finish by No. 52J194. $1.98.**

Men's and Boys' Sturdy Blucher Work Shoe

$1.79

Give Size

Brown or black work shoe of durable leather. Solid leather inner soles. Heavy double soles. Green chrome outsole. Leather heel. Sizes 6 to 12. Wide widths only. **Order brown by No. 52A758. Order black by No. 52A760. Send no money. Pay $1.98 and postage on arrival.**

Order boys' sizes 1 to 5½ by No. 52A554, price $1.98. Order little boys' sizes 9 to 13½ by No. 52A555, price $1.79.

FREE BARGAIN CATALOG

Your order from this ad brings you our beautifully illustrated 160-page catalog of more than 4000 bargains in everything to wear. You get a new bargain catalog every six weeks. This is Sharood's way of keeping you supplied with fresh up-to-date merchandise at the lowest prices in America—a method vastly superior to the old way of sending out a big catalog only once or twice a year. Sharood's goods are always the newest—prices guaranteed the lowest.

Be Sure to Mention All Sizes, Colors, etc., and Send All Orders From This Page Direct to SHAROOD CO. Dept. 52 MINNEAPOLIS MINNESOTA

How to Prevent Fire on the Farm

By PROF. L. J. SMITH, Washington State College

THE farmer dreads a fire more than any other householder and with good reason. His buildings are grouped in such a way that a fire in one may mean the loss of several. The farmer is isolated and can not, like the city dweller, get quick and efficient help.

We all know the uselessnes and tremendous waste of fires, yet in the United States the loss from fires is steadily on the increase. It now amounts to nearly $500,000,000 annually, or enough to pay the taxes of the state of Washington for seven or eight years.

Fifteen thousand people lose their lives annually because of fires. These are mostly women and children. What an enormous toll the fire fiend exacts!

In the light of these facts it is worth while for any serious-minded person to spend a few minutes in the consideration of the common causes of fires.

It is said that three-quarters of the fires are preventable, more than half the fires are caused by carelessness, and that more fires are caused by smokers than by any other cause.

Defective chimneys cause many fires in the country. The chimneys settle and cracks develop. Often the mortar is of a poor quality and crumbles away. The safe chimney is one that begins in the basement and has an inner lining of terra cotta or fire clay chimney tile set in Portland cement mortar. No chimney should be erected upon wooden supports.

Fires start in curious ways. The writer once had an experience which illustrates this very well. The kitchen had a cupboard between the outer door and the range, which did not go to the ceiling as a cupboard should. Some newspapers had been spread on top of the cupboard so that the accumulating dust could easily be removed. One morning a strong gust of wind blew these papers down onto the stove, and had the writer not happened to come in, the kitchen would have been in flames in a few minutes.

Often the woodbox is right where a spark from the open damper might drop right into it. If the housewife happened to be upstairs a disastrous fire might result, and possibly a child might lose its life.

People in the country should use safety matches. The city dweller is rapidly being educated to use them entirely. They eliminate a common source of fires and will save hundreds of children's lives annually. Are you still using the old-fashioned match?

Greasy rags, such as are used with floor oil should never be left about the building. Burn them up directly after using. Live coals in ashes are another source of fires. Never keep ashes in anything but metallic containers. They are too often hurriedly dumped in a wooden box on the porch to be later carried away when the box is full. Never dump ashes alongside of a building.

A stove or heater should never be so close to the wall as to blister the paint or varnish. If it must be close to a wall put a sheet of tin or galvanized iron behind the stove. The same applies to protection under the stove. If a pipe must pass through a partition, be sure that it passes through a good thimble where air can circulate around the pipe. Never join two pieces of pipe in a partition. Long stove pipes are dangerous. They should be well supported, so they will not come down or pull apart.

Don't litter up the basement with a lot of junk. It makes one more fire trap.

If a fire downstairs at night should cut off your stairway, what would you do? The mature members of the family should know right now what they would do. When the house is full of smoke and everybody is dazed is not a time to figure out such a problem. It is the duty of parents to know what to do in such cases. You may never need to do the right thing but once; but what a tragedy it might be if you did not do the right thing then!

Keep a good light ladder handy to the house. Keep the barnyard clean from straw and litter, especially during the dry season. Every farm building should have some means whereby one can get on the roof easily and quickly. A pail of water in time has saved many a farm building. A covered barrel of water with a pail inside would have been worth a thousand dollars to many a farmer.

Petroleum products cause more deaths by fires than all other causes. "Not knowing it was loaded" has caused many a tragedy; but "not knowing it was gasoline" has caused more. Gasoline should never be kept in the house in small quantities. It should never be used for cleaning purposes by lamp light, or where there is a fire in the room. One may light a fire with kerosene a thousand times, but it may "get you" eventually.

Turpentine is equally, if not more, dangerous. It is said that the Lord especially protects drunken men and fools, but I doubt if it applies to the driving of automobiles and to the use of petroleum products for starting fires in stoves. Oil is no respector of persons.

Cotton clothing and light dresses catch fire very easily. If a child catches fire in the home what would you do? Now is the time to figure it out. Have you a loose rug or heavy woolen overcoat handy to smother such a blaze and save the little life? The unnecessary loss of life is a terrible thing; but to have such a loss occur and know that quick thinking and acting would have prevented it is more terrible.

Systematic Rotation

An interesting system of rotation has been adopted and is proving to be a very practical combination with a dairy on the A. J. Lawson & Son farm near Blanchard, Skagit county.

The rotation consists of oats or barley for three years, the third crop being seeded down to clover and timothy. For the following two years the clover is used as a meadow, while it is pastured the third year. At the end of that season the sod is plowed up and the soil prepared for another three years of oats or barley.

"In this way we are able to keep our land in excellent shape," said Mr. Lawson, and still have plenty of hay and grain crops as well as pasture. We change this rotation at times in order to get a better stand of clover, since we find that wheat makes a better nurse crop than oats. It not only makes a lighter growth but there is less foliage, and it does not shade the ground as is the case with oats.

"We have found that corn makes one of the best silage crops, and we have had fairly good luck in getting it to ripen. Others, however, prefer oats and vetch, which makes a heavy yield of silage, but we prefer corn, since it affords an opportunity to cultivate the ground to keep out the weeds."

The Lawson farm consists of 190 acres in all and has one of the larger registered Holstein herds in the county. There are 50 head of animals, 24 of which are milk cows. The Lawson herd was shown at the Skagit county fair this year, where they made a creditable showing in spite of the fact that there was very little time spent in fitting for the show.

GRIND WHEAT FED TO HOGS.

That wheat fed to hogs should be ground to give best results in producing pork is the contention of Professor Howard Hackedorn of the State College of Washington.

Farmers' Want Ads

MONUMENTS F

COMPLETE STOCK. WRITE FOR DESIGNS and prices. Inland Monument Co., N1001 Monroe, Spokane.

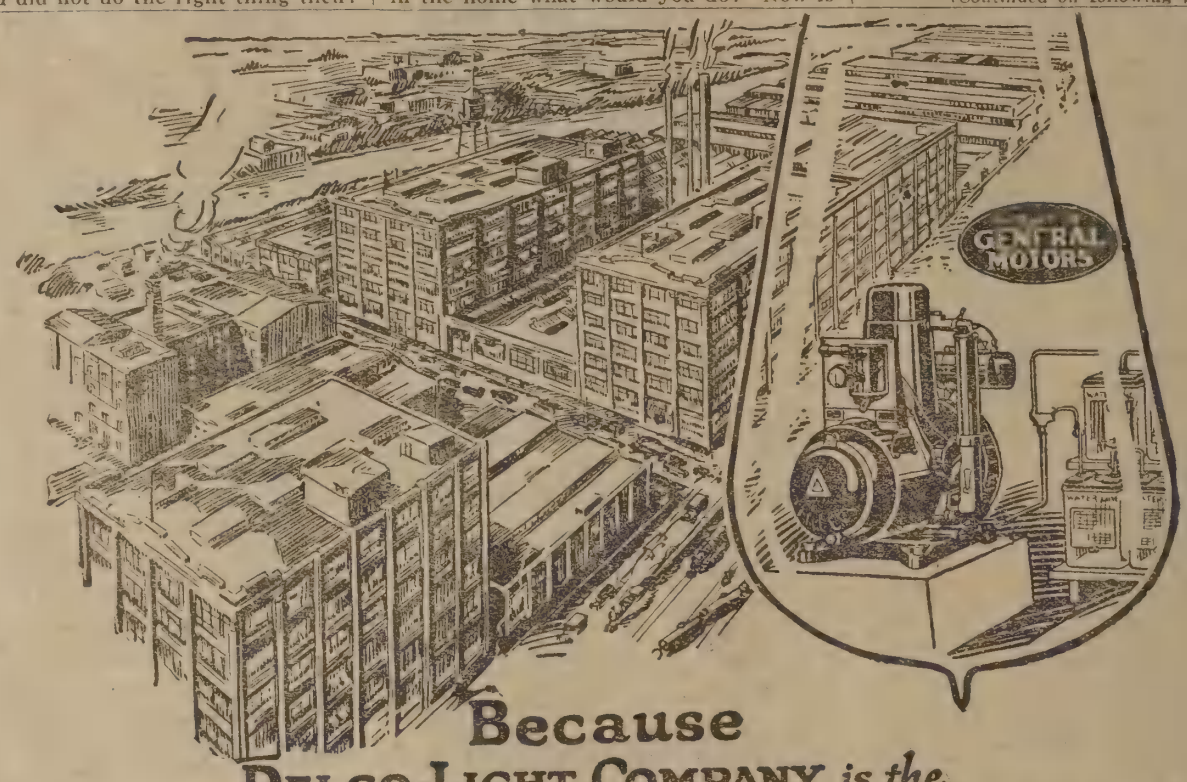
HELP WANTED—Female 1

GIRLS DESIRING WORK FOR HALF BOARD and room, while attending school, write Gooding College, Gooding, Idaho, today.

AGENTS WANTED 9

WHY NOT SELL US YOUR SPARE TIME, $2 an hour, $19.70 daily easy full time, introducing new style guaranteed hosiery; 57 styles, 17 colors. No capital or experience required. Just write orders. We deliver and collect. Your pay daily, also monthly bonus. Free auto offer besides. Elegant outfit furnished. All colors, grades, including silks, wool, heathers. Mac-O-Chee Mills company, Desk 29210, Cincinnati, Ohio.

(Continued on following page.)



Because
DELCO-LIGHT COMPANY *is the*
World's Largest Producer
of Farm Electric Lighting Plants
They offer you All the Advantages *of*-

1—Quantity Production

Whole carloads of Delco-Light plants leave the Factory daily carrying Delco-Light to farm homes in every section of the country. An immense plant, modern production facilities and the complete resources of the General Motors Corporation combine to insure lowest possible cost to the purchaser.

2—Nation Wide Installation Facilities

Over four thousand skilled Delco-Light installation men are daily wiring homes and installing plants in all parts of the country.

3—A Completely Installed Price---the Lowest

Such quantity production and such unparalleled installation facilities enables the Delco-Light Company to offer the lowest installed price ever announced for a farm lighting plant.

Never before has there been such a splendid opportunity to equip your farm with electric light and power. You can make your home a better, brighter place in which to live and work. You can save labor and increase profits.

See a Delco-Light Dealer today. He will explain full details of this remarkable new, completely installed price and tell how easy the terms have been made, so that NOW you can get your Delco-Light.

DELCO-LIGHT COMPANY
DAYTON, OHIO

508 First Ave. So. MODERN APPLIANCE CO. Seattle, Wash.

Dependable DELCO-LIGHT
More than 200,000 Satisfied Users

Modern Appliance Co., Seattle.
Please send me details of the lowest completely installed price ever announced for a farm electric plant.
P11
Name _____
Town _____
County _____
State _____

AGENTS WANTED Continued 9

DISTRICT SALESMEN WANTED—ALL OR spare time. Earn $1500 to $3600 yearly. We train the inexperienced. Novelty Cutlery Co., 456 Bar st., Canton, Ohio.

SCHOOLS AND COLLEGES 26

EARN $110 TO $250 MONTHLY; EXPENSES paid as railway traffic inspector; position guaranteed after completion of 3 months' home study course or money refunded. Excellent opportunities. Write for free booklet G-157. Stand. Business Training Inst., Buffalo, N. Y.

FRESH FOOD PRODUCTS 51-3

FISH—4 LBS. SMOKED SALMON, $1; 4 LBS. Alaska salmon bellies, $1; 4 lbs. black cod, $1; 3 lbs. best codfish, $1; delivered by mail. Coffin Fish Co., Seattle, Wash.

HONEY 53

ALFALFA-SWEET CLOVER HONEY—2 60-LB. cans, $10.75; one can, $5.50, f. o. b. Rigby; one 40-lb. can, prepaid to fourth zone, $6; quality guaranteed. Heckman & Larsen Honey Co., Rigby, Idaho.

ALFALFA, SWEET CLOVER HONEY, PREpaid second zone, 3 10s, $5; 60 lbs., $8.30; two cans, $14.50, not prepaid. Harry Fisher, Prosser, Wash.

HAPPY HOME HONEY — ALFALFA AND clover; 60-lb. can, $7.50; two cans, $14.50; case six 10-lb. pails, $8.50. H. N. Paul, Mabton, Wash.

PURE WATER-WHITE SWEET CLOVER honey; 60-lb. can, $5.50; two, $10.75. H. R. Bowen, Roberts, Idaho.

EXTRACTED HONEY FOR SALE—WELLS D. Rose, Sunnyside, Wash.

MISCELLANEOUS—FOR SALE 60

SASH AND DOORS—O. B. WILLIAMS CO., 1943 First ave. So., Seattle. Chicken house sash, 20" wide by 25" high, 80c; a dozen different sizes in stock for immediate shipment. Skylights for chicken houses, 36"x40"; price, glazed, $2. This is the size recommended by the Western Washington experiment station. We carry them in stock for immediate shipment. Sash and doors for all purposes at lowest prices. All orders receive prompt attention. Our large illustrated catalog No. 35, showing full line of building material and built-in fixtures for the home, free on request. O. B. Williams Co. Established 1899.

LEAF TOBACCO—3 YEARS OLD, NATURE cured. Ever Ready safety razor and six blades, or imported briar pipe free with 10-lb. order. 10-lb. packages, select chewing, $3.50; select smoking, $3; medium smoking, $1.75. Pay for tobacco and postage when received. Farmers' Union, Hawesville, Ky.

PIPE—GET PARTICULARS ON OUR SPEcial flue pipe, 1¼, 1½ and 2 inch. Big saving on it. We also have all sizes second-hand and new standard pipe at low prices. We also save you on roofing, belting, pumps, engines, cables, etc. Alaska Junk Co., 8120 Adams, Spokane, Wash.

SPECIAL—ONE-POUND TIN "SATISFACTION tobacco" and pipe for $1. Smoking, chewing tobacco, cigars, cigarettes and complete line of pipes. Wholesale and retail. Peter M. Jacoy, 3 Washington st., Spokane.

WALL BOARD—WRITE FOR SAMPLE OF Washington plaster wall board; won't warp, won't burn. Manufactured by Washington Building Products company, 6851 E. Marginal Way, Seattle, Wash.

NATURAL LEAF TOBACCO—CHEWING, 5 lbs., $1.75; 10 lbs., $3; smoking, 5 lbs., $1.25; 10 lbs., $2. Pay when received. Pipe and recipe free. Farmers' Tobacco Union, B19, Paducah, Ky.

LEAF TOBACCO—CHEWING, FOUR POUNDS, $1.40; fifteen, $4; smoking, four pounds, $1; fifteen, $3. Pay when received. Pipe and recipe free. United Tobacco Growers, Paducah, Ky.

KENTUCKY LEAF TOBACCO—5 LBS. CHEWing, $1.75; 10 lbs., $3; 5 lbs. smoking, $1.25; 10 lbs., $2. Pipe and recipe free. Pay when received. Cooperative Farmers, Paducah, Ky.

TOBACCO—KENTUCKY'S PRIDE: EXTRA fine chewing; 10 pounds, $3; smoking, 10 pounds, $2; 20 pounds, $3.50. Farmers' Club, Mayfield, Ky.

NATURAL LEAF TOBACCO—CHEWING, 5 lbs., $1.25; 10 lbs., $2.50; smoking, 5 lbs., $1.25; 10 lbs., $2. Farmers' Union, Mayfield, Ky.

COMPLETE LINE LATEST STYLE HAWAIian beads, $1.50 to $2.50 string; all colors. Margaret A. Capps, Grandview, Wash.

50,000 SACKS FOR SALE. INLAND HIDE & Junk Co., W21 Main, Spokane.

OASIS CIDER MILLS AND FRUIT PRESSES. W20 Riverside ave., Spokane.

MACHINERY—For Sale 93

FOR SALE—F. O. B., YOUR TOWN, GUARANteed good as new for work, at half price of new; one Rumely oil pull tractor, 30-60; one Rumely grain separator, 36-60; terms if desired; new four-wheel drive model tractor, 20-35, at one quarter less in price than any other. J. P. Russell, salesman, Hayward, Cal.

TRACTORS—CASE 10-20, FORDSON, CASE 12-25, Rumely oil pull 15-30, Holt Caterpillar 45, gang plows, hay balers and feed choppers. Exchange Machinery Co., W20 Riverside, Spokane.

AUTOMOBILES—FOR SALE 112

SEE CHEVROLET FIRST—NEW AND USED cars at prices that will surprise you; stop in or write Inland Empire Chevrolet Sales Corp., 916 2d ave., Spokane. Open evenings. Open Sunday.

AUTO ACCESSORIES AND PARTS 119

PATRONIZE THE HOUSE THAT CAN GIVE you the best service. Complete stock of automobile repair parts. Wire and disc wheel sales and service. Pacific Gear and Auto Parts Co., 1022 First ave., Spokane, Wash.

STOVE REPAIRING 128

WRITE MYER RUBENS, SPOKANE, ABOUT stove repairs, welding broken parts, nickel plating.

FUR-BEARING ANIMALS 170

SILVER AND CROSS FOXES FOR SALE. William Rambo, 407 Sprague, Spokane.

RABBITS and HARES. 173

RABBITS, TOULOUSE GEESE HAVE MADE my living for 10 years. Prize winning blue Flemish Giants, New Zealand Reds, Himalayans, at utility prices. Agnes Brenner, R4, Box 49, Tacoma, Wash.

POULTRY 174

WHITE LEGHORN BABY CHIX FROM flocks mated to males having sire's dam record of 240 to 297 eggs per year. Full particulars and interesting literature on request. We are accredited by Sonoma county farm bureau. The Pioneer Hatchery, 422 Sixth street, Petaluma, Cal.

FARMERS' WANT ADS

This is the farmers' "want," "sale" and "exchange" department for small advertisements of farmers, including live stock and poultry.

Advertising rates for ads running 1 to 3 times, 10c per word per insertion, with a special rate to Farmer subscribers, as follows: Ads running 4 to 12 times, 9c per word per insertion; ads running 13 times or more, 8c per word per insertion.

All commercial and land advertising, 10 cents per word per insertion. Open also to nonsubscribers.

In using these columns advertisers must observe (1) No advertisement will be accepted for less than $1.00 per insertion. (2) Every word, number and initial, including name and address, must be paid for. (3) New advertisements, changes of copy or cancellations must reach general office, Spokane, Wash., 10 days in advance of publication date. (4) Cash must accompany order.

Above rates include insertion in The Washington Farmer, The Idaho Farmer and The Oregon Farmer, which constitute the Pacific Northwest Farm Trio, 46 Review building, Spokane, Wash.

POULTRY (Continued) 174

FOR SALE — PULLETS AND BREEDING cockerels; April hatched pullets of Hollywood's best strain, trapnested stock, ready for your laying pens. From real layers mated to cockerels of 250 to 275 egg records. Price f. o. b. Prosser, $1.85 (crates returned). Send 25 per cent with order, balance C. O. D. We guarantee satisfaction or your money back. Choice cockerels from same stock. $1.50 each. Pulletpens, Prosser, Wash.

ACCREDITED CHICKS—ALL OUR CHICKS for 1924 will be from accredited flocks mated with certified cockerels sired by hens with 225-egg record. A limited number of chicks from cockerels sired by our $1000 champion cockerel and our world's record pen of hens. Write for special prices for those who order early. Queen Hatchery, 1430 1st ave., Seattle, Wash.

CERTIFIED WHITE LEGHORN QUALITY chicks for summer and fall months, from selected free range, high egg producing breeding flocks, inspected and accredited by the Sonoma county farm bureau. Send for catalog and attractive prices. Safe delivery and full count guaranteed. Must Hatch Incubator Co., Inc., 445 Seventh st., Petaluma, Cal.

SUMMER SALE "HENACRES" PULLETS; best for fall and winter eggs, $1.25 to $2 each. Hens for breeders, $1 to $1.50 each. High grade stock at reasonable prices. Booking orders now for 1924 baby chicks. Free catalog and price list. "Henacres," Box A, Prosser, Wash.

BUY SONOMA COUNTY ACCREDITED Hatcheries chicks; electric hatched by the man who put electric incubation where it is today. I am the father of electric incubation. Stock the best. Prices right. Write for booklet. White Hatchery, Petaluma, Cal.

TURKEYS — HIGHLY BRED MAMMOTH Bronze, April hatch; 6 extra fine toms, $8 each; 25 toms, $5 each; 50 hens, $3.50 each, F. O. B. Grants Pass. References. City banks. D. M. Evans, Grants Pass, Ore. Route 2.

DANIEL'S "IDEALS"—WHITE ROCKS AND White Leghorns; 100 per cent trapnested stock used; place your 1924 baby chick orders now. Our capacity, 2000 chicks every seven days. Free list. Ideal Poultry Yards, Hoquiam, Wn.

IMPERIAL PEKING DUCKS, PRIZE WINners. Large, superior young drakes, $3. Booking orders for eggs and ducklings. Mammoth Bronze turkeys. Write and secure the best on the coast. H. L. Moody, Parkland, Wash.

DOLLARS FOR YOUR EGGS—WE PAY THE top market prices for your eggs and poultry. Daily cash remittances. McClintock-Trunkey Co., produce department, Spokane.

SPECIAL PRICES ON GUARANTEED DAYold pullets; fall and winter delivery. Write for particulars. Eureka Hatchery, Petaluma, Cal.

TO MAKE ROOM, WILL SACRIFICE ROCK and Leghorn breeders. D. W. Allen, Laconner, Wash.

R. I. RED COCKERELS, UTAH RANEY strain; $5 each. Mrs. Tom Griffin, St. John, Wash.

SHIP YOUR POULTRY AND EGGS TO THE Washington Meat & Poultry, Spokane, Wash.

LIVE STOCK 177

WE GUARANTEE TO PAY THE HIGHEST market price for your poultry and live stock. Veal market growing stronger. Owing to the constant changes in the market we are unable to quote prices in this paper from week to week. We will furnish tags and prices when you are ready to ship. Write us what you have to sell. Prompt returns. John Lewis & Co., Spokane, Wn.

25 REGISTERED GUERNSEY FEMALES FOR sale; imported and American bred young cows, heifers and heifer calves of correct type and blood lines. Leslie G. Perry, Wendell, Idaho.

WE PAY TOP PRICES FOR YOUR LIVE OR dressed veal, hogs and poultry. Your check by return mail. Shipping tags on request. M. & J. Packing Co., Spokane.

CALVES FOR SALE—WILL HAVE A LIMited number of Tillamook's famous dairy calves yet this fall. Write for prices. Smith, "the Calf Man," Tillamook, Ore.

FOR SALE—REGISTERED SHORTHORNS; two yearling heifers, one two-year-old, one cow, eight years old. H. Nelson, Springdale, Wash.

TOP PRICES PAID FOR CREAM, EGGS, poultry, pork, veal. Inland Products company, Second at Cedar. Dept. E. Spokane, Wash.

FOR SALE—80 HEAD PUREBRED HAMPshire ram lambs; these are good; will sell singly or in lots. F. M. Rothrock Co., Spokane.

FOR SALE—TWO BULLS AND A FEW REGistered heifers from the famous Hood Farm strain of Jerseys. T. E. Bradley, Daisy, Wash.

FOR SALE—YOUNG, HIGH GRADE, HEAVY producing Holstein cows, registered bull. Wolfepoint Farms, Lemhi, Idaho.

HAMPSHIRE RAMS (REGISTERED); LARGE, well developed and vigorous. Stadacona Farms, Route 1, Spokane, Wash.

REGISTERED HOLSTEINS—BULLS, HEIFers and cows for sale; accredited herd. Oscar Dunlap, Junction City, Oregon.

FOR SALE—10 HEAD OF REGISTERED Shorthorns, priced for immediate sale. E. W. Haag, Sandpoint, Idaho.

O. I. C. REGISTERED PIGS, BREEDING gilts and boars; prices right. E. H. Thieman, South Prairie, Wash.

REGISTERED HAMPSHIRE BREEDING bucks and ewe lambs. Far Niente Farm, R2, Bothell, Wash.

FOR SALE—MILKING SHORTHORN HEIFers and bull calves. DeGraaff Bros., Lynden, Wash.

WANTED—ABOUT TWO HUNDRED OLD ewes; state price. A. J. Perard, Toppenish, Wash.

REGISTERED SHROPSHIRE RAMS. PRICES reasonable. Geo. H. Gilmore, Junction City, Ore.

REGISTERED SHROPSHIRE RAMS AND ewes. Write McK. Edwards, Valley, Wash.

REGISTERED O. I. C. PIGS, $15; 3½ MONTHS, 100 lbs. A. T. Flagg, Chehalis, Wash.

REGISTERED ANGORA BUCK GOATS, $15, crated. C. D. Hartman, Silverton, Ore.

LIVE STOCK (Continued) 177

POLAND CHINA HOGS AND HEREFORD cattle. Ralph Crewe, Wray, Col.

FOR SALE—CHOICE JERSEYS, BOTH SEXES. Ralph Billings, Ashland, Ore.

HARNESS and SADDLERY 189

SEND FOR FREE HARNESS AND SADDLE catalog today; cut out the middleman, buy direct from the manufacturer. Lowest prices in the west; satisfaction guaranteed. Established 1881. Write Pierce Harness Co., Dept. T, Spokane, Wash.

HAY FOR SALE. 200

ALFALFA HAY, GUARANTEED QUALITY; prompt shipment; buy direct and save money. Prices upon application. Richard Nyman, Walla Walla, Wash.

FAIRS. 370

NORTH PACIFIC LIVESTOCK SHOW, EVERett, Wash., Oct. 11 to 14. Write for free premium list to T. C. Simmons, secretary.

JOB PRINTING. 372

WEDDING ANNOUNCEMENTS AND INVItations, catalogs, booklets, high school annuals, letter heads, envelopes, cards, butter wrappers, etc. Union Printing Co., 412 First ave., Spokane, Wash.

CLEANING, DYEING, Etc. 420

FRENCH DRY CLEANING BY PARCEL post. Ladies' and gents' suits, furs, hats, etc., prompt service. Address City Dye Works (Dept. A), E422 Sprague ave., Spokane, Wash.

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WE WILL TAN YOUR COW OR HORSE HIDE for robes or coats, and guarantee our work. We are custom tanners, manufacturers and taxidermists. Write for prices. Spokane Fur Tanning Co., 7 Pine st., Spokane.

ANY KIND OF HIDE TANNED WITH HAIR on, or for leather. Fur and taxidermy work done to order. M. R. Mohr Co., 321 Sprague, Spokane, Wash.

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FREE ENLARGEMENT WITH 75C ORDER high gloss print. Spokane Film Co.

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MATERNITY HOMES 497

MATERNITY HOSPITAL; STRICTLY PRIvate; doctor in attendance; prices reasonable. Mrs. Elizabeth Peel, matron. W1324 Broadway, Spokane.

BUILDING MATERIAL 588

FIX BROKEN PLASTER WALLS WITH PERfection plaster wallboard; nailed on like lumber; takes calcimine or paint; sample and booklet from Western Wallboard Co., Seattle, Wash.

SEEDS 620

FARM SEEDS—RYE GRASS, RED AND ALsike clover, vetch and oats, fall barley and timothy seed of good quality, new, recleaned and ready for shipment. Rhoten Farms, Salem, Ore.

FOR CLOVERSEED, PASTURE GRASSES, vetch, gray oats, etc., get latest prices, stating amount wanted. Lee Hershberger, Hubbard, Ore.

NO. 1 TIMOTHY, 7C POUND; TIMOTHY-ALsike, grown, mixed, 8c; pasture grades cheaper. Meador, Norwood, Idaho.

NURSERY STOCK 621

RELIABLE TREES AND PLANTS—PRUNE, apple, pear, cherry, peach, apricot, grafted walnut and filbert trees, gooseberries, currants, etc., at attractive prices for early orders. Send your want list today for quotations. Benedict Nursery Co., 185 E. 87th st. N., Portland, Ore.

TREES—NOW BOOKING MAIL ORDERS AT reduced prices for limited time only. Apples, pears, peaches, nut trees, prunes, cherry, small fruits, etc. Live agents wanted. Lafayette Nursery Co., Lafayette, Ore.

NURSERY STOCK—PRUNES, WALNUTS, FILberts, fruit trees of all kinds, gooseberry and small fruits. Buy direct and save 50 per cent. Brooks Nursery, Lafayette, Ore.

BLUE GRAPE HYACINTH BULBS FOR FALL planting; doz., 25c. Mrs. S. A. Satrum, Florence, Wash.

HOMESTEADS, RELINQUISHMENTS 642

WANTED—TO HEAR FROM HOMESTEAD seekers. Herman Thun, Blaine, Ore.

TIMBER LANDS FOR SALE

FOR SALE—3½ MILLION FT. OF GOOD FIR timber; good location for sawmill. Lee Barker, Drain, Ore.

FARM LANDS FOR SALE 651

YOU CAN BUY THIS 5-ACRE, ALL-CASH modern farm in "Dalyacres," cream of the famous Marcus Daly estate, Bitter Root valley, Montana, for $2500. Raise crops that bring spot cash; local creameries, canneries and cheese factories pay cash for cream, poultry, eggs, milk, strawberries, cherries, beans, peas, and seed peas. Wonderful climate for dairying and egg production. Mild winters, no rainy season, ideal living conditions in the heart of America's recreation realm. Write for free booklet "Where Farming Is Different." Bartlett-Bolen Co., Hamilton, Mont.

POTATO, POULTRY, BERRIES. ALL cleared and in meadow. A few feet from paved highway; located a half mile from railroad station, good store and sawmill; excellent neighbors, fine schools, close to several good towns. Priced at only $100 an acre. Sold in 5, 10 or 20 acre parcels. Small payment down, balance in 10 years at 6 per cent. This is the best land at the price that we know of. Write or call for full information. Carter, MacDonald & Miller, 208 Columbia st., Seattle, Wash.

193 ACRES, WELL FENCED; 140 ACRES IN cultivation; ample, incontestible water; 25 miles south of Salmon City, Idaho, on Salmon river; fine stock range; six-room house; spring water piped into house; barns, corrals, good orchard; 300 tons hay; about 130 head stock cattle, 18 head horses, lots of farm implements. Price $17,000; cash, $11,000, balance easy time. Write or call on E. K. Abbott, Salmon, Idaho.

FARM LANDS FOR SALE (Continued) 651

FOR SALE—700 ACRES LAND, 2 MILES from Summer Lake, P. O., Lake county, Ore.; 500 acres can be irrigated; water now for 150 acres; yields between 200 and 300 tons hay annually; 3 acres orchard, apples, cherries, walnut, mulberry, prunes, plums, apricots, bearing; 2-story, 10-room house, 18 by 36, and addition, 14 by 22; barn, 24 by 60; small cabins, outbuildings, water piped to house from spring; well, carbide lights. Owner has occupied for many years, wants to retire from active farm work. The whole can be purchased, $20 per acre, $7000 cash, balance 4 payments, at 6 per cent. Address quickly, John Partin, Summer Lake, Lake county, Oregon.—This ad will not appear again.

CUTOVER LANDS, EASY TO CLEAR; $8 TO $20 per acre; 25 miles north of Spokane; on hard surfaced highway; Great Northern and Milwaukee railways; excellent opportunity for dairying and stock raising with Spokane markets and creamery near at hand. Will help the man who will live upon this land and agree to clear a part each year by giving lumber to help start his buildings, and a purebred Jersey bull to groups of farmers. Interest and payments low. Write Milan Farms Development company, Dept. T, Old National Bank bldg., Spokane, Wash.

5000 ACRES, NEWAUKUM RIVER VALLEY; highest type level farming land; all rich, productive scoil. No gravel. No floods. No crop failures. Well developed district. Near Chehalis, Washington, 20 acres up, $15 to $50, easiest terms. Settlers can get steady employment years to come; good wages; and live at home. See local representative, St. Helens hotel block, Chehalis, or write Graham Land company, American Bank bldg., Seattle.

DO YOU WANT A HOME IN A RICH VALLEY near Spokane, on three transcontinental railroads? Where soil is perfect, rainfall ample. Summers cool, winters moderate? The kind of stump land that pays to clear? Timothy and clover, green eight months in year; natural stock country. Land cheap. 10 yearly payments at 6 per cent. Humbird Lumber Company, Box 00, Sandpoint, Idaho.

FOR SALE—65 ACRES BEST DAIRY, FRUIT, berry land; 45 clear, 12 big timber; spring creek; $100 per acre; $1500 down. Profits of six good cows would make yearly payments. 300,000 people live within 20 miles. Mrs. M. Willis, 14 Crawford, Portland, near St. Johns lumberyard.

BIG OPENING SALE OF YAKIMA VALLEY farm land, under an assessed state and government approved irrigation project; best, deep soil; close to town and good roads. Price $25 per acre and up. Very easy terms. Western Lands, Inc., owners, 918 Green bldg., Seattle.

160 ACRES; 35 ALFALFA; 4½ MILES FROM Addy, Wash.; buildings, orchard, berries, running water; 26 head cattle, 12 giving milk; team, farm tools, household goods, 50 tons hay; $6500; federal loan, $1450, balance cash; no trades. John Tracy, Addy, Wash.

BIG LUMBER COMPANY LAND SALE—IN Skagit county; 40-acre tracts, $1400; $200 cash, balance easy. Lots work for the settler. Splendid district, roads, schools, towns. Information free. H. C. Peters, 726 3d ave., Seattle.

DAIRY RANCH, 320 ACRES; 110 IN CULTIvation; good 6-room house; 30 to 40 acres natural meadow; 2 trout streams; best dairy ranch in Stevens county, Washington. $40 acre, easy terms. Groshong Land Co., Deer Park, Wn.

SELL YOUR PROPERTY QUICKLY FOR cash; no matter where located. Particulars free. Real Estate Salesman company, 501 Brownell, Lincoln, Neb.

$2400 CASH—160 ACRES SAGEBRUSH LAND in Harney valley, Ore.; sandy soil; easily cleared; water at 20 feet. Box 172, Kootenai, Idaho.

WESTERN WASHINGTON FARMS—LARGE or small tracts; Puget sound waterfrontage. Charles Somers company, Alaska bldg., Seattle.

15 ACRES GOOD ONION LAND; NINE ROOMS, horse, chickens. William Schwauber, Clackamas, Ore.

GOOD 160, NEAR OROFINO; $15 PER ACRE, half cash. Owner, Henry Loseth, Moscow, Idaho.

NINETEEN ACRES; GOOD BUILDINGS; well, orchard. L. Schulz, Route 6, Salem, Ore.

320-ACRE FARM IN CULTIVATION; 10 MILES north Almira, Wash. Box 140, Twisp, Wash.

FARM LANDS—Wanted

NO COMMISSION — SELL YOUR FARM through Washington Farm Bureau Exchange, represented in 45 states. Lists of farms for sale by owner mailed free. 312½ Lindelle, Spokane.

I HAVE INQUIRIES FOR FARMS IN NORTHwest. Describe fully and state price. R. A. McNown, 310 Wilkinson bldg., Omaha, Neb.

WANTED—TO HEAR FROM OWNER OF land for sale. O. K. Hawley, Baldwin, Wis.

FARM LANDS FOR RENT 652

FOR LEASE—440 ACRES DAIRY FARM; ON Puget Sound; low rent; part cash, part in labor. J. M. Dempsey, owner, 326 East 58th st., Seattle.

IRRIGATED LANDS—For 663

CORBIN ADDITION TO GREENACRES—IN the beautiful Spokane valley; 30 minutes from Spokane paved road; 40 inches of water for irrigation; gravity flow. Ask for booklet with all information.

Return coupon—The Fred B. Grinnell company, Spokane, Wash. I am interested in the Spokane valley. Please send booklet and all information to

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WE OWN 1000 ACRES WESTERN WASHINGton choice irrigated land, and sell in tracts of 5 acres upward; $100 or more down, balance 10 years. $40 per acre, unimproved, to $350 per acre for land in highest state of cultivation. Ideal location and climate for poultry, berries, dairying. Write for information. Washington Colonization company, Sequim, Wash.

A MONEY MAKER THAT WILL ALWAYS show handsome profits: 130 acres, near Yakima; good water rights; excellent buildings and well equipped; large dairy herd. Price $22,000; good terms. Western Lands, Inc., owners, 918 Green bldg., Seattle.

FOR SALE—10 A., IMPROVED, IRRIGATED; early crop belt; stock, implements, tools, crops, furniture, $3500; crippled, must sell; terms. Henry Hays, Richland, Wash.

ACRE TRACTS FOR SALE 669

3-ACRE POULTRY FARM, STOCKED; COW; six-room house, $2300; terms. John Kuper, Route 6, Oregon City, Ore.

FOR SALE OR EXCHANGE 702

THIRTY-ACRE DAIRY FARM, HIGHLY IMproved; ideal location; sell or trade for merchandise stock, registered Jerseys included. Wm. C. Postlethwaite, Caldwell, Idaho.

FOR SALE OR TRADE—RANCH AND SAWmill, 480 acres; 120 plow land; timber, 2,000,000 feet. Box 4, Westlake, Idaho.

Club Work at Spokane Fair

One hundred and fifty boys and girls representing the best members in club work in the state of Washington, assembled at the boys' and girls' club camp at the Interstate fair in Spokane recently and took part in the various contests. There were representatives from Spokane, Stevens, Adams, Pend Oreille, Grant, Benton and Grays Harbor counties present during the week, each club remaining until its contests were held, and then returning home.

Miss Elmina White, Pullman, club representative for the state of Washington, was in charge of the camp. She was assisted by W. J. Green, Spokane county club leader, and a corps of workers which included Miss Selena Deno, 17-year-old club girl and leader, who this year became interstate sewing champion. She took charge of the registration and assisted with the clerical work.

County Contest Winners.

The first two days of the fair were given over to contests in which only Spokane county club members took part. First place in the county contests enables the winners to entry in the district. They resulted as follows: Canning—Cheney team, composed of Nancy Colyar and Josephine Moore. They were unopposed by other contestants, but their demonstration, according to Miss White, was a perfect one. Allan Stout became champion gardener. Selena Deno, Sunset, won first place in the senior sewing contest and Ruth Corey, Richland club, won first in the junior contest. Chrissie Keuster of the Bear Creek Dairy club, Chattaroy, won first in the county dairy contest. This little girl was a member of the Washington state dairy judging team two years ago, which won a trip to the National Dairy show at St. Paul. At that show she won a silver medal, which was greatly admired by dairy club members at the Interstate fair when Chrissie appeared wearing it on her uniform.

In the county dairy calf club contest Sunset community and Spring Valley were rivals for first honors, each club having an exhibit of about 10 calves.

Margaret Campbell of Sunset won first with her 4 1-2-month-old Jersey, Pilot's Lassie Queen. She also won second prize on the same animal when she entered the open classes with it, winning $12. Other winners were: Raymond Wilson of Spring Valley, second on Holstein; Dayton Hood, Spring Valley, third on Holstein; Bessie Janney, Bear Creek club, fourth on Jersey; Hugh and Burgess Hart of Spring Valley won fifth and sixth place, respectively, on Holsteins. Y. T. Hood, leader of the Spring Valley club, accompanied the boys.

Grand Champion, Helen Brown.

The county contest to determine the best grade heifer or cow was awarded Helen Brown of Sunset. She also won grand champion on her calf over all other animals there, even the purebred. Helen says she is going to get a good start in dairying. She has already made a success of poultry raising, for last year she was interstate poultry champion and this year is leading several poultry clubs in her community. Jack Steiner, Elton Deno, Gordon Brown and Jack Adams, all of Sunset, won second, fourth, fifth and sixth prizes, respectively. Norman Janney of Bear creek won third in this contest.

In the district contests boys and girls from sections of eastern Washington were eligible for competition. They were held Thursday and part of Friday and resulted as follows:

Canning—Spokane county team, composed of Nancy Colyar and Josephine Moore of Cheney, first. These girls made a score of 99 per cent on their demonstrations. Second place was awarded the Adams county team from Benge, composed of Elsie Butts and Florence Morgan.

Swine—Edwin Pease, Usk, Pend Oreille county, first; Arnold Bohren, Daisy, Stevens county, second; William Miller, Spokane county, third.

Clothing—Elsie Johnson of Spokane county won first place with a score of 95, defeating Ruby Skeels of Addy, Stevens county.

Garden—Alfred Pease, Usk, Pend Oreille county, first; Adolph Knoston, R. F. D. Spokane, second.

Dairy—Chrissie Keuster, Chattaroy, Spokane county, first.

Poultry—Pearl Caudill, Spokane county.

Potato—Gordon Brown, Spokane county.

Winners of first place in district contests will try out for first place in the state contests at the Yakima fair this week.

Interstate Contestants.

Four interstate champions were brought to the Interstate fair from Benton county by Miss Gertrude Gage, club leader, from Kennewick. They were: Preston Anglin, 14-year-old cooking club boy, who demonstrated the proper diet for a child between the ages of 20 months and 6 years, preparing three meals and a lunch before an interested audience, and later setting the table and serving the meals, at the same time explaining to his visitors just why certain foods were good for a growing child and why certain others were not; Edward Lum of Kennewick, 15, who brought a garden exhibit with him, gave a talk and judged other exhibits, receiving the praise of the judge, who said it was the best exhibit he had ever seen because of its uniformity and variety of products; Elizabeth Drenkhahn of Benton City and Ethel Kelso, Kiona, who composed the canning team and were given first place on their demonstration and exhibit.

George J. Robinson of Elma, Wash., who finishes club work this year because he has reached the age limit, came all the way from Grays Harbor county to exhibit his bees at work and to give a demonstration and explain about his project. Investigation of George's record book disclosed that his bees, after the honey crop is sold, will pay him about $270 for the season.

Other interstate champions include:

Sewing and clothing—Selena Deno, Spokane.

Potato—Mark Wells, Spokane.

Swine—Lester Hartley, Cheney.

Poultry—Pearl Caudill, Spokane. Success in these contests means that the boy or girl is champion in his or her respective project for the three states of the northwest—Washington, Idaho and Oregon.

Girl Wins Judging Contest.

Over a picked field of boy and girl pig and calf club members, Miss Margaret Campbell and Miss Helen Brown of Sunset were awarded first and second place, respectively, in the stock judging contest, which was open to any one under 21. Margaret's total score was 429 out of a possible 500. Helen Brown, state president of the Four H club, was given a total score of 415. The judging was held in four different departments, which included dairy, beef cattle, horses, sheep and swine. John L. Smith was judge of the dairy cattle and Professor Hubbard of Washington State college named the winners in the other departments. Other contestants scored as follows: Edwin D. Pease, Usk, 410; Lester Hartley, Cheney, 381; Eugene Heuter, Cheney, 377; Gordon Brown, Spokane, 376; Ernest Heuter, Cheney, 369; Edgar Boucher, Cheney, 367; William Miller, Spokane, 310, and Alfred Pease, Usk, 295.

"This was one of the most successful years in the boys' and girls' club work since it first came into the fair in 1915," said Miss White. "In 1924 I look for a greater number of exhibits and contestants from outside counties. I was greatly surprised when I heard that there were 150 contestants this year. This is surely a record.

"There have been wonderful strides made in the club work since it has been begun and next year is certainly going to be a wonderful year in Spokane. The boys and girls who were here showed unusual enthusiasm over the prospects for 1924, and there are many youngsters from distant counties and from Idaho districts who intend to enter next year, but were prevented from coming this year because of the fact that the Lewiston and Yakima fairs followed so closely upon the heels of the Interstate fair."

Unity Gets Results in Whitman

(Continued from page six.)

second, Guy Hughes; third, Edgar Halling. Duroc Jerseys, sow pig—First, Myrtle Scott; second, Henry Schafer, third; Veryl Farley, Pullman. Boar pig—First, Joe Kincaid; second, Henry Schafer; third, Myrtle Scott.

Chester Whites, sow pig—First and second, Louis Chesnut. Boar pig—First, Louis Chesnut; second, Ralph Cole, Pullman.

All of the canning club work was won by the Thornton school as follows:

Berries—First, Virginia Johnson; second, Velma Sloan; third, Angus Kerns.

Fruits—First, Velma Sloan; second Flora Joynson; third, Angus Kerns.

Vegetables—First, Charlotte Pickett; second, Wilhmeta Matney; third, Nora Johnson.

Corn, best 20 ears—First, Walker Bailor Colfax; second, Wright Bailor.

Potatoes, best 12 of any variety—First and second, Elman Lyle on Netted Gems.

Coppei wheat, best bushel—First, Roy Jones, Penawawa; second, Phillip Heidenrich, Colfax.

Jones Fife, best bushel—First, Phillip Heidenrich.

Triplet, best bushel—First, Roy Jones; second, William Dahmen, Colton.

Bluestem, best bushel—First, C. E. Maynard, Colton.

General display of vegetables and roots—First, Phillip Heidenrich; second, A. E. Kirkland, Winona.

Best display of fruits—First, Phillip Heidenrich.

ALFALFA AND MORNING GLORY.

It has been suggested that alfalfa might serve as a choke-out crop in combating wild morning glory. The objection voiced at once is that during the choking-out process the seed of the pest would probably be scattered to uninfected fields through the use of the alfalfa hay. If, however, the patch were fenced off and the alfalfa fed for pasture on the ground some beneficial results might be obtained. Experiences of farmers along this line might profitably be passed on to others troubled by this noxious weed.

A Simple Guide to Proper Food Selection

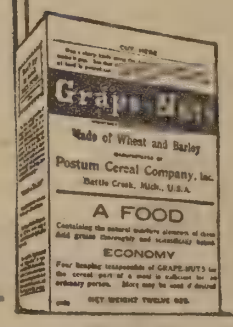
Nourishment— Grape-Nuts with cream or good milk contains every element necessary for perfect nutrition.

Digestibility— Grape-Nuts is partially predigested by 20 hours' baking. It is easily assimilated by child or adult.

Flavor- Grape-Nuts, made of wheat and barley, is sweet with natural sugar self-developed from the grain in the making. It has a delightful, nut-like flavor.

Character— Grape-Nuts is *real* food—the kind you can depend upon for strength and energy. Its crisp granules invite thorough mastication, thus helping to keep the teeth and gums healthy.

Economy— Grape-Nuts is so compact that a package contains many servings; and each serving provides unusual nourishment. A portion for the cereal part of a meal costs about *one cent.*



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A six months complete automotive course that gives you all the knowledge of automobiles and all the skill in handling and repairing parts that can be crowded into 26 weeks of hard study and earnest effort. You get: **250 HOURS** mastering the facts and principles of automobile construction and operation. **120 HOURS** taking apart and assembling automobile equipment. **120 HOURS** working with auto electrical equipment. **180 HOURS** actually repairing automobiles. **175 HOURS** operating the machine tools used in up-to-date repair shops. Skilled teachers; ample equipment; thorough training.

We actually believe that there is no more practical or more thorough course offered anywhere. We want you to have the fullest possible freedom in investigating the school. Come and see the equipment for yourself. Take a few days absolutely free training if you wish. Talk first hand with the large employers of automobile mechanics in Seattle who give first preference to Y. M. C. A. graduates. Write for free catalog.

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Fourth and Madison,
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SOW ROSEN RYE

Because it far outyields the ordinary winter rye. This variety was introduced from Russia by the University of Michigan and in order to supply first class seed have secured a carload from Michigan.

SAND or WINTER VETCHES

Also all varieties of clover and grasses for fall sowing.

Write for prices, stating amount wanted. Samples furnished on request.

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BETTER PRICES

For Your CATTLE, HOGS and SHEEP

when sold on the open competitive market. We handle consignments for you on a commission basis only. Community shipments our specialty. Put your name on our mailing list for weekly quotations.

A. V. OVERMAN & CO.

Live Stock Commission DEP'T T Spokane, Washington

Read the "Want Ad" page this week for good offers of all kinds.

Live Stock Awards at the State Fair

(Continued from page eight.)

2 on Northwood Maggie (junior champion) and Northwood Rosette. Under one year—1 and 2, on Northwood Polly and Northwood Flora B.

Herds and groups—1 on graded herd, yearling herd bred by exhibitor, calf herd bred by exhibitor and get of sire.

The Dairy Cattle.

Guernseys and Jerseys competed most strenuously for top awards in the dairy cattle division. In the Guernseys, the noted herds of Wallace & Fordyce and H. E. Angell & Son, which are to be sold at auction in October, made the greater part of the show, though Roy R. Bush and a few other smaller breeders shared the awards. Among the Jerseys, Midfields farm of Lewis county and Glen Tana farm of Spokane county fought a good-natured battle for top honors, with the winnings fairly well divided, and a few smaller breeders taking occasional awards. Hollywood's excellent herd of Holsteins gave special strength to the black and white show, though other breeders made the competition interesting. In the Ayrshires E. W. Van Tassel's herd from Wenatchee had no competition. The awards were:

The Guernseys.

Bulls—Aged bull—1, Wallace & Fordyce, Sunnyside, Wash., on Chicona Lover Bold (senior and grand champion); 2, H. E. Angel & Son, Mabton, Wash., on France's May King; 3, Roy R. Bush, Outlook, Wash., on Lord Plato of Edgemoor. Two-year-olds—1, Indian City farm, Spokane, Wash., on Amny's King. Yearling—1, T. F. Myers, Outlook, Wash., on Coamos Lover Bold; 2, Bush on Old Homestead's Guernsey Hero; 3, Angel & Son on Ruby Dell Foxey. Senior calf—1, Wallace & Fordyce on Fawndale Dixon (junior champion); 2, Angel & Son on Dame's Prospector of Ruby Dell. Junior calf—1, Bush on Old Homestead's Asher; 2 and 3, Wallace & Fordyce on Fawndale Matator and Fawndale Lover Bold.

Females—Four years or over—1 and 3, Angel & Son on Middledale Grace Darling (senior and grand champion); 2, Bush on Cynthia of Groton Farm; 4, Wallace & Fordyce on Aloha Darling. Three years old—1, Angel & Son on Glenwood Diamond's Gladys; 2, Bush on Old Homestead's Lily Bell. Two-year-old—1, Wallace & Fordyce on Anchor Rose of Fawndale; 2, Angel & Son on Dairy Maid of Ruby Dell; 3, Roscoe Angel, Mabton, Wash., on Laura's Kate of Bonnie Brae. Senior yearling—1 and 4, Bush on Old Homestead's Sunshine and Old Homestead's Katherine; 2 and 3, Angel & Son on Ruby Dell Butter Queen and Ruby Dell Goldie. Junior yearing—1, Angel & Son, on Aloha of Ruby Dell; 2 and 3, Bush on Old Homestead's Polyanna and Old Homestead's Angel. Senior calf—1 and 2, Wallace & Fordyce on Jean of Fawndale (junior champion) and Kate of Fawndale; 3, Bush on Old Homestead's Lily Belle's Jewel. Junior calf—1, Wallace & Fordyce on Fawndale Primadonna; 2 and 4, Angel & Son on Ruby Dell Rexella and Ruby Dell Sultana; 3, Indian City farm on Goldenrod's Helen.

Herds and groups—Graded herd—1, Angel & Son. Young herd—1, Angel & Son; 2, Bush. Calf herd—1, Wallace & Fordyce; 2, Angel & Son; 3, Bush. Get of sire—1, Wallace & Fordyce; 2 and 4, Angel & Son; 3, Bush. Produce of cow—1 and 2, Angel & Son; 3, Wallace & Fordyce; 4, Bush.

The Jerseys.

Bulls—Aged bulls—1, Jesse Brown, Woodinville, Wash., on Eminent Sultan Millview Boy. Two-year-olds—1, Midfields farm, Winlock, Wash., on Fussy's Fern's Noble 35th (senior and grand champion); 2, Glen Tana farm, Spokane, Wash., on Glen Tana Morocco Wonder. Yearling—1, Glen Tana farm on Glen Tana Morocco Majesty; 2, Midfields farm, on Midfields' Manila. Senior calf—1, Nichols & Plunket, Ellensburg, Wash., on Olga's Brown Lad; 2, Glen Tana farm on Glen Tana Wonderful Star; 3, Jesse Brown on unnamed calf; 4, Midfields farm on unnamed calf. Junior calf, 1, Glen Tana farm on Glen Tana Wonder Glory (junior champion); 2 and 3, Midfields farm on unnamed calf and Rose's Proud Lad; 4, David Rankin, Yakima, Wash., on Olga's Golden Duke.

Females—Four years or over—1 and 3, Midfields farm on Brighter Dawn (senior and grand champion) and Star of Yewloa; 2, Glen Tana farm on Glen Tana Sibyl 2d; 4, Jesse Brown on Shellrock's Lovely Lass. Three-year-olds—1 and 2, Midfields farm on Oma's Celebration and Panacea of Midfields. Two-year-olds—1 and 3, Midfields farm on Sweetheart Image and St. Mawes Mary Olga; 2, Glen Tana farm on Glen Tana Morocco Inez; 4, Jesse Brown on unnamed heifer. Senior yearling—1, Glen Tana farm on Glen Tana Morocco Lady (junior champion). Junior yearling—1 and 2, Midfields farm on Midfields' Lady Winkle and unnamed heifer; 3, Glen Tana farm on Glen Tana Morocco Fairy; 4, Rankin, on Gloria Patricia. Senior calf—1 and 2, Nichols & Plunket on Majesty's Cowslip Roxie and Loretta's Cowslip Lass; 3, Glen Tana farm on Glen Tana Wonderful Dorothy; 4, Midfields Zita Helen. Junior calf—1, Nichols & Plunket on Star's Sly Puss; Midfields farm on unnamed calf; 3, Glen Tana Farm on Glen Tana Morocco Irene; 4, Rankin, on June.

Herds and groups—Graded herd—1, Midfields farm; 2, Glen Tana farm; 3, Jesse Brown. Young herd—1, Glen Tana farm; 2, Midfields farm. Calf herd—1, Glen Tana farm; 2 and 4, Midfields farm; 3, Nichols & Plunket. Get of sire—1 and 4, Midfields farm; 2, Nichols & Plunket; 3, Glen Tana farm. Produce of cow—1 and 4, Midfields; 2, Glen Tana farm; 3, Rankin.

The Holsteins.

Bulls: Aged bull—1, D. F. Nugent, Granger, Wash., on Allamuchy Sadie Vale Rose (senior champion); 2, Stephen E. Chaffee, Sunnyside, Wash., on Chief of the Ormsbys. Senior calf—1 and 2, Hollywood Farm, Hollywood, Wash., on Goliah 2d of Hollywood (junior and grand champion) and Judge Segis 20th; 3, J. R. Hobson, Outlook, Wash., on unnamed calf; 4, Chaffee, on Glencliff Segis Ormsby DeKol. Junior calf—1, Western State Hospital, Steilacoom, Wash., on Steilacoom Sir Veeman Hengerveld; 2 and 3, Chaffee, on Glencliff Riverview Ormsby and Glencliff Ormsby Alderwood; 4, J. R. Hobson, Outlook, Wash., on unnamed calf.

Females: Aged cow—1 and 4, Hollywood Farm on Snow Ball Powers Mutual (senior and grand champion) and Hollywood Segis Phoebe Veeman; 2 and 3, Chaffee on Myretta Segis Canary DeKol and Bessie Homestead Traherne Fayne. Three-year-olds—1, Hollywood Farm, on Hollywood Segis Adventuress; 2, Hobson, on Lily Fobes. Two-year-olds—1, Hollywood Farm, on Hollywood Dudley; 2, Chaffee, on Grace Korndyke DeKol Wayne; 3, Cris Verstrate, Yakima, Wash., on Ida Lyons Aggie Hartog; 4, Mrs. A. J. Splawn, Cowiche, Wash., on Hazelwood Ormsby Korndyke Posch. Senior yearling—1 and 2, Hollywood Farm, on Hollywood Segis Colantha Maid and Hollywood Segis Beryl Fayne; 3, Chaffee, on Glencliff Ormsby Piebe Rosie; 4, Hobson, on Pauline Segis Valdessa. Junior yearling—1, Hollywood Farm, on Netherland Segis Ruby; 2, Chaffee, on Miss Cora Fobes; 3, Orris Seward, Yakima, Wash., on Limberlocke Segis Model. Senior calf—1 and 2, Hollywood Farm, on Hollywood Segis Palmer Aaggie 2d (junior champion) and Hollywood Segis Dart 2d; 3 and 4, Chaffee, on Glencliff Pontiac Fobes and Glencliff Bonheur Ormsby Skylark. Junior calf—1, Chaffee, on Glencliff Ormsby Segis Lady; 2, Hollywood Farm, on Hollywood Marion Segis; 3, Hobson, on unnamed calf; 4, Leland Duffield, Yakima, Wash., on unnamed calf.

Herds and groups: Young herd—1, Hollywood Farm; 2, Chaffee. Calf herd—1 and 2, Hollywood Farm; 3 and 4, Chaffee. Get of sire—1 and 2, Hollywood Farm; 3 and 4, Chaffee. Produce of cow—1 and 2, Hollywood Farm; 3, Chaffee.

Holstein Junior Special.

1, Leland Duffield, Yakima, Wash., on Miss Piebe Homestead Fayne; 2, Cris Verstrate, Yakima, Wash., on Ida Lyons Aaggie Hartog; 3, Homer Splawn, Cowiche, Wash., on Hazelwood Ormsby Korndyke Posch; 4, Orris Seward, Yakima, Wash., on Limberlocke Segis Medal; 5, Arthur White, Cowiche, Wash., on Duchess Vessa Fobes.

The Ayrshires.

The entire Ayrshire show was made up of the E. W. Van Tassell herd from Wenatchee. This excellent herd won the following awards:

Bulls: Aged bull—1, on Queen's Scottish Cavalier (senior and grand champion). Yearling—1, on Wenatchee Stewart. Senior calf—1, on Wenatchee Cavalier. Junior calf—1 and 2, on Wenatchee White Cavalier (junior champion) and Wenatchee Peter Bruce.

Females: Aged cow—1, on Lady Bruce 2d. Three-year-old—1 and 2, on Empress Lady of Wenatchee (senior and grand champion) and Lady Bruce of Wenatchee. Two-year-old—1, on Wenatchee Blossom. Senior yearling—1, on Wenatchee Snowball. Junior yearling—1, on Wenatchee Cherry. Senior calf—1, 2 and 3, on Wenatchee Snow. Wenatchee Blue Belle and Stewart Girl of Wenatchee 3d. Junior calf—1, 2 and 3 on Wenatchee Scottish (junior champion), Wenatchee Stewart Lady and Wenatchee Scott. Herds and groups—1, on young herd, calf herd, get of sire and produce of dam.

The Horse Show.

Shires, Clydesdales and Shetland ponies made up the horse show except for two head of Percheron horses, the most worthy of which was the aged stallion shown by Herbert Krueger of Colville. H. W. and M. W. Merritt made the principal show of Shires with their high-class horses from Rosalia, and the Clydesdale show was a one-man affair, but of outstanding quality, from the R. C. McCroskey farm at Garfield. The awards follow:

The Percherons.

There was no competition in this breed. Herbert Krueger, Colville, Wash., was awarded first and championship on his aged gray stallion, Pickett. J. A. Adams received an award on his 2-year-old stallion, Kasba.

The Shires.

Stallions: Aged stallion—1, H. W. Merritt, Rosalia, Wash., on Champ Clark. Three-year-old—1, H. W. Merritt, on Forest Prince (senior and grand champion). Two-year-olds—1, M. W. Merritt, Rosalia, Wash., on George Cooper; 2, David Rankin, Yakima, Wash., on Glad Surprise. Colt—1 and 2, M. W. Merritt, on Prince Albert (junior champion) and King Tut.

Mares: Eight years or over—1 and 3, M. W. Merritt, on Morocco Pride and Keota Sally; 2, H. W. Merritt, on Primrose Victoria. Four years and under eight—1, M. W. Merritt, on Martha Washington (senior and grand champion), 2, W. A. Clark, Tekoa, Wash., on Shasta Daisy; 3, H. W. Merritt, on Keota Molly. Three-year-old—1, Clark, on Mary Pickford. Two-year-old—1, David Rankin, Yakima, Wash., on Hallie (junior champion); 2, H. W. Merritt, on Nancy Lee. Yearling—1, H. W. Merritt, on Princess Victoria. Filly—1, H. W. Merritt, on Henry-Retta. Mare and foal—1 and 2, M. W. Merritt, on Martha Washington and foal and Morocco Pride and foal; 3, H. W. Merritt, on Primrose Victoria and foal. Get of sire—1, M. W. Merritt; 2, H. W. Merritt. Produce of mare—1, M. W. Merritt; 2 and 3, H. W. Merritt. Stud—1, M. W. Merritt; 2, H. W. Merritt.

Clydesdales.

The R. C. McCroskey Clydesdales from Garfield, Wash., made up the entire show in this breed, receiving awards as follows:

Stallions: Eight years or over—1, on Hope's pride (senior champion). Four years and under eight—1, on Meg's Chief. Two-year-old—1, on Sir Henry Lauder (junior and grand champion); 2, on Prince.

Mares: Eight years or over—1, [illegible] Lady Ramsey 2d; 2, on Colony Nancy. Four years

(Continued on page twenty-six.)

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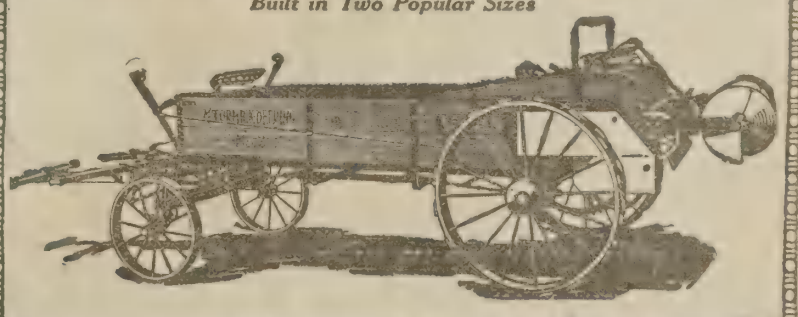

What Does It Cost to Produce Hay?

By L. A. HUNT.

At a recent meeting at Toppenish, Yakima county, a large number of members of he Northwest Hay association undertook to work out the cost of producing a ton of hay under conditions existing on the Yakima reservation. After considerable discussion the following table was approved: Cost of land, $200 per acre, interest

7 per cent	$14.00
Taxes	6.00
Water maintenance	1.20
Water right	1.50
Charge for seed, $4 per acre for three years	1.33
Charge for plowing and harrowing three years	1.00
Ditching out each year	1.00
Irrigation	2.00
Cutting and stacking, $2.50 per ton	10.00
Baling, $2.50 per ton	10.00
Hauling, $1.25	5.00
Actual cost	$54.03

The items entered as charge for seeding and charge for plowing of land, etc., and for cutting and stacking hay, baling and hauling, are items which it is claimed can be contracted at this price. There can be a slight question as to the entering of the water right charge of $1.50 per acre. It is maintained, however, that this $1.50 per acre is a part of the original purchase price of the land, being the government lien for water right and is not included in the cost of land at $200 per acre, and that this $1.50 per acre is not always a constant figure and that it must be met each year for at least the next 20 years, and as it is certainly proper to include a part of it and the inclusion of the entire amount only adds 37 1-2c per ton to the estimated cost, it is not vital. The figures therefore show a total cost of producing an acre of alfalfa hay to be $54.03 where nothing is allowed for supervision or management.

It was claimed by this meeting that the average life of a crop of alfalfa in this territory was three years and that the average yield per acre was not to exceed four tons. It was further pointed out that the crop return during the average two years during which the land is not in alfalfa is not equal to the alfalfa return. However, no charge for such loss is charged against the cost of producing hay.

It is generally considered fair to allow at least 10 per cent for management. There would be some argument as to whether this 10 per cent should figure on the investment or upon the cost price per ton. In any event, such allowance would raise the fair price of alfalfa to at least $15 net to the grower and again this does not take into consideration the fact that four tons per acre cover the entire yield, making no allowance for weather, damage, or off-grade hay, and these are items of very considerable significance.

The purpose of publishing these figures is that every hay grower may compare his own experience with these figures as there will be many cases in which growers will find themselves operating both above and below this cost. If these figures are correct, what is a fair price for alfalfa hay?

Have You Control of Your Car?

By Professor L. J. Smith.

Car owners often think that the most important part of their car is the motor. An automobile must have power and plenty of it. The motor must not fail.

While the above is true, yet there is one thing that every driver is called upon to do sooner or later: that is, to stop and stop quickly. Your life and the lives of others depend upon the control you have of your car.

The brakes are, therefore, one of the most important parts of your car. Yet how they are neglected! We have our motor carefully overhauled each year. How many of the readers of this article have had a competent man go over the brake mechanism this season? And yet, it may be that upon this your life will this season hang in the balance.

It is said that one car in 10 has an accident every year. Will that one be yours? A lot depends upon your control, which means the condition of your brakes.

When the brakes are in proper condition a car going 10 miles an hour should be able to stop in 9.2 feet; 15 miles, in 20.8 feet; 20 miles, in 27 feet; 25 miles, 58 feet; 30 miles, 83.3 feet; 35 miles, 113 feet; 40 miles, 148 feet; 50 miles, 231 feet.

Woman drivers haven't the strength to apply the brakes strongly. Hence the brakes of their cars need more careful and frequent inspection.

To test your car according to the chart, get some one to stand beside a mark across a smooth part of the road. Start with the 10-mile speed. When the front of the car comes to the mark, the person on the road gives a signal and the driver pushes out the clutch and at the same time applies the brakes. When the car is stopped, measure from the front back to the mark on the road. Then turn around and make the test from the other direction. Don't apply the brakes too hard at the start or the rear wheels will lose their grip on the road and skid.

Ellington Is Delegate

Professor E. V. Ellington will represent the State College of Washington, where he is head of the dairy department, at the World's Dairy congress to be held in Washington, D. C., Philadelphia and Syracuse October 2-5 inclusive. Professor Ellington has been honored by election as one of the secretaries of the congress, which has never before held its sessions in America. There will be 30 foreign countries represented in the conferences, which are the most important conclaves of the sort ever convened.

Professor Ellington is also the delegate from the Western Dairy Instructors' association, of which he has recently been made secretary. While in the east he will represent Washington at the dedication of Cornell university's new $600,000 dairy building, the first week in October, and will also visit the nutrition laboratories at Johns Hopkins university, Baltimore, and the dairy division of the United States department of agriculture at the nation's capitall.

STOCKMEN HOLD BANQUET.

Stockmen and others attending the Grays Harbor county fair at Elma held a banquet on Friday evening, August 31. County Agent W. E. Cowan acted as toastmaster. John R. Martin, James Glancy, Don McGruder, J. E. Wivel, Robert Poulson, Kenneth Hinshaw and J. E. Calder, live stock enthusiasts, gave short talks.

"Sheet Writers" Excluded

In the following circular letter President W. H. Paulhamus gives notice that "there is no longer any room on the grounds of the Western Washington Fair association for 'the professional solicitor,' because the strong-arm methods of the "sheet writers" will no longer be countenanced on the Puyallup fairgrounds. This is most gratifying to THE FARMER, whose prolonged campaign against these outrageous methods of obtaining subscriptions, aided by broad-minded and long-visioned fair managers, is bearing fruit. Even outside of the fairgrounds it again warns its subscribers against the panhandling sheet writers working the streets of any town or city. We don't get our circulation that way.

Here is Mr. Paulhamus' letter:

"To the Agricultural, Poultry and Stock Magazines Distributed or Printed in the Pacific Northwest: The Western Washington fair has had more difficulty with the strong-arm methods of solicitors who take advantage of the popularity of poultry, stock and agricultural journals, with the result that they perform about as much high-handed work at the average fair as the worst citizen that we could have on the grounds.

"The undersigned has been trying to rectify this condition from year to year, but without success. I have reached the conclusion that there is no longer any room on the grounds of the Western Washington Fair association for the professional solicitor. The fair is better off without him. He can not rent a booth for a thousand dollars, because the method adopted by many of these professional solicitors is just as bad as petty larceny.

"The Western Washington fair appreciates the importance of the agricultural press, without which agriculture can't possibly succeed, but the legitimate agricultural press is not interested in a solicitor who will treat the public in an unfair manner. The Pacific northwest will prosper most from an agricultural standpoint, provided the farmers support the publications issued in the Pacific northwest.

"If you pay for booth space you are entitled to solicit subscriptions, provided there are no presents and the solicitor will stay within the booth and not violate reasonable subscription methods.

"There will be a special effort made to keep off of the grounds of the Western Washington fair all professional solicitors, regardless of what paper they represent. This for your information. W. H. PAULHAMUS, President."

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With This *Non-Detonating* Gasoline

There's a marked difference in the way gasolines explode.

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And **detonating** gasoline limits compression by its tendency to explode prematurely.

Thus a loss of power and efficiency in your motor result.

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Union is **non-detonating** gasoline. The explosion is prolonged, sustained. Piston heads are thrust rather than "kicked" down. You will find a new "lift" on hills and no "knocking."

Non-detonating gasoline permits of higher compression, for as all authorities know, compression is limited by the tendency of a gasoline to **detonate.** So more power is delivered by Union Gasoline. You find a new rush in the pickup and more speed on the level.

Impulses come more smoothly, so there's less vibration—this saves wear and tear.

And all this higher efficiency means greater fuel economy in motor cars, trucks and tractors. So Union **Non-Detonating** Gasoline delivers superior service in several important ways.

Union is always **uniform.** It doesn't disintegrate, thus doesn't deteriorate in storage. It has all the power when you use it that it has when it leaves the Union plants.

Union Oil Company
of California

Union Gasoline

Cattle Ranch to College

(Continued from page fourteen.)

"What a way to die!" was the only comment John made.

"Those were the very last words Charley spoke," said Frank, more to himself than to his listener.

"I guess Miles City was the toughest place going then," said the boy. "Why, I was driving through the town with my father one day (that was when we were opening a big coal mine down the Yellowstone) and we went under a half-finished railroad bridge and there, hanging from the ties, were the bodies of three men. Lynched. Ugh!" John shuddered at the remembrance of it.

"Was that the case where there was some talk of the men being killed first and hung afterward?" inquired Frank.

"Yes. There had been a row in Brown's place, and these three had been put in jail, but during the night they were taken out and in the morning were found as we saw them. The regular vigilance committee had not done it, and the doctor said death first, hanged afterward."

Both of these characteristic stories were common talk whenever a crowd got together, but neither Frank nor John had heard the facts told by an eyewitness before.

It must not be thought all the conversation of these two was of this blood-and-thunder variety. Frank had lived in the east, and marvellous were the tales he told about the buildings, the people and their doings. The two were so interested in each other, and what each had seen, that the time passed very quickly, and so John was surprised when Frank said late one afternoon: "See that blue range of hills about 30 miles ahead?"

John looked and nodded an assent.

"Well, Baker's ranch is right at the foot of them, and Sun river runs through it. That's where we're goin'."

The following morning they rode toward the ranch house, past the minor buildings, the barns and sheds, past the hay stack, now bulging with its winter store, past the inevitable horse corral, just then containing several horses which were circling round trying to avoid a cowpuncher's "rope." As they reached the ranch house proper—a low, single-storied house built of logs and roofed with split logs covered with turf—a chunky, white-haired man in overalls stepped out of the door.

"Hello, Mr. Baker," said Frank. "You see you can't lose me."

"Well, Frank, it's you, is it? I'm terrible glad to see you. How are you?" Mr. Baker's greeting was cordial. "Who's your friend? What's his name?" he added, noticing John for the first time.

He was introduced, and the warm grasp of the hand that John got from the old ranchman won him at once.

"Mrs. Baker will bubble over when she sees you, Frank. Tie your horses and come in."

A long hitching rail ran along the front of the shack, and to this Frank and John made their horses fast.

Mrs. Baker's greeting was even more cordial than her husband's, and the youngster looked on at the display of affection rather wistfully. Nor was he ignored in the general greetings.

"You're just the fellow I want to see, Frank," said the cheerful, kindly, buxom, albeit gray-haired ranchman's wife. "Mr. B.'s getting kinder old to be chasing round the ranch looking after cattle and range riders, and I want you to see to all that, so I can keep Mr. Baker at home. Will you do it?" She looked from her husband to Frank and back again.

"I'm looking for a job, and so's my friend Worth here. If you'll take us both I'll be glad to stay," and Frank began to enlarge on John's virtues, and told how they had shared the same bed. He characterized him as a "plumb good feller."

"Of course he can get to work," said the couple together.

"Got a saddle?" asked the old man.

"Yes, I've got a good outfit," answered the boy.

"Well, you can go range ridin'." The ranchman spoke in a tone that was not to be gainsaid—it amounted to a command. John understood vagely that range riding was something like horse wrangling, only the job he was now about to undertake would last during the day and night, too.

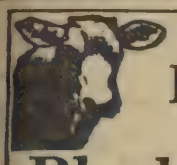
The following day the boy was sent forth to his new work. It was cold, and the gray November sky had a look of snow in it; the air, too, felt snowy. In the ranch house all was warm and comfortable: a great fire of cottonwood logs was blazing in the open fireplace, a few pictures and examples of needlework—the evidences of a woman's hand—were interspersed with mannish things: rifles in rough wooden racks, antlers of deer and prong horns, bridles decorated with silver hung here and there on nails, and a long wooden peg, driven into the whitewashed logs, supported a richly carved saddle, Mr. Baker's own.

From this cheer and comfort John went into exile, to last several months—the cold, bitter, winter months of the northwest.

With the instructions of Mr. Baker the warnings of Frank ringing in his ears, he started off for the shack he was to share with an old, experienced cowpuncher throughout the winter. The eight miles were soon covered, and he drew up before the little log shack which was to be his winter home. A little box of a cabin it was, perhaps 12x15 feet, built solidly of logs and backed up against a low bank for the shelter it afforded. He dismounted and entered; a single small window lightened the gloom somewhat and enabled him to see the familiar rough bunks on either side, one for each occupant; a rough deal table supported on one side by the wall and on the other by two legs; a frying pan, a coffee pot, and a few tin cups—none overclean—hung near the fireplace; these completed the decorations and furniture of the range riders' shack. It was one of several placed at varying distances from the home ranch.

After tying his horse and bringing in the few belongings he possessed, he sat down on the empty bunk and waited for Barney Madden, his mate, whom he had never seen. He wondered what kind of a fellow he was.

(To be continued.)



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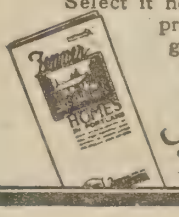

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FAMILY CIRCLE

ALICE W. BARLAND
EDITORIAL CONTRIBUTOR

THE TEST OF LIFE.

What is a failure It's only a spur
To a man who receives it right,
And it makes the spirit within him stir
To go in once more and fight.
If you never have failed it's an even guess
You never have won a high success.

What is a miss? It's a practice shot,
Which we often must make to enter
The list of those who hit the spot
Of the bull's-eye in the center.
If you never have sent your bullet wide,
You never have put a mark inside.

What is a knock-down? A count of ten,
Which a man may take for a rest.
It will give him a chance to come up again
And do his particular best.
If you've never been bumped in a rattling go,
You never have come to the scratch, I know.
—Edward Vance Cook.

Experience Letters

Dear Family Circle: I must tell you how we have been spending the summer. The Hood Loop highway is being graveled and nine of the men who work on the crusher have their families out here in camp.

This is as lovely a camp ground as can be found and will be a wonderful place for summer vacationists to rest, not too far from town, a wonderful amount of shade, good, cold spring water at short intervals along the highway, which follows the east fork of Hood river in which are found many good fish.

There are 21 children in camp between the ages of 13 years and 4 months.

We have a Sabbath school which meets every Sunday in a grove which we have fixed up with seats, with the tree tops and the beautiful sky for a roof. Every Sunday evening we have a young people's meeting, and the Rev. Mr. Hutchesson meets with us at times and preaches a sermon, which we all enjoy.

Th ladies of camp have a sewing circle which meets once a week at the different tent homes.

Wishing the rest of the Family Circle could enjoy such wonderful summer joys, I remain a member of the Family Circle.

Parkdale, Ore. MRS. A. BURTON.

Family Circle Girls

Dear Mrs. Barland: I am another reader of the Circle and find it very, very interesting.

I feel the same as A. P. H. does in regard to the smoking question. Why should girls lower themselves to that degree just because the boys smoke when there is no question in the minds of any one that it is a harmful habit? Suppose we have a right to smoke, just as much a right as the boys. That is no reason why we should follow in their mistaken footsteps, is it?

A. H. wanted to know the opinion of the readers concerning girls going with boys younger than themselves. I think it is all right I know several women who are older than their husbands and they seem satisfied with each other.

I am going with a young man just a year older than I am and the first evening he took me out he wanted me to kiss him. I told him I didn't believe in that sort of thing and I couldn't do anything I didn't believe in. After a good deal of talking and argument I convinced him that it was not the thing for young boys and girls to do and I have been going with him for 10 months now and he has never asked me to kiss him since.

I believe the trouble with the girls who practice the kissing habit is their desire to be popular and they think that is the way to become so. Girls, you are mistaken; the boys may make you think your ways are all right, but this boy I am going with tells me that boys do not respect these girls and that they stand around the corners talking about them. He says this is a sample of the talk he hears about girls who are seeking this sort of popularity: "Oh, daddy! If you want a cozy girl go with such a one," or "You can get lots of kick by going with such a one." (This isn't high-class kind of talk, I know, girls and boys, but I happen to know that it is true and I am giving it to you as the girl has written it with some modifications, which make it a little less rank, because it is well that you girls should know the true attitude these seemingly friendly boys have, toward this careless conduct on the part of the girls who think it makes them popular.—A. W. B.) The girl continues: We girls don't want boys talking this way about us, even if it does seem to make us popular for a while. Boys don't like this soft stuff forever, so let's hold our heads high and not lower ourselves to the level of the slums. Let us keep to a standard of right and purity, so that we shall be respected and looked up to and that men shall say, "That's the kind of a girl I want for a wife." Always a reader. C. L. W.

Idaho.

Family Circle Boys

Dear Mrs. Barland: and Family Circle: In a late number of THE FARMER you invited young men to write and here is my opinion and thanks for the opportunity of expressing it.

I have decided that the "social muddle" is to be acounted for by the fact that there is a general misunderstanding between the boys and the girls. They each believe of the other that they expect and demand petting, whereas the truth is that both sexes wish only companionship and entertainment.

Boys would rather talk athletics, books and such or hike, row or picnic with a girl than pet her. The same with the girl, I suppose (after reading brown-eyed Nell's letter). So let's forget the petting stuff and go in for good, clean, real fun.

About the best times I have ever had were on "weinie roasts," hikes and picnics and such are easily arranged for small groups and a good thing to substitute for car rides which end in petting parties, etc., is a "sing." We all meet at an appointed hour at the home of one of the group. We take along musical instruments, popular songs and girls. The evening is spent in singing and playing and impromptu solos and duets furnish fun and enjoyment. Refreshments are unnecessary, though much enjoyed by the boys.

All petting and dark corner athletics are forbidden and an effort is made to see that every one joins in the fun. This mingling of boys and girls together for a good time eliminates any cause for comment.

Playing tennis, cycling and swimming are also interesting and clean sport if done in the right spirit.

I agree with Miss Lucille as to dress for girls. I admire bobbed hair and pretty one-piece dresses very much

I have a word to say to the "dads," too. It isn't much advice a boy gets from his father nowdays. If advice is asked for or confidence given one gets some such reply as, "Got the fever, too, lad?" or "Thrash it out for yourself, lad, I don't understand 'wimen,'" or perhaps he will get "Better let the girls alone, son." Who wants such advice as that? What boys want and need is a good heart-to-heart talk, so they can "get the hang of things."

I guess this is enough for this time. Success to you, Mrs. Barland.

Idaho. F. L. L.

The above letter is a straight-from-the-shoulder sort that I am glad to get. Let me urge other young men to write, giving us their honest views along the lines which we are discussing. About all the great national magazines are giving much space to these vital questions which concern young people and which, as a matter of fact, lie at the very heart of our national life and well-being.

THE FARMER is going into thousands of homes every week and it will be a strange thing if many are not made thoughtful as they read actual experiences and ideas of those of their own age and walk in life.

It is an easy matter to write a long article admonishing young people to be good and behave themselves, but acording to my reasoning you can be of much more help to each other than much preaching would be. Be free, dear folks, to write and we especially desire letters from young people about 18 to 25. Your friend,

ALICE W. BARLAND.

DISGUISED.

Young Lady—Were you pleased with the new school, little boy?

Little boy—Naw! Dey made me wash me face, an' when I went tome de dorg bit me 'cause he didn't know me.—The Antidote (Peekskill).

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3

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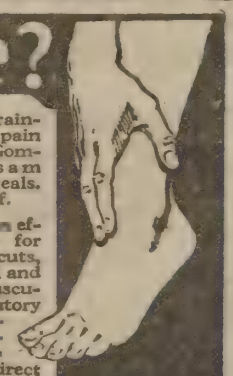
A SLIP, a fall, strained ligaments, pain and soreness. Combault's Balsam soothes and heals. Gives quick relief.

For forty years an effective remedy for sprains, strains, cuts, burns, bronchial and chest colds, muscular or inflammatory rheumatism, sciatica and lumbago. At your druggist or prepaid direct for $1.50. A bottle lasts a long time. The Lawrence-Williams Co., Cleveland, Ohio.



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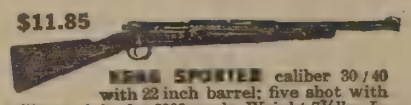

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FRANCIS BANNERMAN SONS, 501 B'way, N. Y. City

Just Folks

To some providence is an opportunity.

Confidence is confidence; it may be overconfidence, never underconfidence.

Words may be objectionable because ause they are true, and words may be leasing because they are untrue.

You can put off death by forgetting it r you can hasten death by forgetting it; is all according to what you live for.

Over 40 years ago I knew a public-spir-ed man in a New Hampshire village. I o not remember of his making any peeches in public or heading committees f his townfolk. Yet I am firmly of the pinion that he was a public-spirited citi-en.

He had left the old farm as a young an and acquired a measure of wealth y manufacturing and trade in Massa-husetts, when he returned to the small wn near the old farm, bought one of e best dwellings for his family and also **owned a business building adjoining. A large room occupying the upper story of this building was made into a museum, containing a collection of geological specimens as well as curios from Asiatic countries which had been picked up in Boston. He welcomed visitors. He talked intelligently about his collection and especially was he glad to get the boys and girls interested. He did one thing more. He put a safe, such as you see in small country stores, in a corner of his museum and invited the school children to save their pennies.**

Remember, that was 40 years ago in a small New England town.

Last summer I passed through that town and saw the sign "Meredith Village Savings Bank," on that same building, which of old contained the museum.

That is all I know about it. I know that Seneca Ladd started the children in the saving of their pennies and now I see the village savings bank sign, and I conclude that this was a public-spirited act which has continued to have its beneficent influence upon that community for more than a generation.

E A S

Latest High Class Patterns for the Home

Please order the patterns you desire at least two or three weeks before you wish use them. Desiring to obtain the latest high-class patterns for its readers, THE ARMER has made arrangements to have them sent direct from the east, and under resent mailing conditions it takes about that time for them to reach you.

4300. Ladies' dress. Cut in ven sizes: 36, 38, 40, 42, 44, and 48 inches bust measure. 38-inch size requires five d one-fourth yards of 40-ch material. The width at e foot with plaits extended two and three-eighths yards. rice 10 cents.

4502. Child's dress. Cut in ur sizes: 4, 6, 8 and 10 years. n 8-year size requires two d three-fourths yards of 36-ch material. Price 10 cents.

4501. Boys' overcoat. Cut five sizes: 6, 8, 10, 12 and years. A 12-year size re-ires two and three-eighths rds of 54-inch material. rice 10 cents.

4294. Girls' middy dress. t in five sizes: 4, 6, 8, 10 d 12 years. A 10-year size quires two and five-eighths rds for the blouse and one d seven-eighths yards for e skirt of 36-inch material. rice 10 cents.

4492. Ladies' coat dress. Cut six sizes: 34, 36, 38, 40, 42 d 44 inches bust measure. A -inch size requires three and ree-fourths yards 54-inch ma-rial. The width of the skirt the foot is one and seven-ghths yards. Price 10 cents.

4488. Ladies' house dress. t in six sizes: 34, 36, 38, 42 and 44 inches bust easure. A 38-inch size re-ires four and three-eighths rds of 36-inch material. The dth at the foot is two and e-eighth yards. Price 10 nts.

4494. Misses' dress. Cut in ree sizes: 16, 18 and 20 ars. An 18-year size re-ires six and one-fourth rds of 40-inch material. The dth at the foot is one and ree-fourths yards. Price 10 nts.

4500. Girls' dress. Cut in ur sizes: 6, 8, 10 and 12 ars. A 10-year size requires ur yards of 36-inch material. ice 10 cents.

4099. Sleeveless "cover all" ron. Cut in four sizes: all, 34-36; medium, 38-40; ge, 42-44; extra large, 46-inches bust measure. A edium size requires three d one-fourth yards of 32-inch material. ice 10 cents.

4506. Boys' suit. Cut in three sizes: 4 and 6 years. A 4-year size requires o and one-fourth yards of 36-inch mate-l. Prices 10 cents.

4321. Girls' dress. Cut in four sizes: 10, 12 and 14 years. A 10-year size re-ires four yards of 36-inch material. ice 10 cents.

4511. Ladies' jacket. Cut in seven sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. A 38-inch size requies two and three-fourths yards of 54-inch material. Price 10 cents.

Send 12 cents in silver or stamps for our up-to-date fall and winter 1923-1924 book of fashions.

Please fill in this order and mail with remittance to:
PATTERN DEPT., PACIFIC NORTHWEST FARM TRIO, Spokane, Wash.

Enclosed find ..... cents for which send me the following:

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Be sure to give the pattern number and the correct size.

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What gives a mother greater pleasure than to make the kiddies happy with the goodies she prepares for them.

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A Monarch oven is ready for any kind of baking in remarkably quick time—and with such little fuel.

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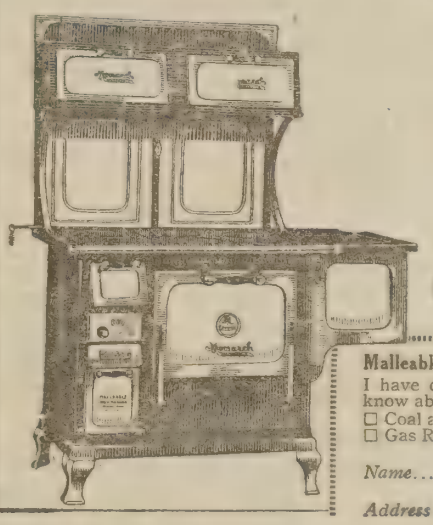

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There's no economy in using the old range even though it can be made to do for another year or so. Mail the coupon for information that will give you new ideas of what range service and economy should be.

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Malleable Iron Range Co., 26-87 Lake Street, Beaver Dam, Wis.
I have checked here the type of range I would like to know about.
☐ Coal and Wood Range ☐ Gas-Coal Combination
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"Dandelion Butter Color" Gives That Golden June Shade and Costs Really Nothing. Read!

Before churning add one-half teaspoonful to each gallon of cream and out of your churn comes butter of Golden June shade to bring you top prices. "Dandelion Butter Color" costs nothing because each ounce used adds ounce of weight to butter. Large bottles cost only 35 cents at drug or grocery stores. Purely vegetable, harmless, meets all state and national food laws. Used for 50 years by all large creameries. Doesn't color buttermilk. Absolutely tasteless.
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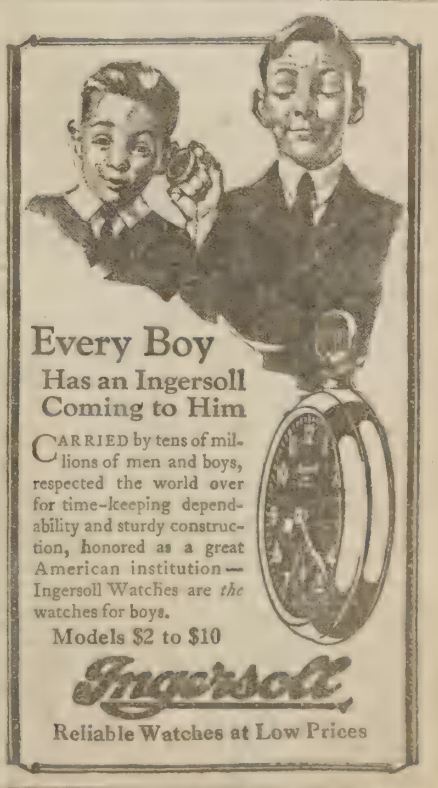

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Models $2 to $10

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Reliable Watches at Low Prices

The department editors of this paper are anxious to be of service to you. Do not fail to write to us if they can be of help to you.

High Points in News of the Week

As predicted last week, the German government has taken steps looking toward the discontinuance of opposition to France in the Ruhr district. On the surface, it appears that Germany is acting with good faith in this attempt to facilitate production in the territory occupied by France, but French officials are apparently taking no chance. Premier Poincare reiterates his original declaration that deeds and not words on the part of Germany will be believed. So far as public information goes, France is taking no action that will lessen the physical efficiency of its control of the Ruhr territory. It is understood that Germany will ask France to withdraw her military forces from this territory under agreement that Germany shall restore industrial activity and begin at once the delivery of fuel and other products from that region as provided in the original peace treaty. It is evident, however, that France is in no mood to let go the strangle hold which she has on this territory until the actual payment of reparations is begun.

The action of the government at Berlin in ordering the cessation of passive resistance on the part of the German people in the Ruhr district has led to activity on the part of the communists in that territory and elsewhere in Germany threatening to prevent the carrying out of the official orders. This situation has resulted in the setting up of military law in a number of localities, notably the province of Bavaria, where a virtual political dictatorship is now in control. Whether or not Germany will be able to restore industry to normal condition in the Ruhr district in the face of the opposition which is being manifested is a matter of outstanding interest to the world at large.

In most circles, Germany's action is looked upon as an evidence of sweeping victory on the part of France. There has been a tendency for French and Belgian securities to rise on the stock markets as a result, though there has been no evidence of outstanding strength on the part of any securities as a result of the new developments.

France and Belgium have opened a recruiting office in the Ruhr district with the object of employing 30,000 German railroad men to operate the railroads in the occupied territory, where they have been nearly idle for months. Every man who is not employed must first take an oath to obey the allied authorities.

* * *

Wheat growing interests of the central west called upon President Coolidge last week urging him to take whatever action is necessary to restore balanced conditions in wheat growing industry. The proposal was received by the president and Secretaries Wallace, of the department of agriculture, and Hoover of the department of commerce and Director Meyer of the war finance corporation. While the president has expressed keen interest in arriving at an equitable solution of the farmers' problem, there is nothing to indicate that he has yet arrived at a conclusion as to immediate governmental aids that might prove effective. Not only the president but Director Meyer and Secretaries Wallace and Hoover are urging increase and expansion and efficiency in cooperative farm organizations with a view to strengthening the farmers' position. It is evident that farm problems will again take a prominent position in the councils of the nation when congress meets in regular session in December.

* * *

Violent rains and a cloudburst in Wyoming last week resulted in large property losses and in the loss of approximately 50 lives. Greatest loss of life occurred when a passenger train went into the Big Muddy river when a bridge gave way under it.

* * *

At least 18 persons are known to have lost their lives as a result of a tornado and cloudburst which hit western Iowa and eastern Nebraska last week. Property damage is estimated at not less than one million dollars.

* * *

An election is being held this week in the Philippine Islands, the outstanding issue being the question of Philippine independence. One party is pledged to a continuance of the administration of the Philippine government by the United States, as at present, and the other is pledged to continued effort for the setting up of a completely independent nation.

* * *

Former Premier Lloyd George of England is now on his way to America, where he will spend several weeks visiting in Canada and the United States. He is reported to be coming as a private individual and not as a representative of official England in any degree.

Farm Business and Markets Outlook

(Continued from page five.)

LATEST QUOTATIONS.

The Live Stock Market.

PORTLAND, Ore., Sept. 29.—Cattle—Choice steers, $7@7.50; medium to good steers, $6.50@7; fair to medium steers, $5.50@6.50; common to fair steers, $4.50@5.50; choice heifers, $5@5.25; choice cows and heifers, $4.50@5; medium to good cows, heifers, $4@4.50; fair to medium cows, heifers, $3.50@4; common cows and heifers, $2.50@3.50; canners, $1.50@2.50; bulls, $3.25@4.25; prime light dairy calves, $10@11; medium light dairy calves, $9@10; heavy calves, $5@6.50; choice feeder steers, $4.50@5; fair to good feeder, $3.75@4.50.

Hogs—Prime light, $9@9.25; smooth heavy, 230-300 lbs. $8@9; smooth heavy, 300 lbs up, $7@8; rough heavy, $5@7; fat pigs, $8.25@9; feeder pigs, $8@8.50; stags, $2.50@5.

Sheep—East of mountain lambs, $10@10.75; choice valley lambs, $10@10.50; medium lambs, $9.50@10; common lambs, $8.50@9.50; cull lambs, $7@8.50; light yearlings,, $8.50@9; heavy yearlings, $6.50@7.50; light wethers, $6@7.50; heavy wethers, $5@6; ewes, $1.50@6.50.

SPOKANE, Wash., Sept. 29.—Cattle—Prime steers, $4.75@7.25; good to choice steers, $6.25@6.75; medium to good steers, $5.50@6.25; fair to medium steers, $5@5.50; common to fair steers, $4.25@5; choice cows and heifers, $5@5.50; good to choice cows, heifers, $4.50@5; medium to good cows, heifers, $4@4.50; fair to medium cows, heifers, $3@4; canners, $2@2.50; bulls, $3.25@4; light veal calves, $8@9; heavy veal calves, $6.50@8; stockers and feeders, $4@5.25.

Hogs—Prime mixed, $8.50@8.75; medium, $8.25@8.50; heavies, $5.50@7.75; fat pigs, $8.25@8.50; stockers and feeders, $7@7.50.

Sheep—Prime lambs, $10@10.35; fair to medium, $8.50@10; yearlings, $7@8; wethers, $5.50@7; mutton ewes, $3@5.

The Grain Market.

PORTLAND, Ore., Sept. 29.—Wheat—Hard white, Bluestem, Bart, soft white, $1.05; western white, $1.03; hard winter, northern spring, $1.01; western red, $1.

Grain futures: Wheat—Bluestem, Bart, soft white, September, $1.05; October, November, $1.04; western white, September, $1.03; October, November, $1.04; hard winter, September, October, November, $1.01; northern spring, September, October, $1.01; November, $1; western red, September, $1; October, $1.01; November, $1.

Oats—No. 2 white feed, September, October, $29.50; November, $29; No. 2 gray, September, $28; October, November, $27.50.

Barley—No. 2, 46 pounds, September, October, November, $29; 44 pounds, September, October, November, $28.50.

Corn—No. 2 eastern yellow shipment, September, $37.50; October, $37; November, $35.50.

Hay and Feed Grain.

SPOKANE, Sept. 29.—Wheat—Feed wheat, $36 ton. Oats—$36 per ton; rolled, $38. Corn—$44 per ton; cracked corn, $46 per ton. Barley—$34 per ton; rolled, $36. Bran—$26 per ton. Bran and shorts—$27 per ton. Shorts—$31 per ton.

Alfalfa, $20 ton in ton lots, $16@18 carload lots; new timothy, $20 in ton lots, delivered.

PORTLAND, Sept. 29.—Millfeed—City delivery prices: Mill-run, $20 per ton; middlings, $41; scratch feed, $47; rolled barley, $39@41; cracked corn, $48; rolled oats, $39.

Hay—Buying prices f. o. b. Portland: Alfalfa, $16@16.50; per ton; cheat, $12@13; valley timothy, $18@19; eastern Oregon timothy, $20@22; clover, $13@14; oat, $14@15; oat and vetch, $15@16; straw, $8 per ton.

General Produce.

PORTLAND, Sept. 29.—Butter—Cubes, extra, 45@46c lb; prices, parchment wrapped box lots, 49c; cartons, 50c. Butterfat, 49c, delivered Portland; average station buying prices, 40c lb.

Eggs—Buying prices: White hennery standards, 43@45c; mixed color standards, 37@38c dozen. Selling prices: Front street, selects, 50c; candled ranch, 44@46c; pullets, 37c. Association selling prices, cash at store: Extras, 48c; standards, 45c; pullets, 35c.

Cheese—Price to jobbers, f. o. b. Tillamook: Triplets, 30c; longhorns, 31c; loaf, 32c per lb. Eastern cheese, prices f. o. b. Wisconsin twins, 26c; triple daisies, 26 1-4c; Wisconsin cream brick, 23½c; limburger, firsts, 25c; limburger, seconds, 25½c; block Swiss standards, 31c; fancy open, 33c; wheel Swiss, fancy, large eyes, 41c.

SPOKANE, Sept. 29.—Poultry, live weight—Hens, 4 lbs. and over, 18c; light hens, under 4 lbs, 14c; springs, 20@22c; old roosters, 8c.

Fresh ranch eggs—$8.50 to $9.50 case; fancy poultry farm, $9.50@10.

SEATTLE, Sept. 29.—Eggs—Select local ranch, white shells, cases included, 45c per doz f. o. b. Seattle; mixed colors, 42c per doz; pullets, 32c per doz; checks, 25c per doz; cases returned to shippers, 1c less, do to country stores, f. o. b., 42c per doz, loss off; eastern Washington, case count, 38c per doz f. o. b. Seattle.

Butterfat—F. o. b. Seattle. A grade, 50c per lb; raw milk, $2.35 per cwt.

Poultry—Hens, 4½ lbs and up, 25c per lb; do 3½ and under 4½ lbs, 18c per lb; springs, 2 lbs and heavier, 25c per lb; do 1 to 2 lbs, 28c per lb; hens, 3 to 3½ lbs, 13c per lb; do dry picked, 3c above live; capons, live, fat, 6 to 10 lbs, 35c lb; do dry picked, fancy, dressed, 38c per lb; do roosters, 11c per lb; Belgian hares, 3½ lbs and heavier, 13c per lb; geese, fat, live, 12c per lb. ducklings, live, 3½ lbs and up, 17c per lb; ducks, old, over 3 lbs, 15c per lb; turkeys, fat, dry picked, 8 to 10 lbs. 30c per lb; do live, 27c per lb; squabs, large, dressed, $3.50 per doz; pigeons, $2; guineas, $8 per doz.

Beef—Steers, fancy, 7c per lb; cows, fat, 5c per lb.

Mutton—Fat, 9c per lb; spring lambs, fat, 16@17c per lb.

Hogs—Good block, 90 to 150 lbs, 11@13c per lb; do heavy, 8@11c per lb.

Range of Live Stock Prices for Week Ending September 26

	Chicago.	Spokane.	Portland.	N. Salt Lake.
CATTLE.				
Choice and prime heavy steers (1100 lb. up)	11.90@13.00	.....	.....	.....
Good heavy steers	10.00@11.90	.....	.....	.....
Medium heavy steers	8.00@10.15	.....	.....	.....
Common heavy steers	6.15@ 8.15	.....	.....	.....
Choice and prime light steers (1100 lb. down)	11.90@12.75	.....	.....	.....
Good light steers	9.90@11.90	.....	.....	.....
Common light steers	5.75@ 8.00	4.25@ 6.25	4.00@ 6.50	4.50@ 6.75
Common light steers	7.85@10.00	6.25@ 7.25	6.50@ 7.50	6.50@ 7.25
Common to choice butcher heifers	4.40@11.35	3.50@ 5.75	3.25@ 5.75	3.50@ 5.50
Common to choice butcher cows	3.50@ 8.75	2.75@ 5.00	2.75@ 5.00	2.50@ 5.00
Bologna and beef bulls	3.50@ 7.50	3.00@ 4.00	3.00@ 4.50	3.00@ 4.25
Canners and cutters, cows and heifers	2.75@ 3.60	2.00@ 3.00	2.00@ 3.00	2.00@ 3.25
Canner steers	3.25@ 5.75	2.50@ 3.50	2.50@ 3.75	.....
Medium to choice light veals	8.50@13.75	8.00@ 9.00	8.50@10.50	8.00@ 9.50
Common to choice heavy veals	3.00@13.50	6.50@ 8.00	7.00@ 9.00	6.00@ 8.00
Common to choice feeders (750 lb. up)	5.25@ 9.00	.....	.....	.....
Common to choice feeders (750 lb. down)	4.35@ 8.50	4.00@ 5.25	.....	.....
Common to choice stocker cows and heifers	3.25@ 5.50	.....	.....	.....
HOGS.				
Top of market	9.00	9.75	9.75	.....
Bulk of sales	7.40@ 8.80	8.75@ 9.50	8.75@ 9.50	7.25@ 8.35
Heavy (250 lb. up)	7.80@ 8.90	8.50@ 9.50	.....	.....
Medium (200-250 lb.)	8.00@ 9.00	8.75@ 9.50	8.75@ 9.75	7.25@ 8.25
Light (150-200 lb.)	7.50@ 8.90	9.00@ 9.50	8.75@ 9.75	7.25@ 8.35
Light lights (130-150 lb.)	7.00@ 8.65	8.75@ 9.50	8.50@ 9.50	7.00@ 8.25
Smooth packing sows (250 lb. up)	7.15@ 8.00	7.50@ 8.25	7.75@ 8.50	5.25@ 6.15
Rough packing sows (200 lb. up)	6.75@ 7.50	6.50@ 7.50	6.00@ 7.75	5.00@ 5.50
Medium to choice pigs (130 lb. down)	6.00@ 7.75	9.00@ 9.50	.....	.....
Stock pigs	.....	8.25@ 8.75	.....	.....
SHEEP AND LAMBS.				
Medium to prime lambs (84 lb. down)	12.00@14.50	9.25@10.35	9.50@10.50	9.50@11.00
Culls and common lambs	9.00@12.50	8.50@ 9.50	8.50@ 9.50	8.00@ 9.50
Medium to prime yearling wethers	8.50@11.75	7.00@ 8.00	.....	5.35@ 6.35
Medium to prime wethers	5.25@ 9.50	5.50@ 7.00	.....	4.10@ 5.00
Medium to choice ewes	3.75@ 7.00	3.00@ 5.00	2.75@ 4.50	3.00@ 3.85
Canner and cull ewes	1.00@ 3.75	1.50@ 3.00	1.50@ 3.00	.....
Feeder lambs	12.00@13.75	.....	.....	.....

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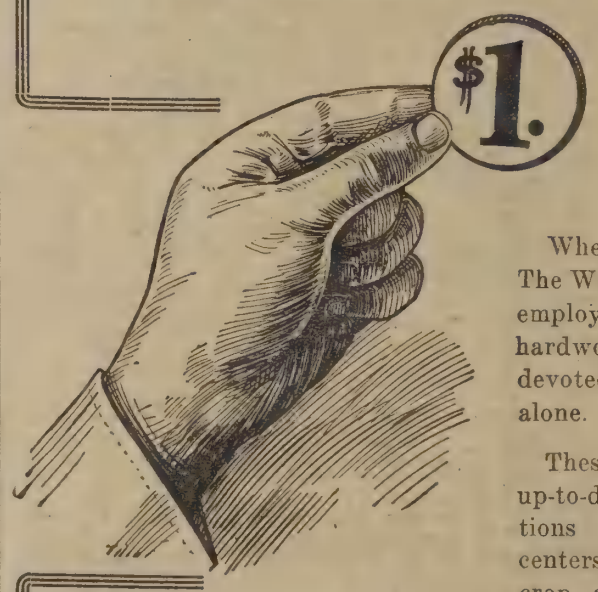

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If your subscription is already paid in advance it will be extended from the date to which it is paid. Oct. 4, 1923.

Aunt Nellie takes pleasure in presenting Freeda Dittmar to the Corner cousins. Freeda says her parents have taken THE FARMER for five years. This new cousin will be 10 years old September 20. She is a Spokane county girl.

Every morning Hannah Wells takes the cream to the creamery. She likes to ride her pony very much. She hasn't any brothers, sisters or playmates, so she has to amuse herself, and, from her letter, Aunt Nellie knows she has done this very nicely. She helps mother and father whenever she can and this summer her grandma and grandpa from Iowa have made them a visit. She writes that daddy had 16 acres in grain this year.

Birthday Greetings

THURSDAY, October 4—Loretta La-Follette, 11 years old; Gwendolyn Schuyleman, 9; Mildred Watson, 8.

FRIDAY, October 5—Geneva Strahm, 9 years old.

SATURDAY, October 6—Stella Cade, 10 years old; Artie James, 10; Ruth Powers.

SUNDAY, October 7—Thordis Fjerlie, 10 years old; Blanche L. Gourlay, 9; Linda Hoikka, 9; Lillian Ward, 10; Ruth Rand, 9.

MONDAY, October 8—Ruth Stuhr, 10 years old; Marguerite Jones, 11; Wayne Milan.

TUESDAY, October 9—Erma Brannan, 11 years old.

WEDNESDAY, October 10—Marvin De-Goyer, 9 years old; Annie Mae Wyatt, 11.

LETTERS WEELCOMED BY AUNT NELLIE.

Among recent letters received by Aunt Nellie are those from cousins whose names follow. A few of these will be published each week in the regular edition of THE FARMER and others will appear from time to time in The Junior Farmer:

Emma Rauber, Freda Stump, Verna Stevens, Beatrice Hazelton, Leda Ruby Harrell, Jessie Fisher, Phyllis Van Dyke, Bertha Van Derchelden, Alice Lavina Halsted, Anna Van Derchelden, Mary Elizabeth Propst, Gladys Halverson, Helen Wise, Elsie Forsgren, Elizabeth Anderson, Maurice Gerritsen.

BEDTIME STORIES

By THORNTON W. BURGESS.

HELPING BY WATCHING.

Peter Rabbit felt very important as he kept watch in the old orchard. He couldn't kill bugs and worms because in the first place he couldn't climb trees, and in the second place he didn't eat bugs or worms. So indeed, Peter couldn't even think of such a thing and feel comfortable. But he had found a way of helping those who could. He could watch out for danger, so that the others could give all their attention to the bugs and not worry for fear they would be surprised by their enemies, and this made Peter very happy. You see, he felt now that he was really doing something for Farmer Brown's boy. The latter might not know it, but the little feathered folk who were working so hard to save the fruit by killing the bugs and worms that were spoiling the trees knew it, and Peter himself knew it, and that was enough.

So Peter sat up very straight with his long ears pointing straight up to the blue, blue sky, and he watched this way and he watched that way. Over on the other side of the old orchard was Johnny Chuck doing the same thing. In the trees the birds were working with might and main and chattering merrily as they worked. Even Sammy Jay was helping. Peter wouldn't have believed it if he hadn't seen it for himself. But he did see it. He saw Sammy tear open a big nest of caterpillars, and when Sammy got through there wasn't a caterpillar left.

"Good for you, Sammy!" called Peter.

Sammy pretended not to hear, but he did hear and secretly he was pleased. You see, Sammy doesn't often hear nice things said to him, and it gave him a very pleasant feeling inside, though not for the world would he have admitted it. It was while Peter was watching Sammy to see what he would do next that he felt the ground rise under him. It was so sudden and unexpected that he nearly lost his balance, and had to drop down on all four feet. It frightened him, too. He jumped off to one side and then looked where he had been sitting to see what it meant. There was a little ridge where the earth had been pushed up from beneath and even as Peter looked the ground moved as if something was shoving it up and the little ridge was a few inches longer than before.

Peter knew right away who had frightened him. He knew that little ridge was made by Miner the mole and that Miner was making a tunnel right along just under the surface through the old orchard. Of course, Miner hadn't known that Peter was sitting there, and he had just happened to push his tunnel right under Peter. Now most people are apt to be a little bit cross when they are frightened, especially if they find that there was nothing to be frightened of. It was so with Peter.

"Ha!" exclaimed Peter. "I'll teach you to frighten honest people!" And with that he hopped over to the spot where by the movement of the earth he could tell that Miner was at work. And then what do you think he did? Why he thumped with all his might right over Miner the mole. Of course It wasn't a nice thing to do, not at all a nice thing to do. It was trying to get even and it was doing it in an unfair way. You see, Miner hadn't intended to frighten Peter, but Peter did intend to frighten Miner. He did frighten him, too. Who wouldn't be frightened to have a terrible thump just over their

"What are you doing down there under ground, anyway?" demanded Peter.

head? Miner was just as much frightened as Peter had been a few moments before.

He backed along his tunnel until he reached the nearest opening. He didn't come out because the sunlight hurts his eyes, but he scolded angrily at Peter, who had followed by watching the roof of the little tunnel move.

"What are you doing down there under ground, anyway?" demanded Peter.

"Tne minding my own business, that's what!" retorted Miner crossly. "It's a pity if a fellow can't hunt for his food without having other people try to frighten him to death."

"What kind of food do you find down there?" asked cPter.

"Grubs and worms," replied Miner shortly. "If it wasn't for me they'd ruin half the green things that grow."

"Then you're helping Farmer Brown's boy, too!" cried Peter delightedly. "If I had known that I wouldn't have been so mean and frightened you." (Copyright.)

Home Recipes

Bran muffins: Two cups of bran, one cup white flour, one cup buttermilk or sour milk, one teaspoon soda, one-half teaspoon salt, three tablespoons molasses, one-half cup raisins if desired. Add buttermilk in which the soda has been dissolved and molasses. Pour into greased muffin pans and bake in a moderate oven. This makes one dozen muffins.

Fried chicken: This is the time for fried chicken and some cooks seem to dry it so it losses flavor. Try this way.

Cut the chickens into pieces so all will lie as flat as possible. Dip into a beaten egg mixed with two tablespoons of milk each piece, then into flour and drop into a frying pan with plenty of hot butter or butter and meat fryings mixed. Cook it quickly, so as to brown on each side; it should take possibly 10 minutes. Have more fat ready in a roasting pan or some suitable pan and place the chicken in it and when it is hot and frying well, turn over it a cup of sweet milk and cover closely and put in the oven. Cook until tender. It should be seasoned properly with salt and pepper. Leave off the cover the last 15 minutes. A. W. B.

Grape conserve: One basket of grapes, three oranges, pulp and rind, one pound raisins, three pounds sugar. Cook grapes in as little water as possible and strain through a sieve. Remove all the white fine shreds and cook in water till tender. part of the orange rinds, cut the outside in Cook all together and add one-half pound of nut meats. MRS. M.

Spiced plums: Use large blue plums, prick well with a fork; four large cups heaped up, four cups sugar, one-half cup vinegar, one-half teaspoon cinnamon, one-fourth teaspoon each cloves and allspice. Cook all together until thick; put in jars. Good with roast meats. Mrs. C.

Cucumber catsup: Four large green cucumbers, one large onion, one pint vinegar, one tablespoon salt, one tablespoon black pepper.

Grate cucumbers and onions and mix well. Let stand an hour or more, then drain off the water. Add seasoning, also a grated horseradish if convenient. Put into bottles and cork tightly.

MRS. C. F. R.

Your Health

By Royal S. Copeland, M. D., F. A. C. S.

In these modern days community spirit reveals itself in surprising ways. In olden times the pioneers had "bees," occasions when all the neighborhood gathered to assist in raising the framework of a heavy-beamed house or barn or do some other good deed for a neighbor. The women met together to assist at quilting or rag-sewing.

Dr. Copeland.

In those times the nursing of a neighbor who was suffering from accident or sickness was undertaken by the kind-hearted friends in the community. I can recall many nights when my father served his turn in caring for a neighbor who had broken his leg.

Today assistance to the individual is less needed. The vast increase in facilities for human comfort, the multiplication of machinery and the many aids to happiness and convenience have done away with the need of most old-fashioned community activities.

Now we group together to aid the community instead of the individual. We have taxpayers' associations, park and playground societies, town improvement circles and many other organizations. One of the latest ideas is "Clean-up week," or "Clean-up and Paint-up week."

The objectives are the removal of rubbish piles, of insect-breeding places, of tin cans and dead cats. But the plan does not end with street, sidewalk, areaway and vacant lot cleanliness. It extends to the attics and basements of our own homes.

This is a splendid movement, because, for one thing, it protects against fire. Most fires in cities start in basements. I am not sure but this is true everywhere. Anyhow, rubbish accumulations are fire traps. On this account they are a menace to life and safety.

But more than this, rubbish in the home affords a breeding place for rats and mice, notorious carriers of disease. Bubonic plague, epidemic jaundice and we know not how many other diseases are transmitted by rodents.

Vermin of every variety are disease carriers. Repairing the broken plaster, filling the cracks in floors, walls and ceilings, and doing away with all the crevices in which lurk the filthy, crawling, repellent creatures inimical to health and well-being—this is a worthy movement which should arouse the enthusiasm of every citizen.

By all means, let us have a clean-up week in every community. Let us clean the streets and the out-of-the-way places. Let us mend the fences, paint the houses and all the buildings of our particular group.

We depend for inspiration, for happiness, for ambition upon our surroundings. Beauty, cleanliness and orderliness make for clean minds, good thoughts, right habits and, consequently, for good health.

I favor 'Clean-up and Paint-up week." Community and domestic cleanliness is as important to health as is personal cleanliness. Each of us should do a man's part in making a success of this forward-looking plan. Come on, let's start with our own attic!

Time to oil those roofs —

If your shingle roofs are beginning to look shabby, that means they are soon to leak and make trouble. Renew their life for the coming rainy season by an inexpensive application of Oronite Shingle Oil.

Oronite Shingle Oil is a high quality preservative that penetrates the shingles, retards the evaporation of the natural oils in the wood, and prevents the absorption of moisture. Occasional treatments retard warping, splitting and leaks and prevent moss growths. It's the economical way of keeping down repair bills.

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Shingle Oil

Live Stock Awards

(Continued from page nineteen.)

and under eight—1, on June; 2, on Fairholme Meg. Three-year-old—1, on Garfield Bell (senior and grand champion); 2, on Bonnie Brae Jean. Two-year-old—1, on Lady May. Yearling—1, on Bonnie Brae Gem (junior champion); 2, on Bonnie Brae Topsy. Filley—1, on Bonnie Brae Nancy; 2, on Bonnie Brae Peggie. Mare and foal—1, on Lady Ramsey and foal; 2, on Fairholme Meg and foal.

Groups: 1 and 2 on get of sire, 1 and 2 on produce of mare and 1 and 2 on stud.

Shetland Ponies.

About 20 head of highly bred and wonderfully fitted and trained Shetland ponies were shown by F. H. Divan & Sons of Monroe, Wis. They received all awards in their respective lots.

The Sheep Show.

Eleven breeds of sheep filled the sheep barn fairly well, with quality satisfactory in nearly all instances. The awards follow:

The Oxford Downs.

Rams—Aged ram—1, Floyd T. Fox, Silverton, Ore.; 2 and 3, E. F. Hubbard, Corvallis, Ore. Yearling—1 and 2, Hubbard; 3, Fox. Ram lamb—1, Hubbard; 2 and 3, Fox.

Ewes—Aged ewe—1, Hubbard; 2 and 3, Fox. Yearling—1 and 3, Hubbard; 2, Fox. Ewe lamb—1 and 2, Fox; 3, Hubbard.

Get of sire—1, Fox; 2, Hubbard. Produce of ewe—1, Fox; 2, Hubbard. Pen—1, Fox; 2, Hubbard. Flock—1, Fox; 2, Hubbard. Champion ram—Fox. Champion ewe—Hubbard.

Romneys.

Rams—Aged ram—1 and 2, William Riddle Jr., Monmouth, Ore.; 3, George Brown, Aldergrove, B. C. Yearling—1 and 2, Riddell; 3, Brown. Ram lamb—1 and 2, Riddell; 3, Brown.

Ewes—Aged ewe—1 and 2, Riddle; 3 Brown. Yearling—1, Brown; 2 and 3, Riddell. Ewe lamb—1 and 2, Riddell; 3, Brown.

Get of sire—1 and 2, Riddell; 3, Brown.

Produce of ewe—1, Riddell; 2, Brown. Pen—1 and 2, Riddell; 3, Brown. Flock—1 and 2, Riddell; 3, Brown.

Champion ram and champion ewe—Riddell.

Rambouillets.

Rams—Aged ram—1 and 2, Burlingame & Craig, Walla Walla; 3, Bullard Bros., Woodland, Cal. Yearling—1 and 3, Burlingame & Craig; 2, Bullard Bros. Ram lamb—1 and 2, Bullard Bros.; 3, Burlingame & Craig.

Ewes—Aged ewe—1 and 2, Burlingame & Craig; 3, Bullard Bros. Yearling—1 and 3, Burlingame and Craig; 2, Bullard Bros. Ewe lamb—1 and 3, Bullard Bros.; 2, Burlingame & Craig.

Get of sire—1, Bullard Bros.; 2 and 3, Craig. Produce of ewe—1 and 2, Burlingame & Craig; 3, Archie C. Stewart, Aldergrove, B. C. Pen—1, Bullard Bros.; 2 and 3, Burlingame & Craig. Flock—1 and 2, Burlingame & Craig; 3, Bullard. Champion ram and champion ewe, Burlingame & Craig.

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The Shropshires.

Rams—Aged ram—1 and 3, Floyd T. Fox, Silverton, Ore.; 2, Felzer Bros., Corvallis, Ore. Yearling—1, Felzer Bros.; 2, Fox; 3, Archie C. Stewart, Aldergrove, B. C. Ram lamb—1 and 3, Felzer Bros.; 2, Fox.

Ewes—Aged ewe—1, Felzer Bros.; 2, Fox; 3, Stewart. Yearlings—1 and 2, Felzer Bros.; 3, Fox. Ewe lamb—1, Fox; 2 and 3, Felzer Bros.

Get of sire—1, Felzer Bros.; 2, Fox; 3, Stewart. Produce of ewe—1, Stewart. Pen—1, Felzer Bros.; 2, Fox; 3, Stewart. Flock—1, Felzer Bros.; 2, Fox; 3, Stewart.

Champion ramb—Fox. Champion ewe—Felzer Bros.

Shropshire specials—Best flock—1, Felzer Bros.; 2, Fox. Best pen—1, Felzer Bros.; 2, Fox.

Southdowns.

Rams—Aged rams—1 and 2, J. G. S. Hubbard & Sons, Monroe, Ore.; 2, Archie C. Stewart, Aldergrove, B. C. Yearling—1 and 2, Hubbard & Sons; 3, Stewart. Ram lamb—1 and 2, Hubbard & Sons; 3, Stewart.

Ewes—Aged ewe—1, Hubbard & Sons; 2 and 3, Stewart. Yearling—1 and 2, Hubbard & Sons; 3, Stewart. Ewe lamb—1, Stewart; 2 and 3, Hubbard & Sons.

Get of Sire—1 and 3, Hubbard & Sons; 2, Stewart. Produce of ewe—1 and 3, Hubbard & Sons; 2, Stewart. Pen—1 and 3, Hubbard & Sons; 2, Stewart. Flock—1 and 2, Hubbard & Sons; 3, Stewart.

Champion ram and champion ewe—Hubbard & Sons.

The Hampshires.

Rams—Aged rams—1 and 2, J. G. S. Hubbard & Sons, Monroe, Ore. Yearlings—1 and 3, Archie Prior, Yakima, Wash.; 2, Hubbard & Sons. Ram lamb—1, Carol Robinson, Ellensburg, Wash.; 2 and 3, Prior.

Ewes—Aged ewe—1 and 2, Hubbard & Sons. Yearling—1 and 2, Hubbard & Sons. Ewe lamb, 1 and 2, Hubbard & Sons; 3, Ed Forquer, Granger, Wash.

Get of sire—1 and 3, Hubbard & Sons; 2, Prior. Produce of ewe—1, Forquer. Pen—1 and 3, Hubbard & Sons; 2, Prior. Flock—1 and 2, Hubbard & Sons.

Champion ram—Carol Robinson. Champion ewe—Hubbard & Sons.

The Lincolns.

Rams—Aged ram—1 and 2, William Riddell & Sons, McMinville, Ore.; 2, Archie C. Stewart, Aldergrove, B. C. Yearling—1, Stewart; 2, William Riddell Jr., Monmouth, Ore; 3, Riddell & Sons. Ram lamb—1 and 3, Riddell & Sons; 2, Arichie Prior, Yakima, Wash.

Ewes—Aged ewe—1, Stewart; 2, Riddell Jr.; 3, Riddell & Sons. Yearling—1, Stewart; 2, Riddell & Sons; 3, Riddell Jr. Ewe lamb—1 and 2, Riddell & Sons; 3, Riddell Jr.

Get of sire—1 and 3, Riddell & Sons; 2, Stewart. Produce of ewe—1, Stewart; 2, Riddell Sons; 3, Riddell Jr. Pen—1 and 3, Riddell & Sons; 2, Stewart. Flock—1, Stewart; 2, Riddell & Sons; 3, Riddell Jr.

Champion ram and champion ewe—Stewart.

The Cotswolds.

Rams—Aged ram—1 and 2, William Riddell & Sons, Monmouth, Ore. Yearling—1 and 2, Riddell & Sons. Ram lamb—1, Riddell & Sons; 2 and 3, D. J. Kirby, McMinnville, Ore.

Ewes—Aged ewes—1 and 3, Riddell & Sons; 2, Kirby. Yearlings—1 and 2, Riddell & Sons; 3, Kirby. Ewe lamb—1 and 2, Riddell & Sons; 3, Kirby.

Get of sire—1 and 3, Riddell & Sons; 2, Kirby. Produce of ewe—1, Kirby; 2 and 3, Riddell & Sons. Pen—1 and 3, Riddell & Sons; 2, Kirby. Flock—1 and 2, Riddell & Sons; 3, Kirby.

Champion ram and champion ewe—Riddell & Sons.

Fat Sheep.

Archie C. Stewart, Aldergrove, B. C., made the fat sheep show with the middle wool breeds. His winnings follow: 1 and 2 on yearling wether; 1 and 2 on wether lamb; 1 on pen of three wethers and champion wether.

Mr. Stewart also showed fat sheep of the long wool breeds, winning awards on all animals entered.

The Leicesters.

E. F. Hubbard, Corvallis, Ore., made the show in Leicesters with practically full classes winning awards on all animals entered.

The Dorset Horned.

Floyd T. Fox, Silverton, Ore., provided the Dorset horned show, winning on all animals entered in practically full classes.

The Milk Goats.

W. H. Higday, Donald, Wash., made the purebred Toggenburg show, winning the following awards:

Aged buck—1 on La Crona's Prince Olwin. Doe, three years or over—1 on J. R. O. May Belle. Yearling doe—1 on Thelka 4th. Doe, under 1 year—1 and 2 on unnamed does. Champions—Champion buck and champion doe.

W. H. Higday, H. H. Abrams, Grammore, Wash., and E. W. Bailey, Naches, Wash., made the show in grade or crossbred milk goats and won the following awards: Doe, 2 years and over—1, Bailey. Doe, two years and under three—1 and 2, Higday; 3, Bailey. Yearling doe—1, Abrams; 2, Higday. Doe, under one year—1 and 2, Higday; 3, Bailey.

Holsteins Are Sold

The complete dispersal sale of registered Holsteins from the Horan Fruit farm at Wenatchee was held at the Skagit county fairgrounds at Burlington September 10. The average price of $126 included a number of young animals which had been on pasture all summer.

The top animal was Howtje Segis Maid, a 5-year-old, sired by Chief Segis, the first herd sire on the Horan place and who has a number of good producing daughters. She is out of Howtje Pledge Maid D. K. The cow has a record of 20.98 pounds of butter and 427.2 pounds of milk and was sold to J. R. Smith of Edison for $300. There were eight animals in the sale that sold above $200.

There was a fair crowd at the sale, but many of the farmers were in the midst of threshing and could not attend, but the price was considered a good one for the shape the animals were in. George A. Gue of Auburn auctioned the sale.

A list of the animals, their purchasers, and prices paid for each, follows: King Imogen Hegerveld, H. Tarry, Mt. Vernon, $50; Spofford Segis Oakhurst, A. Gerriet, Burlington, $100; Andy May Cornucopia Maderia, A. C. Thurman, Mt. Vernon, $110; Sir Kaan Mercedes Paul Lady Lyons 2d, A. Gerriet, $90; Freja Cornucopia Johanna, J. R. Smith, Edison, $200; Wenatchee Sethje Ormsby Wayne, Edward Johnson, Mt. Vernon, $200; Wenatchee Aaggie Fayne Blossom, J. R. Smith, $250; Wenatchee Nora Newman Korndyke, H. Tarry, $120; Wenatchee Gerben Korndyke Segis, T. Dekker, Bow, $200; Wenatchee Veeman Polkadot, B. L. Heggen, Mt. Vernon, $105; Wenatchee Bos Artis, B. L. Heggen, $145; Wenatchee Floa Artis Maid, D. Dykstra, Everett, $85; Wenatchee Ormsby Floa Artis, R. Kooistra, Carnation, $96; Wenatchee Veeman Korndyke, D. Dykstra, $80; Wenatchee Anchor Floa Artis, D. Dykstra, $110; Wenatchee May Artis, J .Dekker, $210; Wenatchee Mech. Veeman, D. Dykstra, $105; Wenatchee Pietertje Floa Artis, E. V. Landell, Bow, $115; Wenatchee Nora Newman Artis, B. L. Heggen, $150; Wenatchee Crescent Floa Artis, D. Dykstra, $160; Wenatchee Lyons Artis, B. L. Heggen, $80; Belle Susie Edgerly, J. R. Smith, $110; Gertie Heng Polkadot, J. R. Smith, $200; Wenatchee Segis, D. Dykstra, $225; Lalla May Cornucopia, R. McKibben, Mt. Vernon, $230; Houwtje Segis Maid, J. R. Smith, Edison, $300; Wenatchee Mech. Lucy, H. Tarry, $115; Anna Cornucopia Johanna, L. R. Hanson, Mt. Vernon, $162.50; Nellie Mech. Lucy, R. V. Wyatt, Lyman, $90; Brita Ormsby Korndyke, C. F. McClain, Mt. Vernon, $105; Wenatchee Mech. Veeman 2d, T. Dekker, $85; Wenatchee Segis Veeman, R. Kooistra, $70; Wenatchee Segis Korndyke, W. K. Henry, Bow, $70; Wenatchee Crescent Floa Artis 2d, W. K. Henry, $75; Wenatchee Ormsby, Peter Omdal, Bow, $60; Wenatchee May Artis 2d, H. M. Eakins, Burlington, $75; Wenatchee Newman, R. Kooistra, $67.50; Wenatchee Pietertje Floa Artis 2d, A. C. Thurman, $60; Wenatchee Bos Artis 2d, J. Dekker, $90.

SHOWED DUROCS AT LEWISTON.

The Duroc Jersey show at the recent Lewiston-Clarkston fair was made up largely, if not entirely, of Washington hogs. The principal exhibitors were Earl F. Harper of Johnson, B. W. Powers & Sons of Palouse, Elmer and Homer Sawyer and Marjorie Jones, club members of Palouse, and W. J. Davis Jr., Johnson. Their winnings are found in the following awards in the Duroc Jersey futurity and, in addition, they divided the ribbons in the open classes for this breed.

Junior boar pigs—First and third, Sawyer brothers, Palouse, Wash., on Joe Sensation and Orion Sensation; second, Earl F. Harper, Johnson, Wash., on Mayview Orion; fourth and fifth, W. J. Davis Jr., Johnson, Wash., on Davis' Pathfinder and Davis' Pathfinder 2d; sixth, Marjorie Jones, Palouse, Wash., on Latah Brownie.

Junior sow pigs—First, second and fourth, Harper on Mayview Double Orioness 2d, Mayview Double Orioness and Mayview Double Orioness 3d; third and fifth, Sawyer brothers on Lady Sensation and Critic's Sensation Fannie; sixth, Marjorie Jones on Latah Beauty; seventh, eighth, ninth and tenth, B. W. Powers & Sons, Palouse, Wash., on Red Giantess, Red Giantess 1st, Red Giantess 2 and Red Giantess 3d.

Litters of four—First, Harper, on litter of Mayview Queen Orioness; second, Sawyer, on litter of Pauline Sensation; third, Powers & Sons on litter of Sensation's Giantess; fourth, Davis Jr. on litter of Woodland's Model 4th; fifth Marjorie Jones on litter of Latah Beauty.

TAKE LANTERN'S PLACE.

Modern farm lights are life savers.

Breeders' Dept.

Pacific International

HOLSTEIN SALE

Friday, November 9th, 10 A. M.

THIS WILL BE THE FINEST OF THE TWELVE ANNUAL SALES

dispersing the famous Max Arp federal accredited herd of 50 head. This entire herd averages 21,000 lbs. of milk and 907 lbs. of butter for the year.

Also 30 head from F. R. Beals—his entire show herd.

3 head from Thos. Owens—one a 1000-lb. bull calf.

3 head from Thos. Yarr—all extra quality.

High records and show ring honors.

GEORGE A. GUE
Sales Mgr.
Auburn, Wash.

Paraline Dairy Offers Holsteins for Sale

a few choice cows and heifers; also two good bull calves from year record dams. Federally accredited, high producing herd. Overstocked.

ALOYS SCHULER,
New Plymouth, Idaho.

Registered Holstein Heifer Ormsby breeding must be sold to make room for this year's crop; priced reasonable. Federal accredited.
GEO. W. SCHREPEL, R1, Corvallis, Ore.

Guernsey Specials

Bull calf out of class leader, Bob's R. S. Royalette 93637, A. R. 641.4 lbs. fat at 3½ years; 8th place Cl. D. D. Price $200.

Other splendid bull calves out of excellent A. R. dams.

One A. R. cow.

Valley Gem Farms
ARLINGTON, WASH.

First 10 A. R. records completed average 665 lbs. fat, mature credit. Three class leader records.

Guernsey Bull Calf

Good individual; big producing blood lines. Write for particulars.
M. RYAN, Nashville, Ore.

Brown Swiss Stock Farm

Breeders of Brown Swiss cattle, the farmers' dairy cow. Young stock for sale.
BRUGGER, Route 3, Gresham, Ore.

Richest Jersey Breeding Susy's St. Mawes Apex 168,841

Dropped Aug. 22, 1917. Solid color. St Mawes and Rosaire's Olga Lad on both sides through their greatest daughters. Has been first prize winner at Oregon state fair. Will sell cheap or consider purebred cows in trade.
WM. ROBITSCH, Bay City, Ore.

Richly Bred Jersey Bull Calf

Out of silver medal daughter of Belle's St Mawes Lad, silver medal bull.
L. C. DANIELS, Tillamook, Ore.

Maple Ridge Jersey Farm

offers strongly bred St. Mawes bull calf; bred for production and type. Reasonable.
J. C. BROWN & SONS, Shedd, Ore.

Imported and American Bred Jerseys

Blood lines of phenomenal production and most perfect Jersey type.
CRANDALL & LINN, Salem, Ore.

Richly Bred Young Jersey Bulls

Sired by Gertie's St. Mawes and out of tested dams with good records.
C. F. BATES, Rt. 5, Salem, Ore.

Gold and Silver Medal Jersey Breeding

Heifers and bulls, offspring of the great gold and silver medal bull, Silver Chimes of S. B.
DEL PERKINS, Carlton, Ore.

Seely's Jerseys

Young service bull of fine type, priced right. Dam's record 504 lbs. fat.
R. B. SEELY, Sherwood, Ore.

Graymere Jersey Heifers Bred and open from 6 to 1 months old. Myra's Missionary, Plymouth Lad and Oxford Majesty breeding.
WARREN GRAY, Box T, Jefferson, Ore.

Midway Farm Jerseys Herd headed by St. Mawes Lad of Midway, son of St. Mawes Lad and Lad's Lily Pauline, 941 lbs. fat.
W. H. McCONNEL, Shedd, Ore.

Pioneer Herd Hampshire Swine

Lookout and Cherokee breeding. Nonrelated stock at all times. Twelve years a breeder and exhibitor of Hampshire swine. I will attend the fairs at Spokane, Salem and Yakima. See me if attending any of these fairs.
J. M. FRUITTS, Cambridge, Idaho.

Entermille Polands

Big Buster and Giant Liberator are recognized as outstanding individuals and sires of real merit. Spring pigs sired by them for sale at very reasonable prices. Write at once for information.
FRED D. ENTERMILLE, Baker, Ore.

Polands 100 fine Clansman bred fall pigs must go at a bargain. My pigs and prices please from California to Alaska.
H. J. STILLINGS, Hermiston, Ore.

Weanling Hampshire Pigs

and service boars. Most popular blood lines, good individuals, reasonable prices.
J. W. PARKER, Yamhill, Ore.

Aviator-Pathfinder Durocs Fall and spring service boars and open gilts. Well grown, good individuals. Priced to sell.
M. AVERHOFF, Lebanon, Ore.

Berkshires An exceptional lot young boars. Breeding unsurpassed. Offered on a year's time. Write for sale plan. Cedar Canyon Farms.
F. M. CURTISS, Prop., Fruitland, Wash.

Shropshires, Oxfords and Dorsets

Fitted show rams for good registered flock headers; range rams in lots to suit.

20 Shropshire ewes, sired by imp. Brewis 92; 20 Oxford breeding ewes, 40 Dorset breeding ewes and ewe lambs. All priced according to value.
FLOYD T. FOX, Silverton, Ore.

Choice Shropshire Rams Doerfler Farm offers a few yearlings, sired by imported rams. Flock noted for its fine wool.
F. A. DOERFLER, Silverton, Ore.

Oxford Downs I have 21 registered yearling rams for sale, well kept and large for their age. Can also spare a few choice ewes.
DAVID H. LOONEY, Jefferson, Ore.

FOR SALE

A choice lot of Holstein calves, both sexes, finest Hollywood breeding, excellent individuals. Several are out of yearly record dams. Have no room for them and they must be sold. Breeding and individuality considered, they are the very best bargain on the market. Write for prices and descriptions. Excellent heifers for calf clubs, fine bulls for bull associations.

A CALF OR A CARLOAD.

HOLLYWOOD FARM, Hollywood, Wash.

The department editors of this paper are anxious to be of service to you. Do not fail to write to them if they can be of help to you.

GENERAL ADVERTISING. GENERAL ADVERTISING. GENERAL ADVERTISING. GENERAL ADVERTISING.

Startling New Facts About Hog Feeding Revealed By State Test

Official tests conducted by Department of Agriculture, Iowa and Indiana State Experiment Stations amaze hog raisers. New feeding method finishes out hogs in one-third usual time at one-half the feeding cost. Uses home-grown proteins. Equally amazing results are being obtained by same method with cattle, horses and sheep.

By E. J. ROLLAND

FOR many years feeding and fattening problems of the hog raiser have been left almost entirely in the hands of manufacturers and distributors of various feeds and patented mixtures. Only in the last few years have such reliable investigators as the U. S. Department of Agriculture and the various State Experimental Stations concentrated their efforts upon finding some simple food supplement containing the necessary ingredients to permit the feeding of all home-grown vegetable proteins—such as Alfalfa, Soy Beans, Cow Peas, Clover, etc., with corn, eliminating the use of high priced animal proteins such as tankage, milk, milk powders, etc., and at the same time securing equal or better results.

The now famous Iowa Test was made in an attempt to find this supplement; it also uncovered a fact of far greater importance to hog raisers—**that hogs could actually be finished in one-third the time and at one-half the usual feeding cost.**

Had this statement come from an advertiser or from any less reliable and unprejudiced a source it might have been greeted with skepticism, but having so authentic and well recognized substantiation it is of vital importance that every progressive hog raiser should at least know the details. For the benefit of the readers of this magazine the figures are given in a panel on this page.

WHAT was responsible for the extraordinary gain on the part of one group? Did the group of fat hogs have the advantage of pure breeding, better protection, more food or more careful attention? Did they suffer digestive disorders, lack of exercise or other handicaps?

No! The report shows that there was only one reason for this amazing development; a slight and simple modification of the diet, based upon the discovery of W. H. Lambert, formerly of the University of Wisconsin. The results secured by Mr. Lambert's discovery were so unusual that he was invited to address the faculty, county agents and leading Iowa breeders so that they might be informed upon

the physiological reaction of this preparation which made such results possible.

Amazing Results of Iowa Test

Hogs	Averaged Daily Gain	Feed Required per 100 lbs. Gain	Average Cost per 100 lbs. Gain	Profit per Hog over Feed Cost
Corn fed Hogs or Rape Pasture	.67 lbs.	419 lbs.	$8.47	$.33
LICTONIC fed Hogs	1.51 lbs.	330 lbs.	$6.05	$4.93
LICTONIC fed Hogs Make Greater Daily Gain of	.84 lbs.			
Saving of Feed per 100 lbs. of Gain by LICTONIC fed Hogs		89 lbs.		
Saving in Feed Cost per 100 lbs. Gain by LICTONIC Fed Hogs			$2.42	
LICTONIC fed Hogs bring in extra profit of				$4.62
Summary of Advantage of Lictonic Feeding	Additional Gain 84 lbs.	Feed Saved per 100 lbs. 89 lbs.	Money Saved per 100 lbs. Gain $2.42	Additional Profit per Hog $4.62

Simple Reason for Amazing Gain

MR. LAMBERT in his address explained that there is nothing mysterious or new about this discovery—it was so simple that it had been overlooked by many other experimentors in their search for something new. Mr. Lambert called particular attention to the fact that his discovery was not to be classed with salt bricks, condition powders, cure-alls, or mineral feeds. He brought out the fact that his Lictonic was nothing more nor less than a 100% pure, concentrated preparation that automatically supplies hogs and all live stock with the ingredients that nature dictates they should have if they are to be the biggest profit makers. It is a preparation containing practically all of the minerals, proteins, drugs, herbs, and medicinal elements recommended by the United States Department of Agriculture, which permit the feeding of home-grown vegetable proteins with corn, as a balanced ration.

While Mr. Lambert placed particular emphasis upon the fact that Lictonic was no cure-all, he did show physiologically why it was an upbuilder, strengthener, fattener and food supplement which would build bigger-boned hogs, cause cheaper and faster gains by enabling the hogs to get full assimilation of their food, would make larger litters, keep stock fit, and prevent pig-eating sows.

IF the day has come when hogs can be fattened ready for market in one-third the time and at one-half the feeding cost—and the tests conducted by the Iowa State College and hundreds of individual farmers show that it has come—then the hog raisers of America are facing a new era of profits greater even than any one has ever dared dream of. It actually means a profit increase of 400% to 500%.

Not only does Lictonic bring a quicker turnover-and increased profits, but it also does away with tankage, medicines, tonics, mineral mixtures, condition powders, torpedoes, worm medicines, and dopes, for it keeps stock in tip-top physical condition and free of worms, etc. When fed to sows before farrowing the litter will be healthier, thriftier, and bigger-boned.

Because it supplies these ingredients nature dictates hogs should have, it builds up the animal's resistance against such things as paralysis, soft or spongy bone, breaking down in the back, hairless, off colored and dead litters, non-breeders, rickets, soft pork, many forms of abortion, thumps, weak pasterns and general malnutrition.

Farmers Report Unheard-Of Gains

Equally amazing results are being secured every day by leading breeders and farmers by using Lictonic for their cattle, dairy cows, horses, sheep, etc. It has been unquestionably proven that practically the same methods of feeding will increase a cow's milk production. Such leading breeding establishments as Carnation Stock Farms, owners of Segis Pieterje Prospect, World's Champion dairy cow that produced as much milk as 10 average cows in one year, have found Lictonic is most beneficial not only for their matured cows, but also for their calves. The leading circuses, such as Ringling Brothers, Sels-Floto, have found Lictonic very beneficial for their horses, keeping them in perfect shape even under the unusual conditions to which such horses are subjected. Lictonic is very beneficial for sheep because it supplies those mineral ingredients that they desire and frees sheep from worms and keeps them free.

Free Sample Feeding

THE complete story of Lictonic, what it contains, how it acts and how it can be used to make these unusual gains and big savings has been printed by Mr. Lambert to be sent free to all stock raisers. Mr. Lambert is so anxious to give stock raisers everywhere the immediate benefit of his discovery that, for a limited time only, a free feeding offer will make it possible for every farmer to try LICTONIC on his own farm at no cost to himself.

You will wish to find out just what LICTONIC will do for your live stock on your own farm. The coupon below is for your convenience—simply write your name and address, and you will receive the free sample feeding and full information by return mail. But mail it at once before you lay down this magazine, as this offer is made for a limited time only.

W. H. LAMBERT,
Dept. 1310, St. Louis, Mo.

Send me without obligation the Free Sample Feeding and the full facts about Lictonic, also official formulas so I can make my own mineral mixtures and conditioners and save money.

Name .....

R. F. D. ..... State .....

Town .....

I am particularly interested in
( ) Hogs ( ) Cattle ( ) Horses ( ) Sheep

EXP. STA.
EXPERIMENT STATION
URBANA ILL

LOOK FOR THE RED BALL

"BALL TRADE MARK BAND"

The Right Boots for the Job

Boots for work—boots for play—boots for mud or water—slush or snow—boots that are always comfortable.

Wool Boots and Socks, also Rubber Shoes and Arctics, that keep your feet warm as well as dry.

"Ball-Band" (Red Ball) Rubber and Woolen Footwear is made in as many different styles as there are kinds of work and weather.

Go to the store that carries "Ball-Band" and look at the assortment. You will surely find different kinds to fill your various needs.

There are many styles of "Ball-Band" Rubber and Woolen Footwear not shown on this page.

Write us for the free, illustrated booklet "More Days Wear." In it you will see just what you need for different jobs and all sorts of weather.

In writing, please give the name of your nearest dealer.

We make nothing but footwear—and we know how

Mishawaka Woolen Manufacturing Company
462 Water Street Mishawaka, Ind.
"The House that Pays Millions for Quality"

OCTOBER 11, 1923. Washington's Great Farm Magazine EVERY THURSDAY

THE WASHINGTON FARMER

ESTABLISHED 1894 SPOKANE. SEATTLE.

Where Prices Haven't Gone Up

The "Wets" Are Planning to Make Washington a Battle Ground---Page 4

ORDERED SOLD

New Shipments of Surplus War Supplies from different Army and Navy bases, now on sale with commercial merchandise. The name and fame of the wonderful bargains offered by the Navy and Army Goods Store, corner 13th and Pacific Avenue, Tacoma, Wash., is spreading throughout America like wildfire. Thousands of people from all walks of life such as ranchers, miners, fishermen, farmers, mechanics and professional men, are saving money. Why don't you order by mail today, now, if you care to save money? Read the prices below, then act. Remember, ALL GOODS SHIPPED FREE. We save the public thousands of dollars in delivery charges.

ARMY MACKINAWS
Khaki Wool Coats. Belted Models. Sizes 36 to 42 NOW $5.95

NEW ARMY STYLE JERKINS
Leather outside and wool lined. Heavy warm, outdoor garment. NOW $4.45

NAVY PEA JACKETS
The well known Blue Mackinaw Style Coat; all wool Melton; sizes 32 to 42— Now $9.45

NEW NAVY RAIN SUITS
Guaranteed wind and rain proof rubberized cloth, used by the Navy. Just the suit for hunting or outdoor work. Better than a slicker. Suit consists of separate pants and blouse with hood attached. Worth $7.00. OUR PRICE $3.95

ARMY OVERCOATS
Army Regulation. Three-quarters length. All wool Khaki. Sizes 32 to 42. Guaranteed Class B NOW $4.95

ARMY KHAKI HEAVY WOOL SHIRTS
Made of Blanket Cloth. Double front and back. A strong, warm, outdoor shirt. Worth $7.00. NOW $4.95

Heavy Weight U. S. Army (Goat Wool) Mackinaw—Worsted 49c

ARMY AND NAVY SOX

Army Khaki Cotton Sox—Now	12c
Navy Cashmere Wool Hose. Worth 75c pair. Now	33c
Army Trench Caps. All sizes. Now	39c
Wool Union Suits. Worth to $4.00. Now	$2.95
U. S. Navy Underwear. Sweater neck. Shirts and Drawers. Garment, now	49c
Medium Weight Wool Underwear—Shirts and Drawers. All sizes. Garment	98c
One lot of Wool Underwear. Big Bargain. All sizes	$1.39
Natural Grey Wool Union Suits. Medium weight. Now	$2.19
Heavy Silver Grey Cotton Union Suits. All sizes. Special Now	$1.29
Pure Wool Union Suits. Natural grey color. 100% wool. Worth $5.00. Now	$3.95

Army Khaki Jersey Gloves—Now 23c

O. D. Wool Wrap Leggings—(New) 95c

O. D. Wool Wrap Leggings—(Rec.) 49c

U. S. Marine or Army Leggings. Canvas. All sizes 59c

Heavy Work Suspenders—Now 39c

Suspenders—Now 29c

Deer Foot Hunting Knives Now— $2.95

U. S. Army Toques. Pure Wool. Can be used to make Sweater and Cape— Special 39c

U. S. Army Knapsacks—Now 59c

Wool Flannel Shirts in Grey or Brown. All sizes— Now $2.45

U. S. Navy Middie Blue Broadcloth Wool. Used by all girls. Now $3.95

Army Raincoats; double back; all waterproof $3.95

U. S. Army Belts; regulation; all sizes 23c

U. S. Garrison Caps; by officers and enlisted men—Extra Special 69c

Made for the Navy—Black Lisle Hose—Now 33c

Army Work Shoes—Big Bargain; all sizes—Now $2.89

Jerkin vest style; leather sleeves; heavy duck lined; worth $8.50—Now $5.95

Army Motor Transport Gloves; two finger leather, worth $1.50. Gauntlet style Now 49c

New Heavy weight Khaki Wool Blankets, on sale Now— $3.95

Men's Fine Scout Shoes; Tan or Black; big bargain. All sizes— Now $2.49

Issue Sox, Natural Grey color—Cashmeretts 19c

Heavy Wool Navy Sox in Khaki or Grey—Fine for work 39c

Black or Tan Sox, cotton, medium weight 9c

Khaki Work Sox—Cotton—Extra Special 19c

Army Goods from Ft. Mason, Cal.

WE SAVE YOU SHIPPING CHARGES

The Home of One of America's Largest and Finest Army Goods Mail Order Houses, Occupying the Large Store, 13th and Pacific Ave., Tacoma, Wash.

WE PAY SHIPPING CHARGES

New Navy Wool Underwear. Shirts and Drawers. Sizes 34 to 46. Each, now 98c

Cotton Flannel Drawers. Heavy weight. Knit ankles. Now 69c

New Army Cotton Underwear. Heavy Ribbed Cotton Shirts. Sizes 34 to 46. Now, garment.. 59c

Army Goods from Camp Lewis, Wash.

Army Dress Shoes; made for comfort and service. This style of shoes sell for $7.00. Our price $4.95

Police Automatics Shoot Standard Cartridges, 25 and 32 Caliber Now— $9.95

Hi Cut Shoes, 15 and 16 inch boots; strong, well made up boot; all sizes; worth $10.00— Now $7.95

Army Hip Boots; American made boots. All sizes. Now $4.95

Army Jumpers—Now ... 85c

Army Waist Overalls; extra heavy blue denim— Now 95c

Army Cigarettes; Omar brand— Now 15c

Army Trench Shovels—Now 89c

Army Canteen Bottles. New aluminum—Now 49c

Army Canteen Covers. Khaki— Now 23c

New Mess Kits—Now 39c

New lot large size Khaki Packs. Now $1.75

Khaki Army Style Flannel Shirts, popular with laborers, ranchers and mechanics; worth $3.50— Our price $2.45

Navy Wool Sweaters made of fine dark blue worsted; worth $5.00. Our price $2.95

Blue Chambray Work Shirts, 14 to 17—Now 65c

Khaki Cotton Shirts; any style, 14 1-2 to 17— Now 89c

New Hickory Work Shirts; sizes 14½ to 18— Now 98c

Canvas Gloves, with wristlets. Now 9c

Khaki Handkerchiefs—Now ... 7c

Navy and Army Combe— Now 5c

Army Leather Gloves—Now 49c

The Famous North Sea Shirts
Heavy Wove Cloth. Warm and cold proof. Used by the government on submarines. Great shirt for fishermen, hunters and outdoor men. Now..... $2.95

Haversacks
Boy Scouts say they're the best ever. Made of heavy O. D. Canvas, strong and waterproof. In excellent condition. Fit over shoulders and under arms. A dandy pack for hunters, fishermen and cross country hikers. Look at our low price. Each 69c

New Collapsible Canvas Buckets
Made of best and heaviest grade khaki canvas. Takes up little space. Most convenient water carrier made for auto tourists, campers and others. Priced for quick sale. Get yours today. Wt., each, 3 lbs. Price each 79c

Barracks Bags
Handy Bags, the same used by every doughboy as a carry-all for his personal baggage during the war. Suitable for laundry bags. A boon to campers, hunters, etc. Made of blue denim or khaki. Strongly stitched and closed with white cord drawstring. Price each 69c

U. S. Cartridge Belts
Regulation Army Cartridge Belts of strong khaki webbing. Valuable for every hunter's and camper's outfit. Eyelets for fastening canteen, holsters, etc. Pockets for shells, tobacco, etc. Reclaimed. Each 39c

Aluminum Drinking Cups
Finest grade Aluminum 1 pint Army Drinking Cups, like the soldiers use. Handy in home or camp. Last a lifetime. You get at less than cost of material. Price, each 23c

New Army Slickers
Fine for outdoor work in rainy weather or for roughing it. A dandy garment for campers and sportsmen. Made of durable oiled fabric. Cut full to give comfort—Special price $2.45

Army Coats
Khaki Coats (cotton) regulation U. S. Army Fatigue Uniform Coats. Sizes 32 to 40 only; (Rec.) Now 49c

U. S. Army Coats for growing boys; sizes 30 to 36 only. Made of fine wool (khaki). A wonderful work coat. (Rec.)—Sale price 98c

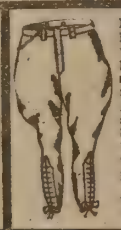
Men's New Army Wool Coats; all sizes—now $1.95

Officer's Dress Shoes
That well groomed appearance so noticeable in the American Army Officers. The officer's dress shoe is a crowning achievement in the combination of style and comfort in footwear. It has the semi-English comfort style and perfect toe length. Sold at $8.00. Now..... $4.95

Army Marching Shoes, Solid Leather. All sizes. Now..... $4.45

Army Shoes for work or dress. All sizes. Now..... $3.95

All Around Work Shoes
Regulation Chocolate Brown U. S. Army shoes of heavy, oil tanned leather. Solid leather soles. Blucher style. These are the kind of shoes that stood the test given them by American soldiers. And it was a real test. They'll serve you just as well for work, hunting, fishing, etc. These shoes will outwear the ordinary kind. They're made for wear, not style. Better order a couple of pairs because they're going fast. Price, per pair $3.95



New Army Wove Breeches—Now $3.95

U. S. Army Cotton Breeches, regulation issue; rec.; No. 1 condition; sizes 26 to 34. Suitable for men or ladies—Now..... 98c

Army Riding Breeches; wool; in sizes 30 to 38, (Rec.) Sale $1.95

Wool Army Breeches; rec.; sizes 26 to 36—Sale price $1.45

When ordering Breeches give weight and height, also write name and address plainly for mail orders.

Army Moleskin Overcoats
Guaranteed Class B

Sheep Wool Lined. Used for Siberian campaign. An extraordinarily warm coat for outdoor men. Made of tan moleskin. Belted model. 40 inches long. Overcoat has 4 pockets, leather reinforced corners. Body and sleeves sheep wool lined. Knitted inside wristlets. Cost about $20.00. Now $12.95

FREE

Free of All Charges, with a money-back guarantee. What could be more fairer? Thousands of people are saving money. Why not you? ORDER BY MAIL today—NOW, AND SAVE MONEY.

FREE

Overcoats
Hundreds of Civilian Overcoats, in black, dark grey and brown colors; plain and belted models; all sizes, 30 to 44; sold from $20.00 to $35.00. Now $9.90, $12.90 & $14.90

U. S. Army Leggings
Wrap Spiral Puttees. Good quality wool. Fit any size leg. New. Price, per pair 95c

Army Mackinaw Coats
Double back. Waterproof. Sizes 30 to 42. Now $3.95

Tweed top, rubber lined Raincoats. Usually sold at $20. Our price $9.95

Raincoats, dark grey and black. Sizes 30 to 40. Big values at $2.98

Officers' Style Army Raincoats
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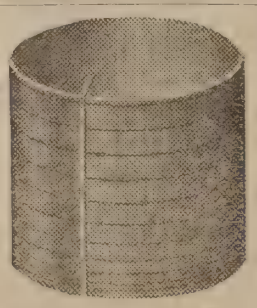

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Bigger Western Washington Fair

"The Vision," an Early Pioneer Pageant, Draws an Immense Crowd to the Puyallup Grounds

By RALPH ERSKINE

At "The Vision," a pageant given at the Western Washington fair at Puyallup October 1 to 7, an immense audience saw the rickety wagons of the early pioneers come around the side of an improvised mountain down into the fertile Puyallup valley, and watched the efforts toward building homes and the struggles with the Indians. As the pageant progressed not a few in the audience found themselves wishing that the brave men and women who fought their way over the Naches pass in those early days might really visit the Western Washington fair in 1923.

What a treat it would have been to the men, who first attempted to clear the land in order to try some simple crops, to spend a few hours in the agricultural products building and see the vast variety and excellent quality of the fruits, vegetables and grains displayed. How they would have enjoyed a visit to the live stock building, where there were some of the finest animals in the northwest. Suppose the women who struggled with sick babies, often without a doctor within hundreds of miles, who might have taken their children to the clinic in the better babies building, might have attended the fair on Monday, when 20,000 little folks were the guests of President Paulhamus, or again, might visit the women's building, where row upon row of shining glass containers held western Washington fruit and vegetables.

The pageant was indeed a unique way of bringing home to the people of western Washington the development their district has enjoyed, and the 1923 fair was the last word in the agricultural progress of the northwest. The attendance throughout the entire week was excellent. A conservative estimate of the attendance Monday, children's day, was 40,000, and the rest of the week averaged about 30,000. There were only a few hours of rain and these were hardly noticed by the visitors on account of the covered passageways and buildings.

Aside from the educational features of the fair, there was every opportunity for a day of entertainment. There were horse races every afternoon, rain or shine, and good band music with an occasional vocal solo. There were also some splendid trapeze performances. Unscrupulous concessions and solicitors were barred, but there was ample opportunity for entertainment about the grounds.

Fruits and Vegetables.

The fruits and vegetables were shown in a larger building this year, the one adjoining the automobile building. This has more room and better light for the entries and it made a better showing than has ever been seen at Puyallup at any past fair. There were more county and community exhibits and a goodly number of individual displays both in fruits and vegetables.

The Skagit county booth won first prize with its splendid collection of farm produce of all kinds as well as a few of the industrial products that are manufactured in that district. In the community displays Oakville community of Grays Harbor county won first place, with Enumclaw a close second. The individual fruit exhibit was won by R. T. Reid of Bellvue, who showed a variety of grapes as well as other orchard fruits in an attractive booth. The best general exhibit by a farmer was won by Chris Turner of Spanaway.

The bee and honey display was put on largely by individual apairy exhibits and also with single entries. It was a very striking exhibit of extracted and comb honey, with the usual amount of candy, wax and fruit canned in honey. Helen Steiner, owner of the Olympian Bee farm at Elma, won the sweepstake prize on extracted honey. The same award for the comb honey was given to F. A. Ross of Puyallup. A very attractive display of white extracted honey was shown by the Superb aparies of Elma, most of which was made from fire weed.

School Exhibit Building.

The school exhibit building was filled to capacity. Each school in the county that turned out had their class work displays arranged in a booth and the articles were judged in separate classes. Almost all of the booths had manual training work and many of the pieces were as good as could have been purchased at the stores. Some of them emphasized cooking and baking, with the girls of the classes doing the actual work. The Tacoma city schools did not compete.

The state college extension service had eight of their booths on display, including bees and honey, poultry, dairy, curtains, clothes closet arrangement, the club demonstration booth and drainage exhibit. The information booth had an enlarged photograph of the campus and buildings at Pullman, which brought many graduates back to their college days as they stopped to look at the view.

The boys' and girls' club exhibits were not as large as they have been in past years, due to the fact that the state club contests were held at two other fairs this year. The clubs that came out had some fine displays of vegetables, canned fruits and sewing. Those who showed were Connell's Prairie, Spanaway Sewing club, Edgewood sewing, Edgewood and Alderwood Bee club, Alderton and Kelley Lake clubs and the Nisqually Sewing club.

The western Washington experiment station at Puyallup was given one entire side of the same building for their displays of root and silage crops, grains and grasses, fertilizer demonstration figures that showed the value of potash on potatoes, varieties of grapes and grading of berries to obtain a better price and diseases of plants, poultry and cattle. All of these exhibits were educational and are only omitted from this report because of a lack of space.

Fine Flower Show.

The flower show, arranged in a large four-pole tent, had some gorgeous dahlias, asters and gladioli and other flowers that are blooming at this time of the year. There were also some fine showings of house plants and shrubs as well as individual displays of cut flowers from bulb gardens and nurseries. It was a beautiful sight to see and it was a big asset to the fair.

The women's department occupied the same space as heretofore, but there seemed to be a better class of entries, especially in the fancywork division. There were all manner of articles that are used about the house shown and many and many were unusually clever in their design. The display of quilts, rugs and table covers were all very interesting. There was an excellent exhibit of china painting; the baking canned goods were very complete and the curio display was in a class by itself.

The fine arts division included many entries of home paintings, both in oil and water color, by professionals and amateurs. A special room was given over to a collection of rare oil paintings from the Metropolitan Museum of Art at New York city. The 39 paintings are said to be valued at $60,000 and it gave the art lovers an opportunity to see rare paintings which are seldom shown outside of the museums in large cities.

Although the live stock department is not considered a real competitive show, Mr. Paulhamus has for many years made it a point to have representative herds from as many breeds as possible. Competition, however, is welcomed, but the shortage of space has kept the numbers down until this year. Some day the fair may be able to buy more land and build more buildings

(Continued on page twenty-two.)

Northwest Hay Growers' Association a Going Concern

By ELIAS NELSON

The Northwest Hay Growers' association, which has been in process of organization for over two months, is now established and ready to function. On July 7 the first draft of the contract was submitted to a conference of representative growers of the four counties of Kittitas, Yakima, Benton and Walla Walla and the contract approved and an organization campaign launched. By September 15 there had been signed 80 per cent of the tonnage of those four counties, with 1000 growers supporting the movement.

On September 29 the organization meeting was held at Yakima with 105 delegates from the 10 districts covered by the association in attendance. At this meeting the mail ballots for directors of the association were counted and the election as it appeared ratified. The board of directors, thus elected, met at once, organized, and continued in session for several days working out the details of the immediate activities of the association.

The directors of the association, with their addresses and the districts which they represent, are as follows: W. L. Dimmick, Yakima, Bench district; J. F. Schreiner, Yakima, Yakima district; Lee M. Lampson, Kennewick, Benton district; E. C. Houston, Prosser, Mabton district; R. B. Dwinnell, Outlook, Outlook district; C. O. Lovell, Toppenish, Toppenish district; Harry Jones, Wapato, Wapato district; J. G. Sorenson and H. W. Brown, Ellensburg, Ellensburg district; Clifford C. Riggs, Walla Walla, Walla Walla district. H. C. Lucas, president of the Yakima Trust company, is the 11th director on the board. He was appointed by Director of Agriculture E. L. French to represent the general public on the board, as required by law.

W. L. Dimmick was elected president of the board and of the association; J. F. Schreiner, first vice president; H. W. Brown, second vice president, and Lee M. Lampson, secretary-treasurer. President Dimmick served as county commissioner of Yakima county for two terms and produces hay on an extensive scale on the Yakima Indian reservation. Mr. Schreiner was the receiver for the Washington Hay Growers' association and is a substantial farmer. Mr. Lampson has had wide experience in cooperative marketing and is at present the sales manager for the Three Rivers Growers of the Kennewick district, producers of strawberries and early garden truck.

L. A. Hunt of Hermiston, Ore., manager of the Oregon Cooperative Hay Growers, was chosen manager of the association. Mr. Hunt has been the leading spirit in the organization campaign and his experience in the management of the Oregon association and the sale of its product made him the logical man, in the minds of the growers, to place at the head of the new association, which is to operate in conjunction with the Oregon concern.

Mr. Hunt has been the manager of the Oregon Cooperative Hay Growers since its organization in the winter of 1920-21. He was county agent of Morrow county, Ore., for two years and previously had a farming experience of 15 years. This is the fifth cooperative organization which he has helped to form.

Few, if any, other cooperative marketing organizations among farmers in the northwest have controlled such a large percentage of the product as does the Northwest Hay Growers' association. It embraces the potential hay growing districts of Washington and contains in its membership the producers of 80 per cent of the tonnage of those districts.

The hay association has been organized with a great deal of care and those in charge believe every reasonable precaution has been taken to build it upon a permanent and enduring basis. The movement was initiated by the Yakima County Farm bureau and supported by the farm bureaus of the other counties included within the scope of the organization. The project has had the support and approval of the state department of agriculture from the first.

The contract with the growers was drawn up by the law firm of Aaron Sapiro of San Francisco, cooperative marketing attorneys, and Boyd Oliver of that firm directed the organization work at the outset. The completion of the organization was under the direction of L. A. Hunt, working with a committee of growers, with all the districts in the four counties represented.

Each district has elected its own director, and according to the by-laws it can remove its director at any time. Many district meetings were held, at which the matter of choosing the right man was thoroughly discussed and every precaution was taken to permit the growers themselves to decide on all issues at stake.

While the association was primarily organized to stabilize the hay market and in a measure assure the producers of hay better returns on their product, the directors are taking a broad view of the aims of the concern, according to Manager L. A. Hunt.

Serve the Consumer, Also.

"The sales policy of the association will be on a basis of service to the consumer," said Manager Hunt. "There has been too great a fluctuation in the price to the consumer. The spread between the farm price of hay and the price which the dairymen on the west side have had to pay has in the last several years averaged $7 a ton, net, including the cost for freight. This is entirely too great and is not fair to the grower or the consumer.

"Also, there has been difficulty of the dairymen buying the product at a reasonable price and being assured of getting the quality desired. The dairymen have found it mostly impracticable to get the hay direct from the producer as they could not be sure of the quality. They have, therefore, preferred to pay a premium by buying from the dealers where they could see the hay and satisfy themselves of the grade.

"Under such conditions there could hardly be an expansion of the dairy industry. The aim of the association is to stabilize the market and thus in a measure assist in placing the dairy industry on a more sound basis and thus improve the market for hay.

The expansion of no other line of farming is calculated to improve the agricultural situation to so great an extent as is that of dairying. We are at this time shipping dairy products into the northwest, thus showing that there are possibilities of expansion and that the growers of hay may profit by increased dairy production.

"Growing hay is the primary basis of fertility on the irrigated lands of central Washington. The farmers will therefore continue to grow hay on a considerable scale. In the past they have produced it often at a loss. For the last several years the average cost of producing hay has been calculated at $13.50 a ton. In 1922 the highest price reached to the producers was $12.50, which was the highest price in several years, and in 1921 the hay sold at $7 to $7.50 a ton.

The sales policy of the new organization will be to sell to the trade and to the consumers direct where such arrangements can be made. Sales will be made on state grades and weights with certificates of inspection at shipping point so that the dairymen on the west side may be assured of getting the quality which they desire. The directors are thoroughly sold on the idea of keeping the price to the consumer from going too high, as the aim is to furnish the hay to the dairymen at a price which will make it possible for them to expand their industry."

With the association functioning, the financing of the growers should be more easily handled. It has been more or less of a vexing problem in the past. The recent decision of the farm loan board at Washington, D. C., that the intermediate credit bank may loan money on hay in the stack has opened the way for credit to the growers. To what extent it may be necessary to use those credit facilities remains to be seen.

The association will, in accordance with its policy, place itself in a position to advance money to the farmers for the growing of hay and when the hay is in the stack to make other advances, the total of such credit extended to be on a basis of the loan value of the hay, said Mr. Hunt. This fall the credit may be restricted due to the fact of the association starting to function so late in the season and because the financing of the growers has been taken care of quite generally.

Yakima is the headquarters of the association at present and though the board has not definitely determined where the offices of the association will be, indications are that they will be at Yakima.

There will be community organization in about 30 districts, with a district committeeman or manager in charge, the idea being to bring the association as close to the growers as possible. The duties of the district committeemen will be determined by the board of directors. Each district will have its own pools. Contracts with the growers are for five years and are thoroughly binding.

W. L. Dimmick, Yakima; J. O. Sorenson, Ellensburg, and J. F. Schreiner, Yakima, constitute the executive committee, while H. C. Lucas, Yakima, is the chairman of the finance committee, with the whole board constituting that committee.

The association controls 150,000 tons of hay in the four counties and the Oregon association, which is expected to come under the same sales management, controls 50,000 tons.

President Coolidge

sends envoys west to study wheat farmers' problems and encourage cooperative marketing of grain. He has also ordered the tariff commission to investigate the desirability of increasing the tariff on wheat.

Canadian Wheat

comes across the line notwithstanding the 30 cents a bushel tariff on it.

The Farm Bureau

last week laid before President Coolidge a definite program of accomplishments toward which it desires his assistance.

Organized Labor

may adopt a formal resolution on Ku Klux Klanism at its convention now in session in Portland.

Foreign Debts

will not be canceled if President Coolidge has anything to say about it.

A New Republic

is about to be formed in Turkey with a president, a congress and a cabinet.

(If interested in the high points in the affairs of the United States and of the world, turn to page 20.)

THE WASHINGTON FARMER

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Friends of Prohibition Must Be on the Alert

As our readers will recall, the New York legislature at the recent session repealed the state's prohibition enforcement law and Governor Smith approved the repeal. The purpose was to throw upon the already overburdened enforcement officers of the United States government the tremendously difficult job of upholding the Constitution and the Volstead law in a great city where opposition to law enforcement is notoriously brazen. The effect of that repeal practically put New York on the side of nullification of the Constitution. The deliberate purpose was to discredit the Volstead law and help along the agitation for congressional legalization of the traffic in wine and beer.

But it now transpires that the enemies of prohibition are not confining their attack to New York, Wisconsin, Illinois and like states, but are planning to carry their campaign into Washington and other states of the Pacific northwest. Louis Ludlow, a well-advised Washington, D. C., correspondent, reports that "the candidates for the legislature in Washington state next year will be grilled by the national wet forces for the purpose of ascertaining whether or not Washington will be in a mood to follow the example of New York and withdraw from the Union, as far as enforcement of national prohibition is concerned."

That timely warning should not be overlooked by the friends of prohibition in the northwest. They should do a little "grilling" themselves with the candidates for the legislatures of Washington, Oregon, Idaho and Montana. They should find out well in advance whether a candidate is stiff-backed for the Constitution and law enforcement, wobbly on that great issue, or downright wrong.

Do Good Cows Pay? They Do

The average cow in the 10 best herds in the Clallam County Cow Testing association last year produced 400.6 pounds of butterfat, while the average cow in the 10 poorest herds produced 297.9 pounds. County Agent A. W. Holland found that the first cow ate more feed than the average of the lowest, but returned $89.80 above her feed cost, while the second one returned only $51.55 above her feed cost.

It is probably fortunate for the looks of the record that no figures are available on the cows that were not in the testing association. While there are many good cows that are not being tested, many a non-testing dairyman thinks his cows are much better than they are.

At any rate, it is interesting to note the difference in the profit of a first class cow over a fairly good cow. The difference between the income from a fairly good cow and that of a poor cow, of which the dairymen of the state unknowingly have many, is probably just as great. The moral is to get into the testing association, if there is one in your community, and, if not, to take the necessary steps to learn in some way how many cows in your herd are paying a profit and how many are merely boarding with you at your expense.

Western Washington Fair

Substantial and progressive growth is characteristic of the Western Washington fair at Puyallup. Clean shavings as flooring is being supplemented rapidly by cleaner and more enduring cement.

At the Western Washington fair the women especially see lots of things they would like to have in their own homes. Here are abundant exhibits of things that amuse the children, of things to make kitchen work easier, of things to make the living room prettier, of appetizing things to eat and comely things to wear.

This fair is eminently a household fair and the households are turning out by the tens of thousands to see and hear what is going on at the grounds.

Even in the agricultural and live stock exhibits, the big poultry department is an outstanding feature. Here again an appeal is made, especially to the women folks who largely have charge of family poultry keeping.

The Western Washington fair is unique in its methods of "introducing" prize winning animals to the thousands of people on the grandstand. Horses and cattle that have won the ribbons are brought up onto a substantial platform in front of the grandstand. Here they are presented to the people by Mr. Paulhamus. The names, the breed, the owners and other interesting facts are told in an inimitable way by the president of the fair. These are interesting episodes between the afternoon races.

W. H. Paulhamus, president and manager of the Western Washington fair, is the same well-poised and unfrettable man that he has always been. This enables him to attend to the thousand and one details which he has been urged time and again to deputize to others. Perhaps this of itself helps to explain the big fact that Mr. Paulhamus himself is the master key that unlocks the secret of the remarkable success of the Western Washington fair, and that is making each year's fair better and more successful than the previous one.

Here is a fair that started practically without any funds to speak of, and has built up its wonderful plant year by year out of its own profits. Without any aid from the taxable wealth of the state, the loyalty of friends and good business management show what can be done in building up an annual fair which has become one of the big assets of the commonwealth.

Demand for Food Increases

Department of agriculture figures recently announced on the consumption of pork in the United States this year are interesting. The results of two previous pig surveys have indicated that there was an increase in the production of pigs, but pork prices have remained reasonably strong. Most of this is now explained, as figures from the meat inspection service of the bureau of animal industry show that 800,000,000 pounds more carcass pork were consumed the first seven months of 1923 than the same seven months of 1922. The department of agriculture says that industrial conditions presage a continued increase in demand for food products.

Distance Lends Enchantment

Many a live stock man has paid a good price for an animal in the middle west or east and paid an excessive railroad rate on him, when he might better have taken from his neighbor's herd or the herd of a breeder in a neighboring county. Sometimes the animals in a distant herd are better than those closer home. Frequently the reverse is true. At any rate, the farmer or breeder who wants to add new blood to his herd or flock should look around the home territory before sending great distances.

Washington State Gleanings

A span of young horses brought $325 under the hammer at the C. O. Slusser and John Klemgard joint farm auction sale September 25.

SELLS 320 ACRES.

Heinrich Burghardt has sold a half section 20 miles northwest of Ritzville to F. J. Geissler for a reported price of $10,500.

TEN PIGS WEIGH TON.

Ten pigs, 180 days old, weighed 2288 1-2 pounds when weighed in the ton litter contest for club workers at Walla Walla September 21. The animals are owned by Kay Cochran of Dixie.

JOINS COLLEGE FACULTY.

Fred S. Rounds, graduate of the University of Illinois, a commercial architect of Minneapolis, comes to the state college at Pullman to become assistant professor in the department of architecture.

NEED HELP IN ORCHARDS.

From now until the apple crop is boxed there will be a great demand for pickers, packers and other warehouse workers, according to Francis Million, deputy superintendent of the federal employment office at Yakima.

ESTIMATES POTATO YIELD.

The potato yield of Washington was estimated by the United States department of agriculture on September 1 to be 8,467,000 bushels. In 1922 the crop was 9,425,000 bushels, while the five-year average, 1917-1921, was 8,276,000 bushels.

THEY TOPPED THEIR PLANTS.

A check was made among the strawberry growers of South Bend who have topped their plants this season and in one demonstration there had been an increase of 33 per cent in the yield on the rows topped over those not topped.

GREAT YIELD OF SILAGE CORN.

New world's record for silage corn was shown at Grandview when County Agent A. E. Lovett weighed an acre of corn raised by S. D. Cornell. The final check showed a little more than 28 tons to the acre. The best previous record was 24 tons.

OLD TREES BEAR HEAVILY.

What is claimed to be record apple production is that of 63 Grimes Golden apple trees in the J. D. Taggard orchard at Waitsburg. These trees, which were planted 27 years ago, averaged 51 loose boxes, or 39 packed, this year, the highest yielding tree producing 70 boxes. Seventy-five per cent went extra fancy, 13 per cent fancy and 12 per cent C grade, under federal inspection.

FAIR WEATHER WAS FAIR.

The Clallam county fair was favored with excellent weather, was in many respects larger and better than ever before and the attendance showed a considerable increase over previous years. One of the outstanding features was the group of community exhibits. Six most excellent community exhibits gave proof of the fact that the fair has the active support of all sections of Clallam county.

DRAINAGE PAID WELL.

That drainage pays good dividends to the farmer who needs it for his lands was shown in a demonstration near Skamokawa by County Agent F. S. Martin on the farm of William Dawson. A field of seven and one-half acres yielded 36 tons of good mixed hay, which before drainage yielded only poor pasture. Oats estimated to yield 100 bushels per acre were growing on part of the farm drained. Mr. Dawson stated that it had made his farm and that he had increased the value of his place by $3000, with an investment of less than $800.

WILL SHOW CLUB COLTS.

The members of the Adams County Colt club and their colts will make a trip to the Pacific International Live Stock exposition at Portland next month. This club was organized three years ago by County Agent Donaldson and has the distinction of being the only colt club in the state. The purposes of the club are to give the boys training in the feeding and care of colts and horses. The charter members of the club are Willie Buscher, Walter Thom, Donald Danekas, Casl Benzel, Lawrence Gillispie, Jesse Gillispie, Dean Scheel, Raymond Telecky, LeRoy Schaffer and Ralph Meyer.

HANNA LEAVES COLLEGE.

Richard Hanna, nine years herdsman on the Washington State college farm, has resigned and leaves early in October for Cottage Grove, Ore., where he will engage in farming with his son. His successor at Pullman will be John Burns, formerly herdsman on the Robert McCroskey farm near Garfield.

During his nine years at the state college Mr. Hanna has groomed many prize-winning animals, and attained his ambition in 1922 when his prize steer, Topsmans Type, won top honors from steers produced by 16 colleges and universities at the Chicago International Live Stock show.

USE NEW DRIER SYSTEM.

The new recirculation type of drier, which was tried this year for the first time in Clarke county, has proved a decided success, according to the growers who used it. It was perfected recently at the Oregon Agricultural college and has been tried out in the orchards in the Willamette valley.

Among the growers who experimented with it here was L. F. Russell, president of the Washington Growers' Packing corporation and an owner of a large Washougal orchard. With an expenditure of about $1500, the ordinary $5000 drier can be remodeled so that it doubles its former capacity, it is claimed.

A SEED GROWING SECTION.

The importance of the Mount Vernon section as a seed-growing community and its rapid growth in acreage and seed products is shown by the reports for this year which are now coming in. The Aabling Seed farms, from acreage owned or controlled by it, produced 130,000 pounds of spinach seed, 120,000 pounds of turnip seed, 60,000 pounds of beet seed and 40,000 pounds of cabbage seed, all of which goes through its Mount Vernon warehouse and represents a value approximating $75,000.

The head of the concern, A. L. Aabling, has been in Mount Vernon looking after his concern's interests and handling the seed crop.

Wheat Exports Are Large

Our Farmers Grow More, but American People Eat Less

Here are some facts on foreign buying of American wheat and flour that will surprise some of our wheat growers in the Pacific northwest. They were made public by the United States department of commerce.

For the last three years we have been exporting nearly three times the quantity of wheat and flour that we exported before the World war.

The average wheat exports during the last three calendar years have been 221,000,000 bushels, and exports of flour have averaged the equivalent of about 77,500,000 bushels—a total yearly foreign demand of 298,500,000 bushels for the last three years.

Contract that with the average yearly export before the war, of wheat and flour combined, of only 105,000,000 bushels, and you have the refuting answer to the widespread erroneous belief that the war knocked out the foreign demand for American wheat and flour.

The fact of the situation is that we are growing more wheat than we grew before the war, but the American people are eating less wheat per capita than they were eating before the war.

To what extent this reduced consumption of wheat food comes from the increased consumption of "breakfast cereals" made from corn, oats and rye it is impossible to determine; but undoubtedly that change in the American diet is one of the causes of the low price of wheat.

We use the term "low price of wheat," but that, too, is comparative. The price of wheat here in the Pacific northwest certainly is not below the pre-war average; but it costs the producers much more to grow a bushel of wheat than it formerly cost.

And then, when the wheat grower spends his dollar coming from the sale of his wheat, he finds that it will not buy as much as the dollar bought before the war.

What is the remedy to be? We hesitate to return a confident answer, in competition with the cocksure solutions and free advice that the farmer is getting from so many sources, but it does seem that our growers can not reasonably look for a much greater foreign demand than they had for the last three years, and that the solution would better be sought in—

1. Reduction of the acreage sown to wheat.
2. Cooperative marketing of the crop.
3. Educational campaign to induce the American people to eat more wheat foods.

Dealing in Bulk

Theodore Roosevelt, assistant secretary of the navy, speaking at the New York fair as the guest of the state federation of county farm bureaus, expressed thought and counsel that is a reminder of the clear vision and sound judgment of his illustrious father. Mr. Roosevelt truly said, "Now, as never before, economy and efficiency are vital to success, and it is axiomatic that, either in buying or selling, if you deal in bulk you can deal to your advantage." He urged the farmers to deal in bulk, to organize, to combine, to carry on their own marketing. He went to the heart of this problem when he said, "Cooperation is necessary for the salvation of the farmer and the salvation of the farmer is necessary for the salvation of the general public."

That is the doctrine we long have been advocating to the farm producers of the Pacific northwest. There is no other lasting and dependable solution. Even the advocates of government price-fixing for wheat are not asking for that support permanently.

SETS BAD PRECEDENT.

Enos Lee, president of the New York State Farm Bureau federation, referring to the proposition of the government's buying up the surplus wheat, says: "We are opposed to that, absolutely. It sets a bad precedent. If the government buys the surplus wheat it should take over the overproduction of other crops." Mr. Lee adds: "No merchant can sell more than his customers will buy. If the American farmer can not sell the surplus to Europe, why should he produce it?"

The Difficult Task

It Is an Inspiration and a Spur to the Man or Woman of Character

The sluggard will not plow by reason of the cold; therefore shall he beg in harvest and have nothing.—Proverbs 20:4.

The surmounting of difficulties, the overcoming of obstacles, the doing of tasks that in themselves are distasteful are evidences of sturdy character. To yield to these make-believe enemies is to admit weakness; it leads inevitably to failure.

The agricultural figure used by the scriptural writer as quoted above applies to all walks of life as well as to the farm family. It invites all men and women, all boys and girls, to partake of the joys of accomplishment, and warns them of the dangers of being easily discouraged or turned back. The consciousness of having won a battle against odds is more than sufficient compensation for all the effort that was put forth. The greater the odds, the more interesting the task and the more gratifying the success. Every one deserves a chance to succeed. Given that, one should not complain about the difficulty of the undertaking. The greater the problem the greater must be the character and ability of the one who tackles it and the greater the satisfaction when it is solved. It is no satisfaction to a true sportsman to win a sure race. Neither is it gratifying to a big man or a strong woman to succeed in an undertaking that requires little ability.

Worthwhile characters do not seek easy tasks. They are attracted by the hard work that the hard job requires.

The person who yields to the little difficulties or the little discomforts and inconveniences of his or her duties is a little man or woman as character is measured. He or she who defies hardships and despises temporary adversities, but who sees beyond the hour the fruits of accomplishment and strives for their attainment, possesses a worthwhile element of greatness even though the sought for goal be never actually reached.

FARM BUSINESS AND MARKETS OUTLOOK

An avalanche of cattle descended upon the market a week ago, combined receipts at leading markets being the heaviest since October, 1922. The run included a high percentage of short-fed and western grass steers, and eastern dressed beef markets were sluggish, so that a decline on killing classes was logical. Under the array of depressing influences, values on steers, heifers and cows registered a 50 to 75 cent loss at Chicago. The country promptly shut off the supply, however, and most of last week's loss on fed steers has been regained. Prime steers are still quotable near the $13 level, but plainer, long-fed, weighty steers show a decline of $1 from the high point a few weeks ago.

Veal calves declined but have recovered in part. Receipts in this division are due for a substantial increase in the next two months. Calf slaughter under federal inspection in 1922 was the largest on record. Thus far in 1923, last year's figures have been outdistanced.

Hog Market Slumpy.

New crop hogs have showed up in profusion in the last ten days and total receipts at eleven markets were the heaviest in eight weeks. Packers were enabled to start the usual fall raid and prices dropped back to the June level. The break checked the run, however, and the market has had a small upturn. Pigs and light hogs have been severely penalized because of a lack of finish.

Normally, hog receipts expand about seventy-five per cent from the end of September to the end of November, so that a further decline in prices is in store. How severe it will be this year depends on the extent of the increase in arrivals. It is generally believed that the number of spring pigs on farms is slightly greater than a year ago. The government's estimate as of June 1 indicated a gain of 6 per cent in the corn belt.

In spite of near insolvency in Europe, clearances of hog products continue to show a substantial gain over last year. Exports in the first eight months of 1923 shows an increase of more than 20 per cent over the same period in 1922. Foreign countries have sent $172,142,466 to us for pork products against $136,957,622 last year. Even Germany had bought nearly twice as many dollars worth of pork and lard up to the end of July as in the same period of 1922. Hog stocks in storage are fading away at a normal rate in spite of constant heavy receipts and remaining holdings are only about equal to the average.

Break in Lambs Halted.

Lamb prices declined further early last week but the market developed stability at the close. This is probably the last severe decline of the season as receipts usually begin to taper off during October. Feeder buyers have been a constant support as purchases at twelve leading markets in the five weeks ending September 29 totaled 557,879 head compared with 297,989 head last year, so that there is some uncertainty about prospects for the winter fed lamb market. October usually is the month in which the movement to the country reaches high tide.

Wool Markets Firm.

Domestic wool markets have turned firm in the last two weeks and price changes have been slightly in favor of holders. The London auction maintained the initial advance till the close, a strong tone prevails at the Australian auctions of the new clip and South African and Argentine markets are quoted higher. Since prices in this country are below the outside level plus the duty and mills are still using up wool at a fairly high rate, there is no justification for a lower market in the early future.

The Boston market is quoted as follows: Scoured basis: Oregon—Eastern No. 1 staple, $1.28@1.30; fine and fine medium combing, $1.23@1.27; eastern clothing, $1.10@1.15; Valley No. 1, $1.15@1.18. Territory—Montana—Fine staple, choice, $130@1.33; 1-2 blood combing, $1.15@1.20; 3-8 blood combing, $1.00@1.05; 1-4 blood combing, 80@82c.

Wheat Advances.

Talk of governmental aid to the wheat farmer furnished the motive power for an advance in prices last week to the highest point since last June. Lower freight rates on wheat for export and financial aid to cooperative export organizations appear to be the most likely measures if any action is taken.

Flour mills are operating at the highest rate this year, about 3,500,000 bushels are being cleared for export each week, primary receipts show a progressive decline and the visible supply is not mounting as rapidly as in the past two months.

Canadian wheat is not exerting a great deal of pressure as much of it is being placed in storage by growers and exporters appear to be buying rather freely.

The U. S. Department of Agriculture places world production of wheat in the northern hemisphere in 1923 at 3,000,397,000 bushels against 2,755,987,000 bushels last year and 2,655,930,000 bushels in 1921. Prospects in the southern hemisphere remain favorable, also, so that there appears to be plenty of wheat in sight for importing countries.

The United States has exported about 55,000,000 bushels since July 1, most of it from east of the Rockies although it is calculated that there is but little surplus above domestic needs in that section with the exception of durum wheat in the Northwest. This situation has been a factor in the strength of the market in the last ten days.

Seeding conditions in the main winter wheat belt are favorable but reports still point to some decrease in acreage as compared with last year.

Corn Passes Dollar Mark.

Cash corn remains extremely scarce and demand from industries and distributors is keen. Prices advanced last week to above the dollar mark at Chicago for the first time since October, 1920. Bids of around 75 cents for new No. 4 corn to be shipped in the next thirty days are being made in the middlewest.

Damage by frost was greater that at first expected and estimates upon the crop are being reduced to slightly below three billion bushels. Its actual feeding value probably shows still greater loss. Weather conditions have been unfavorable for curing and mold and rot will probably take additional toll. All signs point to a tremendous feeding demand during the fall and winter.

Oats and Barley.

Demand for oats has broadened as this grain has not been on a par with other feed grains. Primary receipts are falling off so that the visible supply is not gaining rapidly. World production of oats, twenty-five countries reporting, is estimated at 3,070,331,000 bushels against 2,791,429,000 bushels last year. The barley crop, twenty countries reporting, is estimated at 968,715,000 bushels against 858,281,000 bushels last year. The total rye crop in twenty-two countries is estimated at 932,642,000 bushels against 802,589,000 bushels last year.

The range of cash grain prices for the week ending October 3 was as follows: Chicago—Wheat: No. 3 red, $1.04@1.08; No. 2 hard, $1.09@1.18; No. 3 hard, $1.05@1.09 1-2. Corn: No. 2 mixed, 91 1-2c@$1.01; No. 2 yellow, 91 1-2c@1.01 1-2; No. 3 yellow, 92 1-2c@$1.01 1-4. Oats: No. 2 white, 43@46c; No. 3 white, 41 1-4@44 1-4c; No. 4 white, 41 1-4@44c. Rye: 71@73c. Barley: 57@73c.

Clover Seed Holds Gains.

Clover seed prices are holding most of their gains amounting to around $4 per bushel on red clover above the low point of the season. The market outlook is strong as a result of the small crop but higher prices will result in the use of substitutes such as soy beans, in larger imports and in more economical use of seed by farmers. In addition, the large carryover partly offsets the small crop. Quotations: Toledo, per bu.—prime red clover, $14.25; prime alsike, $10.50; prime timothy, $3.70. Chicago, per 100 pounds—clover, $19.00@23.00; timothy, $7.00@8.00.

Feed Markets Dull.

The feed market is dull and prices are weak. Neither jobbing nor consuming demand shows improvement. Flour mills are operating at a fairly high rate and stocks of wheat feeds are still accumulating at lake ports and Buffalo.

Prices per ton (100 pound bags) in carlots: Chicago—Bran, $31; standard middlings, $33; flour middlings, $36; cottonseed meal, 36 per cent, $49; 43 per cent, $55; hominy feed, $40; gluten feed, $40; old process oil meal, $53; tankage, $60.

Hay Market Turns Firm Again.

The hay market is again firm as a result of light receipts. Prices, however, show but little change. Prices per ton in carlots: Chicago—No. 1 timothy, $27@28; No. 2, $24@26; No. 1 light clover mixed, $24@26; No. 1 clover, $22@24; No. 1 to choice alfalfa, $18@28; upland prairie, $18@21; rye straw, 11.50@12.50; oat and wheat straw, $9@10.50.

Decline in Eggs Halted.

Unusually heavy receipts of fresh gegs for this season of the year have caused a temporary downturn in the market, but the market is regaining strength. Arrivals at the four leading markets since September 1 have totaled about 25 per cent more than in the same period last year when dry weather curtailed fall production. The increase in the rate at which eggs are disappearing into consumptive channels is much less than the increase in receipts. Better grades of fresh eggs undoubtedly will advance further during November and December when receipts are sure to be much lighter but lower grades are in uncertain position owing to the large stock of storage eggs.

Receipts of poultry are gradually increasing and are due to mount much higher in the next sixty days. As in the egg market, arrivals are the heaviest on record for this time of year, reflecting the tendency to expand production. The rate of consumption likewise is larger than ever. The enormous accumulation of poultry in storage from last winter will be reduced to about the same size as a year ago by the time fresh receipts are heavy enough to begin storing again. Latest quotations: Chicago Eggs extras, 40@41c; miscellaneous, 29@30c; dirties, 22@24c; checks, 19@21c; fresh firsts, 30@34c; ordinary firsts, 25@26c. Live poultry: Hens, 17@22 1-2c; springers, 19c; roosters, 14c; ducks, 23c; geese, 21c; turkeys, 20c.

Butter Turns Upward Again.

Butter prices have turned upward again and have recovered most of the recent losses. Statistically, the market is rather strong, owing to the small stocks in storage compared with last year, and broad consumptive demand. Production also is declining from week to week. On the other hand, the make is running larger than last year, receipts at the leading markets in September were about 17 per cent larger than a year ago and withdrawals from storage at those cities during the month were much smaller than in September, 1922. Some foreign butter is coming in, but not in sufficient quantities or at great enough discount below domestic prices to exert much influence. Receipts will probably decline during the next two months and start prices of fresh butter on an upward trend once more.

Prices on October 3 were as follows: 92 score fresh creamery—Chicago, 46 1-2c; New York, 47c; Boston, 47 1-2c; Philadelphia, 48c. 90 score centralized carlots—Chicago, 45 1-2c; New York, 45@45 1-2c; Boston, 46c.

(Continued on page twenty.)

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Mosaic Menaces Potato Crop

Mosaic is the worst enemy that has ever confronted the potato growing industry, says George L. Zundel, extension specialist in plant pathology of the state college, in a recent bulletin.

The methods of control are, in the main, two: First, the planting of seed from healthy plants only, and, second, the use of a seed plot isolated from any commercial field and vigorously rogued for all mosaic or other objectionable plants every week or ten days during the growing season.

Mosaic is distinguishable only by certain specific symptoms appearing on the leaves, says Mr. Zundel. It is characterized by mottling of the leaves with dark green and light green areas. The light green areas grow more slowly than the dark green, thus causing an uneven expansion of the leaf, which results in a crinkling. In the early stages of the disease, the mottling is not well marked but becomes more pronounced in later stages. At first, the plants assume natural growth but soon a dwarfing takes place which in time terminates in typical curly dwarf. The symptoms are not uniform in all varieties so one must become familiar with the disease as it appears on different varieties and under different climatic conditions. To illustrate, typical mosaic appears on the Green Mountain variety, while usually very little mottling appears on the Netted Gem.

The tubers produced on a mosaic plant are either very poorly shaped or they are the most perfect tubers in the field and since the disease may be transmitted through the tubers it makes bin selection of seed a very hazardous proposition.

Potato mosaic is transmitted in two ways, first, by planting tubers from diseased plants; second by means of insects. Experimental work has demonstrated that the virus causing the disease is carried in the sap of the plant. The principal insect carrier is the potato aphis. When an aphid feeds on a mosaic plant and then feeds on a healthy plant the virus is carried with the insect and transmitted to the healthy plant. Furthermore, if an aphid once gets the mosaic virus in its system it can transmit it to its offspring for several generations so that they can infect healthy plants without feeding on mosaic plants themselves. No doubt, there are other sucking insects that can also transmit the virus but this remains for future experiments to demonstrate. Recent experiments seem to indicate that mosaic can winter over on certain weeds and act as centers of infection in the spring.

The nature of the mosaic virus has not been understood in the past and even now the knowledge of it is incomplete. The most recent developments seem to indicate that some type of protozoa or amoeba (very low microscopic forms of animal life) are responsible for mosaic. Experimenters in the various states, Hawaii, Java and elsewhere have located and seen these low forms of animal life in the mosaic diseased areas of various plants. It is very probable then that we are on the verge of a more complete understanding of another type of plant disease hitherto unknown and the scope of plant pathology will be greatly enlarged.

There is a disease of the potato foliage in which deep yellow spots appear which later turn white and finally may disappear. This is "chlorosis" or "calico" and is distinct from mosaic.

No spray or seed treatment has been successful in controlling mosaic except so far as it might control the insects that transmit the disease. We must, therefore, resort to other means of control.

Kitsap County Fair

A new name has been written on the list of annual county fairs in Washington. The Kitsap county populace has gotten together in Port Orchard and put on a fair that is little short of remarkable for a first attempt.

The town of Port Orchard dug into its pockets far enough to provide a convenient, attractive and debt-free site within easy reach of its business section. The hastily-formed association worked overtime to make the fair complete in every detail, and the many visitors found a wide variety of interesting exhibits ranging from all the usual fair displays to a herd of elk and fancy game birds, shown by the county game warden.

In the poultry displays the exhibitors outdid themselves and the showing would stand up well alongside of many of the older shows of the state.

The herd of Holsteins from Minterbrook farms, including the big bull, King Minterbrook Sylvia Matador, was the mainstay of the live stock show. There was only one entry in each of the other classes and consequently no competition, but all the animals shown were good individuals. Just outside the live stock barn was Charles Gaskill of Port Orchard and his string of milk goats, satisfying the inquisitiveness of many visitors as to the quality and taste of the milk.

The room provided for the various exhibits proved to be inadequate and on the opening day carpenters were busy making temporary shelter for the ever increasing entries. The productiveness of Kitsap county was well illustrated by the many fine booth displays. The boys and girls' club work booth was very complete and interesting.

The crowds were fair in size for both the afternoon and evening, there being a moving picture show and dance at the close of the day to furnish recreation for the tired but happy crowds.

Halt Eelworm Embargo

Producers of clover and alfalfa seed in the Pacific Northwest will breathe easier now that the Federal Horticultural Board announces that scattered occurrence of the stem and bulb eelworm, a serious pest of alfalfa and clover, in the United States as well as its prevalence in foreign countries makes control of this pest by federal quarantine impracticable. This conclusion was reached at a hearing today by the federal horticultural board of the United States department of agriculture, and as a result no quarantine action will be recommended.

The hearing indicated that serious damage by this nematode or eelworm to alfalfa and clover has occurred only in the Pacific northwest in moist sections or under irrigation conditions, and there was no evidence to indicate that it was likely to become a menace under other conditions in the United States. The board, it is said, does not believe that products from the areas in which infestation is reported convey a greater risk to other portions of the country than do seeds or plants from foreign countries, the imports from which for the last hundred years have been undoubtedly bringing this pest into the United States.

Failure of the pest to occasion injury in the United States as a whole is apparently due to the generally less favorable climatic conditions. Desirability of local control under state authority was indicated at the hearing for the protection of new irrigation projects.

Washington's Wool Crop

Washington's 1923 wool crop will return about $1,500,000 to sheep men throughout the state, T. J. Drumheller, president of the Washington Wool Growers' association, says.

Mr. Drumheller declared that about 4,000,000 pounds of wool had been clipped and shipped in the state this year.

"Washington wool went into the market when there was a shortage of wool," said Mr. Drumheller, "and ran between 36 and 40 cents per pound. Because of the shortage at the time our wool was sold most of it was shipped by rail at a half cent differential over water rates. There are about 400,000 head of sheep in the state."

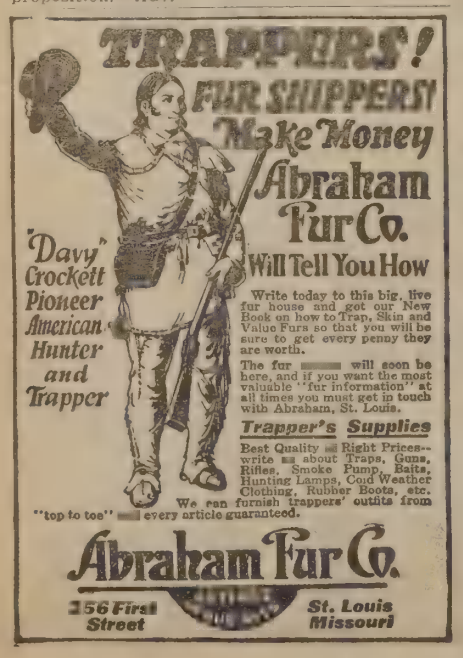
GENERAL ADVERTISING.

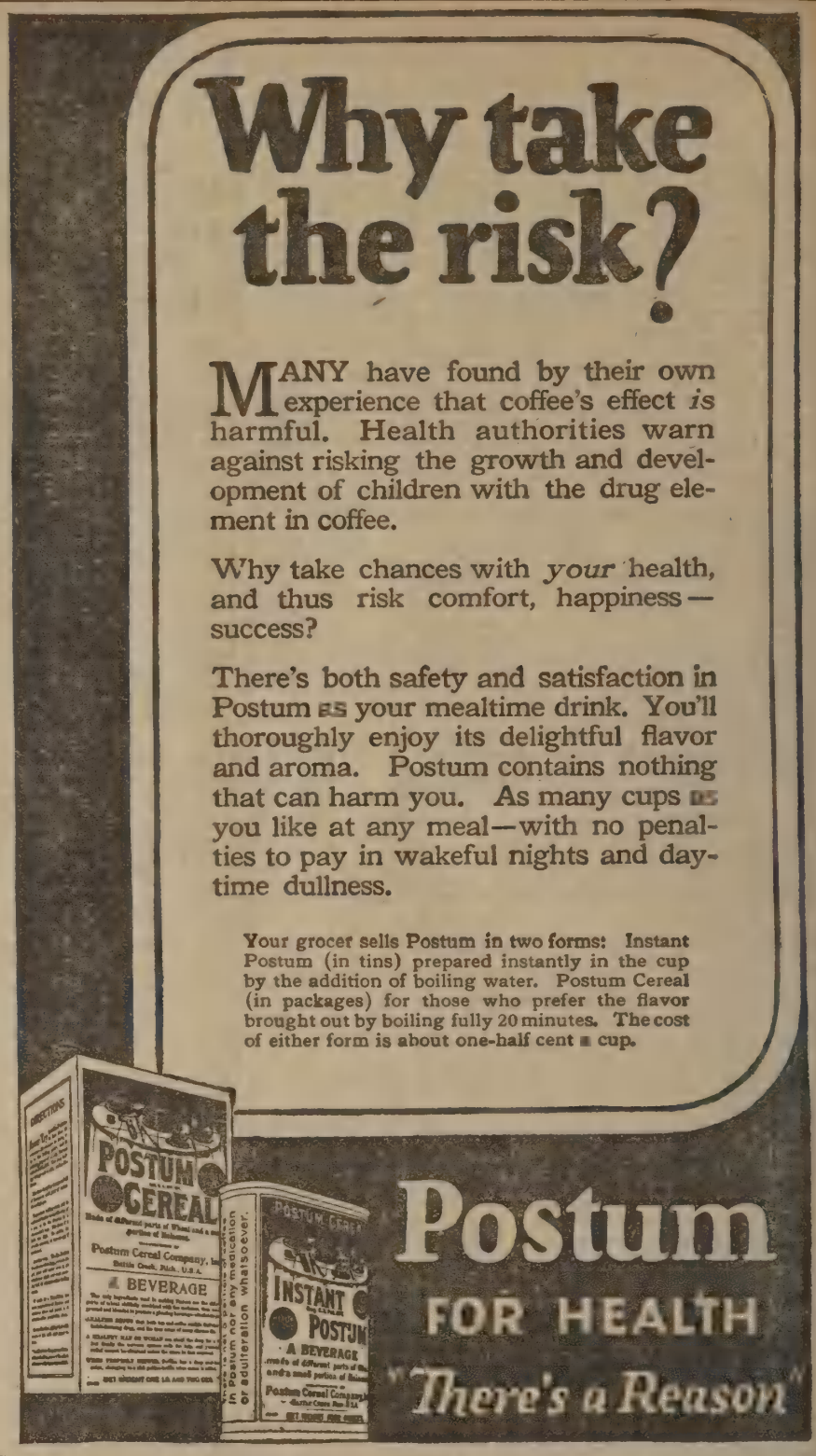
WHITE LIGHT FROM OIL LAMP NOW

Government Tests Prove New Light Beats Electric—Sensational Invention.

A new lamp has recently been invented which burns common kerosene oil and produces a soft, white light said to be even better than electric or gas. Tests by the government and leading universities prove this new light is superior to ten ordinary oil lamps. It burns without odor, smoke or noise, is simple and economical, requires no pumping up and has been approved by the underwriters for insurance.

The inventor, W. T. Johnson, 161 Union ave., Portland, Ore., is offering to send one of these new lamps on ten days' free trial, or even give one to the first user in each locality who will help him introduce it. Write him today for particulars. Also ask him to explain his agency proposition.—Adv.





The department editors of this paper are anxious to be of service to you Do not fail to write to us if they can be of help to you.

Hog Men Organize

When 40 or 50 swine breeders meet to discuss their various problems, it is almost certain that some interesting viewpoints will be uncovered that would be valuable information to other breeders if they could have been present. The following is a brief review of the points that were discussed at the Washington State Swine Breeders' association banquet at Yakima during the week of the state fair.

"There are better prospects ahead for the hog breeders of the northwest than they have ever before experienced," began Ray J. Fox of Oregon, who judged all the breeds shown at the state fair this year. "There is a good demand for market hogs and the Portland markets are spending several millions each year for pork shipped from the corn belt. As I see it, the western swine breeders will not be able to fill the supply for a number of years."

"It is hard to estimate the value of purebred sales to hog breeders of any community," remarked J. Alva Bull of Ellensburg. "I am a strong believer of combination sales, which allows animals of different breeds to be entered and sold at auction. This gives the farmers a good chance to pick up a good purebred sow or boar, and they know they are getting good animals since the guarantee is usually supplied at such sales. As a general rule he is not so particular what breed he buys, but many of them are anxious to get a purebred sow of some kind. A good auctioneer is an asset to any sale, since he must know when to sell an animal, and not sell at a disadvantage to the buyer or to the consigner."

Earl Harper of Johnson, Whitman county, said that he had known of good results from local sales even where the small breeder was forced to go in with a neighbor who was holding the sale. He suggested, however, that the conditions of the sale should be attractive to all buyers, and that the visitors should be made comfortable during the sale. Proper guarantees should be given so that the cautious buyer would not hesitate to buy an animal that suited his needs.

C. M. Hubbard, live stock specialist of the state college, urged the value of having registration papers ready at the time of the sale. He told of a plan that had been worked out which gave the buyer's name on a change of ownership blank, which is sent immediately to the breed association, asking that papers which have been applied for be mailed to the purchaser. This, he said, avoids much trouble and confusion after the sale and is more of an inducement to purchase young purebred, but as yet unregistered, animals.

"I am coming to believe more and more that there is no best breed," said Steve Woodhouse of Ellensburg. "I am only a beginner with hogs, but find that it pays to follow out the advice of more experienced breeders, and also the suggestions given by the state college. I tried out the ton-litter plan and was very well pleased with it. I used to keep my growing pigs in any kind of a pen, and not pay much attention to what kind of feed I gave the sows. I find, however, that by putting the young pigs on alfalfa pasture and the self-feeder as soon as they are weaned they will make rapid gains until they have reached the right age to butcher. When I began feeding I let the pigs have too much feed and gave them a ration that was too fattening. Hereafter I am going to feed more oats and barley in the mixture and put the feeders out in the pasture, where they will get plenty of exercise going to and from feed and water."

George Varnum of Mabton emphasized the value of boys' and girls' club work and said that in many cases a boy can be encouraged to stay on the farm by giving him a good pig for his own. In the pig club he is required to keep a cost account, and he knows exactly whether his pig is paying its own expense or not. In many cases the boy's father is induced to buy purebreds, and often gets some valuable pointers from the boy in the way of care and management. Whenever it is possible, such boys should be encouraged to show their animals in the open class; not always for the purpose of winning first prize, but rather to see how their animals compare with the pigs that are getting the money. Boys and girls who take up club work of any kind are usually the better type of youngsters in any community and the club experience helps them to become successful farmers or business men. In fact, it is a training that is an asset to any youngster, no matter what he is going to take up as a life work, said Mr. Varnum.

Before the meeting adjourned the members organized the Washington State Swine Breeders' association for the purpose of promoting the interests of all breeds of purebred swine in all parts of the state. J. P. Paddison of Yakima was elected president and given power to appoint a committee to go before the state fair secretary next year and agree on certain days for judging the different breeds and to discuss any other problems that might be vital to those who expect to show next year.

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It is easy now, but hard after the rains begin to fall.

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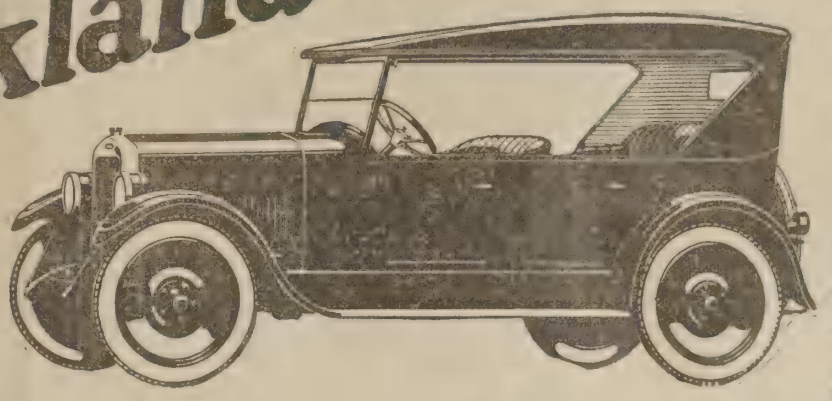

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Note these new features—many of them exclusive:

Brand new L-head engine. Smoother, quieter, more powerful;

Four-wheel brakes for safety. Simple—practical—proved;

Beautiful new blue bodies built by Fisher;

Hand controls centralized on steering wheel;

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Five-Passenger Touring Car . .	$ 945
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Prices f. o. b. Pontiac

These facts and prices will astonish you, but wait until you see and drive the True Blue Oakland and compare it with others!

OAKLAND MOTOR CAR COMPANY, PONTIAC, MICHIGAN
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Every True Blue Oakland carries the long established 15,000 mile guarantee and the Mileage Basis Gauge of Value.

A Nation-Wide Demonstration

"True Blue Travelers"—with thousands of miles of test duty on their speedometers—are touring the country to demonstrate the high quality of Oakland construction and the remarkable efficiency buyers of these 1924 Oaklands will receive, even after months of the most gruelling service.

The True Blue Oakland "6"

Oakland

LIVESTOCK AND DAIRY

Feed for Cows

By E. V. ELLINGTON,
Head of Department of Dairy Husbandry, State College of Washington.

I would like some information regarding feed for cows. In feeding the following, how much linseed meal should be allowed: Two and one-half pounds ground barley; two and one-half pounds feed meal (corn meal); 10 pounds mill run? F. B.
Port Blakley, Wash.

A grain mixture which has been found to be very efficient consists of four parts, by weight, of mill run, two parts rolled barley and one part of linseed oil meal. This is the standard mixture that we have used very effectively with the state college dairy herd. We mix together 400 pounds of mill run, 200 pounds of rolled barley and 100 pounds of linseed oil meal. This is fed at the rate of one pound for every three to four pounds of milk the cow produces daily. The amount depends upon the breed of cattle. The Jerseys and Guernseys are fed one pound for every three pounds of milk and the Holsteins and Ayrshires one pound for every four pounds of milk produced daily.

If both corn meal and barley are at hand, you can feed the same mixture that you are now using, that is, 10 pounds of mill run, two and one-half pounds ground barley, two and one-half pounds corn meal and add to this one and one-half pounds of linseed oil meal. You should secure excellent results with such a grain mixture when fed to your cows in the above stated amounts.

I take it that you are using some leguminous hay, such as alfalfa and clover, for your roughage. These hays form the best and cheapest sources of protein and the grain ration suggested will supplement such roughage.

Please tell me what kind of feed to buy to make a balanced ration with alfalfa hay to start for winter? J. R.
Richland, Wash.

In figuring a grain ration, cost is one of the most important factors. With this in mind, the separate grains should be selected to supply the necessary nutrients at the lowest possible cost. Where leguminous hays, such as alfalfa or clover, are available, they form one of the best and cheapest sources of protein.

It has been the practice in the management of the state college dairy herd to select the cheapest possible grain ration and yet one that will supply the necessary nutrients for milk production and body maintenance. Alfalfa hay is used as the main roughage, together with silage or roots to supply succulence. Either corn or sunflowers may be used for silage. The grain ration consists of four parts, by weight, of mill run, two parts rolled barley and one part linseed oil meal. When corn or wheat is cheaper than barley, either may be substituted in equal amounts, as the feeding value of these three cereals is practically the same. Cotton seed meal or soy bean meal can be similarly supplied in the place of linseed oil meal when the price is right.

Ground oats are well adapted for feeding dairy cattle. They are a very palatable cereal and are slightly laxative. Because of the high market price it is usually more economical to sell oats and purchase other feeds which furnish nutrients at a cheaper price. When oats can be secured as cheaply as barley or corn the following grain mixture is recommended: Four parts of mill run, two parts of ground oats, two parts of rolled barley and one part of oil meal. These mixtures may be fed at the rate of one pound for every three or four pounds of milk the cow produces daily, the amount depending upon the breed.

VETERINARY

By DR. S. B. NELSON.

Warts—I have a calf about a year old that has warts all over its neck and head as big as a large egg. Is there a cure for them? MRS. J. F. P.
Hiesson, Wash.

Give the calf a teaspoonful of Fowler's solution of arsenic for a week or 10 days. Then stop and let her rest for a week or 10 days, and then repeat. This may stimulate the skin growth and the growing of healthy skin tissue.

Spavin—I have a horse that is lame in the left hind foot. After going a little while she gets better, but when she falls a little she is worse and does not want to back up. She walks on her toe. E. M. S.
Colbert, Wash.

The story that you give about your horse would indicate that she was spavined. If that is the case, the best thing for you to do is to consult your veterinarian in Spokane and see if he will confirm the diagnosis. If so, he will either severely blister or fire the spavin, very likely the latter.

Cribber—I have a horse 13 years old that is a confirmed cribber. At this time of year when he is pastured at night and fed hay in the morning he will be bloated within half an hour. Is this caused by his wind sucking? I have had his teeth filed, but not by a veterinarian, as there is none in our vicinity. This bloating has resulted in colic in the past. J. G.
East Sound, Wash.

The bloating is caused partially by his wind sucking and partly through his indigestion because of a distention of the stomach filled with the sucked air. You might try filing between his front teeth with a very, very narrow file. I think it would be better if this horse was kept in a box stall constantly when he is not working, or if he is turned to pasture he should have a good, broad strap fastened tightly about his neck. When you feed him his hay and grain you should feed it to him on the floor and let him pick it up. Do not leave any place in the box stall where he can get his teeth on an edge. Cribbers or wind sucking horses are always subject to colic.

Milk Fever—I have a cow that was subject to milk fever when her last calf came. Is she apt to have it again? Also I have a horse sweenied. What will cure sweeny?
Springdale, Wash. J. T. B.

A very good preventive for milk fever is to take the animal off from good feed before she is expected to freshen. Feed her the driest, poorest feed that you have for about 10 days. In order to keep her bowels normal give her, if necessary, a handful of epsom salts in a quart of water once daily.

When she freshens change her to better feed. Of course, both changes should be gradual, taking four or five feedings to do this.

Regarding the horse sweenied: If it is a bad sweeny you may get good results from the following blister: Red iodide of mercury, one drachm; powdered cantharides, one drachm; lard, 10 ounces. Mix. Apply this, with rubbing, to the sweenied part. Repeat in two or three weeks as necessary. Work the animal gently; tie her up so that she can not rub it or get at it with her lips for a few hours after you have applied the blister.

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UP TO DATE.
Opposite Union Station, Spokane.

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Beacon Lite Spark Plugs
You Can See Them Fire
Just lift the hood and look. See instantly which cylinders are "dead." No guessing. No testing. Cost no more than ordinary plugs. Sure fire. Extra durable. Sold only by "Pani Men". Agents smashing all earning records. Exclusive territory. Write quick.
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A Mighty Helper for the FARMER
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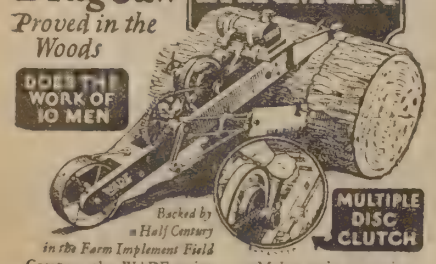

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Engine Develops Full Horse Power
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The WADE is the "old reliable" of the Drag Saws—
It will pay you to own a WADE
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Consider, from what happened this fall, if an economical, dependable motor truck would not make money for you!

Then consider carefully the GMC Model K 16 one ton truck —its value as a transportation unit.

You will find it a powerful, dependable motor truck. You will find its economical engine, built exclusively for motor truck use and embodying many distinctive features, easier to care for, longer lived, and better fitted for heavy hauling.

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One Ton	$1295	Three and One-Half Ton	$3600
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All prices for chassis only, f.o.b. factory, tax to be added

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WANT ADS offering farms, live stock, poultry, second-hand machinery and a hundred and one other things on "Want Ad" page of this issue.

Wheat Prices

Vary With the Seasons of the Year

Herewith is given a table of the extreme prices of wheat in Chicago over a reports of the Chicago Board of Trade. There are numerous interesting facts that can be figured out from this table. For instance, it is seen that the lowest price occurred 12 times during the month of August and never in the month of May. On the other hand, the highest price occurred 12 times in the month of May, 10 times in the month of April and only five times in the month of August. The lowest price occurred 13 times during the months of January, February and March, while the highest price occurred only 10 times in these three months. In the next three months -April, May and June—the lowest price occured eight times, while the highest price occurred 27 times. During July, August and September the lowest price occurred 22 times and the highest price 15 times, while in October, November and December the lowest price occurred 20 times and the highest price 14 times.

Taking it by half-years, it is seen that during the first six months of the year the lowest price occurred 21 times and the highest price 37 times. In reverse order, during the second half of the year the lowest price occurred 42 times and the highest price 29 times.

These figures indicate the tendency throughout these 60 years for the price to be lower during the fall following the American harvest, than during the spring and early summer, when the wheat supply has been reduced and is largely out of the farmers' hands.

Year.	Lowest price reached.	Range for year.	Highest price reached.
1860	December	.66@1.13	April
1861	June, July	.55@1.25	May
1862	January	.64@ .92	August
1863	August	.80@1.12	December
1864	March	1.07@2.26	June
1865	December	.85@1.55	January
1866	February	.78@2.03	November
1867	August	1.55@2.85	May
1868	November	1.04@2.20	July
1869	December	.76@2.47	August
1870	April	.73@1.31	July
1871	August	.99@1.32	Feb., Apr., Sept.
1872	November	1.01@1.61	August
1873	September	.89@1.46	July
1874	October	.81@1.28	April
1875	February	.83@1.30	August
1876	July	.83@1.26	December
1877	August	1.01@1.76	May
1878	October	.77@1.14	April
1879	January	.81@1.33	December
1880	August	.86@1.32	January
1881	January	.95@1.43	October
1882	December	.91@1.40	April and May
1883	October	.90@1.13	June
1884	December	.68@ .96	February
1885	March	.73@ .91	April
1886	October	.69@ .84	January
1887	August	.66@ .94	June
1888	April	.71@2.00	September
1889	June	.75@1.08	February
1890	February	.74@1.08	August
1891	July	.84@1.16	April
1892	October	.69@ .91	February
1893	July	.51@ .85	April
1894	July	.50@ .63	April
1895	January	.48@ .81	May
1896	August	.53@ .94	November
1897	April	.66@1.06	December
1898	October	.62@1.85	May
1899	December	.64@ .79	May
1900	January	.61@ .87	June
1901	July	.63@ .79	December
1902	October	.67@ .95	September
1903	March	.70@ .93	September
1904	January	.81@1.22	Sept., Oct., Dec.
1905	August	.77@1.24	February
1906	Aug., Sept.	.69@ .94	May
1907	January	.71@1.22	October
1908	July	.84@1.11	May
1909	August	.99@1.60	June
1910	November	.89@1.29	July
1911	April	.83@1.17	October
1912	Nov., Dec.	.85@1.22	April, May
1913	October	.80@1.15	January
1914	July	.77@1.33	September
1915	August	.98@1.68	February
1916	June	.98@2.02	February
1917-19	Price fixed	3.18	October
1920	December	1.50@1.64	December
1921	April	1.19@1.87	May
1922	August	1.00@1.73	May

Alphabet of Marketing

At a farmer picnic in Illinois Sydney Anderson in his speech gave some helpful hints on the "Fundamental Principles of Marketing" as follows:

It costs more:

A—To sell at long distances than at short.

B—To sell unstandard than standard products.

C—To sell perishable than unperishable.

D—To sell small quantities than large quantities.

E—To sell many varieties than few varieties.

F—To sell products with a seasonable demand than with an unseasonable demand.

G—To sell products not widely known than those widely known.

"If the farmers form their organizations and place good men at the head of them, they will succeed," he said.

"After you have organized do not withdraw from your association because you can momentarily get a better price for your products elsewhere. Stick to your association and it will prosper."

BERKSHIRE MEN ELECT.

The Berkshire swine breeders who attended the state fair at Yakima held a short business meeting September 18. The following officers were elected: Dr. W. J. Keyes, Spokane, president; J. A. Simonson, secretary-treasurer; J. Alva Bull, D. C. Bunn, Prosser, and L. D. Green of Grandview were appointed to arrange for a futurity show at the fair next year.

Clear More Land THIS FALL— Large Profits Next Year

IF you are after bigger crops and bigger profits next year, there is no more valuable work you can do following harvest than to clear more of your stump land.

The easiest, quickest and most economical way is with Pacific Stumping, the new du Pont explosive. Pacific Stumping has approximately the same strength as any standard stumping powder, stick for stick, yet leaves no larger hole in the ground than a "20%"—and you get ½ more sticks for your dollar. It won't freeze. Get it from your local dealer.

Write for free booklet, "Clearing Logged-off Lands." It gives full information on the use of explosives for land-clearing, ditching and tree-planting.

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REDUCED FARES ON ALL RAILROADS.

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Gigantic Live Stock Exposition
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N. W. Hay and Grain Show
Western Winter Poultry Show
Night Horse Show
Daily Auction Sales

Invest in farm land or improved farms NOW. Our "Want Ads" offer some A1 opportunities. Read them.

POULTRY AND RABBITS

Unclean Sour Milk

Cause of Disease in the Flock

An interesting experience with a commercial flock of White Leghorns was told by J. D. McClain of Marysville, who has 960 pullets and over 600 old birds, which he is raising in a double-decked house. Late this summer he had been having trouble with occasional blow-outs, and at first thought the trouble was due only to the heavy egg production of the flock. The number increased gradually and W. D. Buchanan, poultry specialist of the state college, was called upon for advice.

Upon examination of the flock, Mr. Buchanan said that there seemed to be no reason for trouble of this kind unless there were impurities in the feed. Mr. McClain said that he was feeding skimmed milk, which was delivered to his farm daily, but that it was always clabbered when received. This was found to be the source of the whole trouble, since the milk had been kept in a wooden barrel which had not been thoroughly cleansed while in use.

"I frequently find cases of this kind," said Mr. Buchanan, "and in most cases they trace directly to the source of milk supply. It is not always the fault of the poultryman, but in many cases the milk cans in which the skim milk is carried are not thoroughly washed and scalded at the creamery. If the same cans are used every day they should be scalded before being used again for milk, even though sour milk is used, because when the bacteria accumulates for a number of days they increase so rapidly that they cause serious indigestion in the flock.

"This is also true with the containers which are used on the farm, and it is important that these should be cleansed and scalded if possible at frequent intervals. Sour milk should never be allowed to dry and crumble along the edges of any container without being thoroughly cleaned out before the vessel is used again for milk. Many do not realize that such material contains millions of bacteria and causes fresh milk to sour very rapidly. Cleanliness always pays and more especially where disease and death of birds result from the lack of sanitation."

Mr. McClain's trouble was not considered serious, since he was advised to continue feeding the same rations he had been feeding for maximum egg production. Any change in feed would have had a tendency to throw the birds into a molt and not materially effect the trouble caused from the sour milk. By changing the vessels and using only sterilized containers for the milk supply and insisting that the delivery of skim milk be made only in steamed milk cans, a greater part, if not all, of the trouble could have been avoided, according to Mr. Buchanan.

Mr. McClain was cautioned not to let this experience discourage him from using skim milk because when used properly, it is one of the best egg producers obtainable, and should not be omitted from the ration of the laying hen if it can be obtained at a reasonable price. Mr. McClain was feeding both kale and carrots as green feed and the grain ration was considered a good one for that time of the year.

Not Always a Cull

Molting is only one of the many points that should be taken into consideration in culling the poultry flock and it should be applied "last and least, rather than first and the total reason for basing judgment," in the opinion of Hubert E. Cosby, poultry specialist in the Oregon extension service. He declares that too many producers have the idea that culling is the simple process of selling off the hens that molt early, while the mere fact that a hen begins to molt in July or August does not necessarily indicate that she is an inferior producer.

"One characteristic of a low-producing hen is a slow, early molt with an early cessation of lay. This does not mean, however, that every individual hen that molts early is a cull hen," says Mr. Cosby. "Occasionally a very low-producing hen will not molt early because her vitality is so low she can't stand the strain of growing feathers.

"The yellow color in the shank, vent and beak is a valuable aid in culling, but, like the molt, it has been abused and used as the single weapon in the culling battle. How frequently have we heard the statement, "Sell all hens that have yellow shanks in July and August." This is true a full 100 per cent when the flock has been given regular balanced care with no acts of mismanagement to upset their regular lay. The molt and yellow color have a direct relationship of the care the flock has received.

"When a hen stops laying she usually starts molting regardless of the time of year. The cull hens will stop laying early, even under good, regular care; they start to molt and the yellow color starts to return. This condition, however, will affect only a small number of birds in a well-managed flock and suspicion will be directed against them, and when all other characteristics are applied they usually are sent to market.

"If a whole flock is upset by moving, mismanagement, change of feeding habit, etc., the entire flock will go down in production, a molt will start and, due to nonlaying, the yellow color returns.

"The molt and yellow color have a value with the few cull hens in a well-managed flock; it is a different story when a flock, through mismanagement, shows the characteristic that rightfully belong to the natural low per cent of the flock commonly called culls.

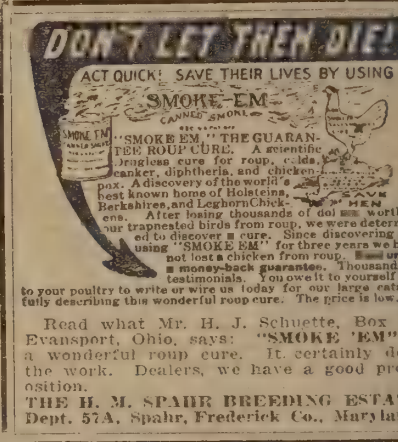
"Recently a farm meeting was held in a flock of 450 birds in their first or pullet-laying year. The production was less than 100 eggs a day. More than 80 per cent of the birds were in a heavy molt and many of them nearly through. The vent, earlocks, beak and shanks were extremely yellow. The flock in this condition showed unmistakable evidence of having been upset nearly three months previous. Investigation disclosed the fact that the owner employed a 'self-confessed experienced poultryman' early in May. Not knowing his work, the flock was thrown into a molt. During the molt of course the yellow color returned to all parts of the body. The poultry producers in attendance recognized the fact that we would have to practically ignore both the molt and yellow color in culling the flock. The entire flock was culled and only 64 hens were rejected as undesirables. An amateur believing the positive statements relative to molt and yellow color would have wrecked this flock, instead of culling it. In addition to the above example, flocks having the egg mash taken away from them when eggs get cheap; hens that have sat on eggs and brooded chicks; grain-fed flocks. etc., will present some interesting problems. The molt has its place and so has the yellow pigment, but they must be considered intelligently and this can only be done when flock management is known. Culling is one of the hardest phases of poultry culture. It has been abused by people who thought they had mastered the subject by a culling book."

Opposes Investigation

The Rockefeller foundation has a plan under consideration to investigate Japanese inroads on the Pacific coast. This has met with a vigorous protest from Miller Freeman at Seattle, who declares in a letter to a representative of the Rockefeller foundation:

"What the people out here want, and have a right to expect, is the protection of the federal government, with prompt and definite action on the simple problem that we have a right to say who shall come and dwell among us and form a part of our population."

Moreover, Mr. Miller believes that the proposed new investigation is likely to delay a settlement of the trouble, and that there have been enough of such investigations already.



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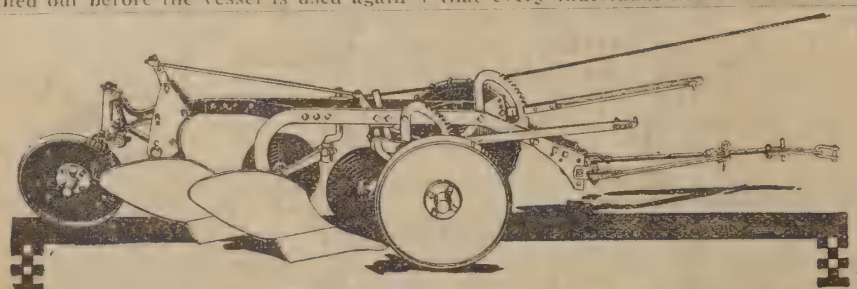
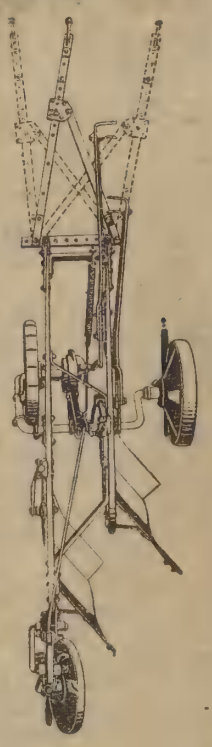
Dept. 57A, Spahr, Frederick Co., Maryland.



Only 26 Inches High —37 Inches Wide

You can plow under those low, overhanging limbs, up close to the row—deep or shallow as desired, when you use the low, narrow

John Deere No. 45-A
For Small Tractors



Only 26 inches high over all when plowing 6 inches deep. Levers set low when plow is working and are lowered as depth is increased.

Only 37 inches wide —gets up close to row, throwing either to or from the trees; no projections outside of narrow wheel base to interfere with trees.

Wide offset of plow to right or left of tractor for work close to row is permitted by adjustable reversible hitch. (Note this hitch in illustration at right.)

Good clearance — 21 inches from beam to share point; lots of clearance at other points. A big advantage when plowing deep or turning under cover crops.

Mighty strong — beams, braces and axles made of special hard and tough John Deere steel. Braces hot-riveted to beams—frame has lasting rigidity.

Pulls light—a real fuel-saver. Simple, positive power lift.

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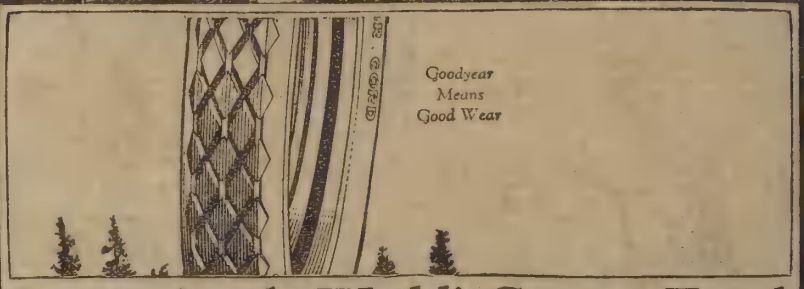
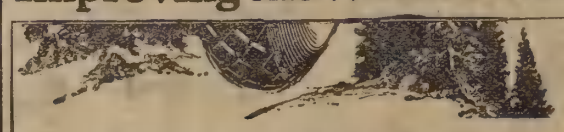


Improving the World's Greatest Tread



There is scarcely a motorist anywhere today who does not recognize the familiar pattern of the Goodyear All-Weather Tread.

For many years, to millions of people, this famous tread has been the mark of a tire of superior quality and worth.

Imprinted on the roads of the world, its clean-cut outlines unmistakably evidence its efficiency and popularity.

In the *new* Goodyear Cord Tire the celebrated All-Weather Tread has been importantly improved.

The extraordinarily dense and tough rubber compound now used in its making assures even longer wear than before.

The powerful rugged blocks of this tread are now reinforced at the base by heavy rubber ribs, knitting the whole tread design into a stronger unit.

The blocks which line the tread on either side are beveled at the outer edge, reducing vibration and strain as wear proceeds.

* * *

Heavier sidewalls, stouter ply unions, and other improvements, make the new Goodyear Cord with the beveled All-Weather Tread the best tire Goodyear ever made.

It runs more smoothly and quietly; it piles up bigger mileages; it preserves without sacrifice the digging, clinging, road-gripping power of the long-wearing All-Weather Tread.

Despite its advantages this *improved* Goodyear Cord costs no more to buy than ordinary tires.

You can get your size from your Goodyear Service Station Dealer, who is pledged to help you get from your tires all the mileage built into them at the factory.

Made in all sizes for Passenger Cars and Trucks

GOODYEAR

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ORCHARD AND GARDEN

Honey Drippings

By GEORGE W. YORK.

I suppose there are many of the breeders of THE FARMER who are often troubled about getting a paste that will hold labels to tin or glass. Well, here are directions for making such paste yourself:

Use one part honey, three parts flour, and water sufficient to cook thoroughly into a smooth paste.

This recipe appeared in the British Bee Journal and was conrtibuted by H. H. Brown, who says "It will keep sweet a long time and will stick labels to tin or glass cheaper and better than any other paste I have seen."

Short Honey Crop.

Not only the government reports show the shortest honey crop this year since 1917, but reports from beekeepers all over the United States all agree that the 1923 honey crop is the shortest in years. Very few of the states claim a normal crop. Outside of the states of Montana and New Mexico, which have only certain sections producing honey, there are no large producing sections that report a heavy crop.

Usually the best states for honey are Texas, California, Idaho and some other intermountain territory, but all these report a small crop. The intermountain territory may have 75 per cent of a normal crop, while Texas and California will likely have not over 25 per cent.

Sweet Clover for Honey.

It has taken at least a third of a century for many farmers to learn that sweet clover is one of their best friends. But beekeepers have known its value as a honey producer for half a century or more.

Dr. R. A. Morgan was a beekeeper in Wisconsin 40 or more years ago. But for many years he has been in South Dakota. As an indication of what he can do in his present location, he secured 650 pounds of comb honey from two colonies of bees in one season, and all gathered from sweet clover blossoms.

When Dr. Morgan came to South Dakota he began at once to talk up sweet clover among the farmers. He not only talked it, but he actually scattered the seed of sweet clover far and near. Of course, he didn't advertise his procedure. He kept quiet, and the sweet clover grew, and soon the farmers began to realize its great possibilities both as a forage plant and as a soil builder.

Farmers everywhere should grow sweet clover, not alone for its honey-yielding value or quality, but because it is one of the best forage and hay crops that can be grown.

How Long Will Honey Keep?

Honey is almost a non-perishable food. If properly stored it will keep almost indefinitely. In Chatterbox for 1920, page 70, is an article about "buried cities" this appeared:

"When a royal tomb was opened in 1906 the bees flew into the cave from the sunshine outside and settled on 5090-year-old honey which trickled from a shattered jar."

Of course, very few people in the present fast age would want to keep honey 5000 years, but if it is put in a warm and dry place, it will keep in perfect condition for almost any length of time. But never try to keep honey in a damp, cool place—like a refrigerator, or in a damp basement, for honey attracts or absorbs moisture very readily, and this causes it to sour or ferment.

Pure honey, of course, may soon become granulated if kept in the very best place, but it is very little trouble to reliquefy it by heating it on the stove or in the oven. But be very careful not to heat it any more than is necessary merely to restore it to its original liquid state. If overheated it will spoil both its color and delicate and delicious flavor.

Golden Words for Golden Apples

Nearly a score of years ago Herbert W. Collingwood, editor of the Rural New Yorker, delivered a eulogy to the original Grimes Golden apple tree, which is remembered and now and then quoted in the press ever since. This eulogy was given at the annual meeting of the West Virginia Horticultural society at Martinsburg. Here is an extract:

"West Virginia has developed some great men and has given great wealth to the world, but it is doubtful if any other product of her soil is more worthy to be given to the world than the Grimes Golden apple. Its origin was humble enough. Over 150 years ago an apple seed was dropped on a West Virginia farm. We do not know whether it was planted intentionally, whether it was dropped by some wandering bird or whether it fell from some tree by chance. That does not matter, for the divine instinct and purpose, which, from the beginning has willed that the good shall survive, guarded the seed and nursed the seedling. The little tree grew unmolested to fruitage. There was that within it which corresponds to genius and unquenchable ambition born in the heart of man. It could not be destroyed.

"We can imagine the scene of its first fruitage, when men first found that a new expression of the beauty and value of horticulture had come upon earth. Thomas Grimes, the owner of the farm, had no doubt watched the tree and had perhaps debated as to whether he should cut it down. When the golden fruit appeared, that question was settled, for nature had touched the tree with life and hope and packed her choicest flavors inside the golden skin. We know little of Thomas Grimes. He did his duty in his humble way, but had it not been for the apple, it is doubtful if today we should give him even a passing thought. The apple holds him back from obscurity and will carry his name along through the years as long as men live and care for good fruit."

ENEMIES OF MOTH IMPORTED.

As a result of the search made this spring in foreign countries by entomologists of the United States department of agriculture for natural enemies of the gipsy moth, 36,978 tachinid fly puparia were sent or brought to this country. France, Spain, Italy, Germany, Austria, Hungary, Rumania, Poland and Japan were visited. Rearing work is in progress with adult parasites received from Europe and Japan. About 7000 Apanteles fulvipes have been liberated this season.

DOWN TO THE DEPTHS.

Loosening up the subsoil often helps the orchard.

NOUVELSOIE SHIRTS

Art lustre novelties — patterns in checks and exclusive stripe effects. Unusual weaves and colorings. Only one of many exclusive groups of

HALLMARK SHIRTS

Featured for Fall

HALL, HARTWELL & CO., INC.

TROY, N. Y.

Makers of SLIDEWELL and MARK TWAIN Collars and HALLMARK Athletic Underwear

A Ready Seller
Great Keeper
Good Shipper
Heavy Producer

for Profit, plant

RAINIER Apples

Better Trees!

All stock grown on new soil on the Yakima Indian Reservation. Abundant sunshine, good soil, continuous cultivation, and moisture under control enable us to produce splendidly rooted trees that are thoroughly matured, healthy and hardy. That means bigger yields and more profitable crops for you—the planter.

From our 1,000-acre nursery you may secure nearly every variety of deciduous fruit trees, shade trees, shrubs, vines, roses, etc.

The Dessert Apple Supreme!

The Rainier apple is tried and proven. Bearing trees in the Yakima Valley demonstrate it to be one of the most profitable apples produced.

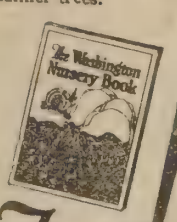
The Rainier is unexcelled for dessert purposes. The fruit is mild, crisp, fine grained, and delightful. The flavor appeals to all. It is the one apple you will enjoy eating any month of the year.

Rainier trees are very hardy, heavy and continuous bearers, and commence bearing at an early age. Its keeping qualities are remarkable. U. S. Government Bulletin No. 587 says: "The keeping qualities of the Rainier apple are unsurpassed by those of any other variety of the Pacific Northwest that has yet come to the attention of the U. S. Dept. of Agriculture."

The Rainier apple is propagated exclusively by us, from the original genuine Scott Rainier trees.

Write for this Book

Shows the Rainier apple in colors, and gives complete history and description of it. Also describes hundreds of other fruits and flowers.



Washington Nursery Co.

Box Y, Toppenish, Wash.

Plant WASHINGTON NURSERY *Trees!*

FRUIT AND SHADE TREES
SHRUBS—VINES—ROSES

243

Buy For Less at U·S·Salvage!

SEND NO MONEY Examine goods and if you are not more than satisfied with your bargain, we will gladly return your money. PAY ON ARRIVAL

O.D. WOOL BREECHES $1.98

Army regulation all wool O. D. Breeches. Class B. Made of the finest wool serge and melton materials. Sizes 30 to 36. Slightly used..... $1.98 Plus Postage

NEW ARMY WOOL BREECHES. $3.59 Plus Post.

Brand new heavy army O. D. all wool breeches made of best wool serge and melton materials, with large extra patch on knee. Sizes 28 to 46..... $3.59 Plus Postage

NEW O. D. WOOL LEGGINS..... 75c Plus Postage

Guaranteed 9 months wear U·S·Field Shoe $2.89

Army Hob Nail Shoes. Soft toe bellows tongue, solid leather counter, glove finish inside adding to its comfort. Will withstand barnyard acids better than any commercial shoe. Has steel heel plates and hob nails in heel and toe. The longest wearing shoe in the world. Sizes 5 to 12..... $2.89 Plus Postage

FIELD SHOES, SAME ABOVE without hob nails. Sizes 5 to 12. $2.98 Plus Postage

ARMY HORSE BLANKETS $2.79 each 2 for $4.98

Brand new government horse blankets. Made of heavy waterproof duck; lined. This blanket is worth at least $4.50 each..... $2.79 Plus Postage

ALL WOOL SOX 3 Pair for 89¢

All wool heavy weight army wool sox. Easily worth twice our special price: 3 pairs. 89c Plus Postage

All Wool O·D· Trousers $2.98

U. S. Army O. D. wool serge Yankee pants. Well tailored, made of excellent quality 20 oz. wool serge and melton without cuffs. Have four pockets of extra heavy drill, and the trousers are double stitched throughout. Worth at least $6.00. Sizes waist, 28 to 44..... 2.98 Plus Postage

ARMY PURE WOOL UNDERWEAR 89¢ per garment

Men stock up on these fine suits of wool underwear made for the U. S. Army. Our price is only 89c per garment. You would rightly expect it to be $1.50. Shirt sizes 34 to 46. Drawer sizes 30 to 40..... 89c Plus Postage

GENUINE BUNDAM HEAVY WOOL UNION SUITS

Made from the finest quality wool mixed ribbed yarn. Closed crotch, large button flap, matched pearl buttons. This garment would ordinarily sell for at least $3.75 only..... $2.45 Plus Postage

HEAVY O.D. BLANKETS $2.89 each

Genuine army—pure wool blankets worth at least $7.00, full bed size about 66x84 inches. The ideal blanket for the home or camping, motoring, etc. Gives more warmth than two ordinary blankets. They are getting very scarce. Each $2.89 Plus Postage

U.S. SALVAGE CO.

SEND FOR FREE CATALOG

St. Paul DEPT. P. Minn.

Double Your Money in Less Than a Year

$7000 Cash and 6 Pairs Foxes from 2 Pairs of Our Breeders in 15 Months

This was done by one of our purchasers. Ask about it. Raise ROOSEVELT STRAIN Mormon Foxes and you can do as well. All breeders purebred, registered, guaranteed.

UNITED STATES SILVER FOX FARMS CORPORATION
200 Hutton Building, Spokane.

Export Market

Would Introduce North Central Washington to South America

A $10,000,000 corporation, including Seattle, Portland, San Francisco and Oakland capitalists, formed for the purpose of marketing Pacific northwest products in South America, is being promoted by David B. McGinnis, a pioneer wheat and apple grower of north central Washington, now living in Oakland, Cal. The inauguration of regular service from all the principal Pacific coast ports of this country to the east coast of South America by 20,000-ton refrigerated ships of the United States shipping board is what determined Mr. McGinnis to take this course. Already the first shipment of apples has been booked for a steamer sailing from Seattle September 17, and others will be made later.

Mr. McGinnis is intensely interested in the question of introducing north central Washington apples to the South American markets. He spent several months there in 1922 and is now preparing to take this matter up with the idea of forming an apple export corporation.

"The one obstacle that has always stood in the way of shipping boxed apples from the Pacific northwest to the markets of South America has been transportation," said Mr. McGinnis. "It was absolutely out of the question to get apples through the Bottle Neck of New York. In order to get them loaded onto a South American steamer they had to be transferred by truck and barge four or five times. First from the train into a warehouse in Jersey City, then out of the warehouse by truck to a barge which carried them to the East river, then out of that warehouse to another barge, which loaded them onto another barge and finally to the poorly-equipped vessels. All of this meant expense, stealage, wearage and possible decay.

"The establishment of a line of modern 20,000-ton refrigerator steamships from Pacific coast ports to the east coast of South America by the United States shipping board has solved our problem of getting into South American markets. There is no question but what the South American people want our apples. They raise practically none and are great lovers of a good apple, which they call "manzanas buenos." When South Americans wish to pay a compliment to a beautiful girl they call her "manzana," meaning "apple" in the same sense as we use the name "peach."

"I received an offer of $7.50 a box for some of our extra fancy varieties if delivered after Christmas and $10 a box if delivered before Christmas. Of course, I would not want to guarantee that these prices would prevail if large quantities of our fruit were on the market there.

"Some idea of the market possibilities may be gained from the fact that Buenos Aires is the largest city south of the equator, with nearly 3,000,000 population, while Rio de Janerio has 1,250,000 and Montevideo has 400,000. People in all of the cities seem to have plenty of money and live well. They are noted for being high livers and consumers of luxuries.

"As to the apple industry of north central Washington, I am convinced that it will never attain to its fullest measure of prosperity and achieve the best returns to the growers until the producers control the distribution of their products. If it were not for the fact that you have some of the most capable and honorable men to be found anywhere in charge of the distribution here you would not have achieved such results as you have."

Eradicate the Mice

By LEO K. COUCH.
United States Biological Survey.

What can I do to get rid of mice that destroy my grain in the barn? Is there anything that I can mix poison with that they will eat when they feed on oats and hay? J. C. G.
Dixie, Wash.

From your description of the damage done to grain and hay in the barn, there is little doubt that the ordinary house mouse is responsible. The following method will help in eradicating them.

Secure one-eighth ounce strychnine alkaloid (powdered) and dust this quantity over about two pounds breakfast rolled oats or a heavy recleaned steam-rolled oats. This should be mixed thoroughly dry. Place the poison along the sills and beams in the hay mow, in small baits of not more than one teaspoonful to a place. Such small baits, accidentally mixed in with the hay, would not be injurious to live stock. The poison baits should also be distributed in other locations where the mice are shown to be present.

It would probably be better to poison the mice around the barn before the hay and grain have been put in.

HAUL OFF THE TOP SOIL.

Your garden or fields need the top soil from your chicken yard and your flock needs to get rid of it. It is good fertility for the garden, and equally good for the poultry diseases.

for Economical Transportation

CHEVROLET

Quality Cars Now Easy to Own

5-Passenger Sedan NOW $795 F. O. B. Flint, Mich.

It is no longer necessary to pay high prices for quality transportation.

Through engineering and marketing efficiency, Chevrolet has achieved volume production of quality automobiles, thereby effecting such remarkable economies that it now leads all standard-built cars in volume of sales.

Artistic appearance, fine finish, and riding comfort are characteristics of all models.

Ease, simplicity, and economy of operation are insured by a chassis famous for its engineering efficiency.

You have reason to be proud of your Chevrolet. It is an achievement.

Prices Effective Sept. 1, 1923, F. O. B. Flint, Michigan

Superior Roadster	$490	Superior Sedan	$795	Superior Light Delivery	$495
Superior Touring	495	Superior Commercial Chassis	395	Utility Express Truck Chassis	550
Superior Utility Coupe	640				

Chevrolet Motor Co., Detroit, Mich.

Division of General Motors Corporation

Come out of your shell!

ALMOST every day, some question crops up that puzzles you. "Should I do this or that or the other thing?" It happens to every poultryman—no matter how long he's been in the business. Sometimes your neighbor knows the answer. Sometimes he doesn't. More often than not, it's apt to be guess-work anyway!

So, whenever a poultry problem starts a-hatching in your head—come out of your shell! Ask questions—as many as you like. That's what the Sperry Poultry and Dairy Service Bureau is for. We realize that, in helping you, we are helping ourselves.

To this end, we maintain numerous service headquarters. We answer many thousands of questions by mail. This service is always personal, always individual, always free! Years of practical, hard-pan poultry experience, together with our laboratory and research work, make our answers authoritative and worthwhile.

Whether you are a beginner or a veteran, please feel free to write us about your problems. There are no strings to this offer. It holds good whether you use Sperry Feeds or not. There's a handy coupon below—use it!

Have you ever wanted to know—

- Whether you are feeding the right proportion of grain and mash for most profitable results?
- What is the life of profitable production of a hen?
- How many eggs is it possible for a hen to lay?
- Whether electric lights can be used harmfully on a flock?
- How to recognize the symptoms of coccidiosis (bloody diarrhea) in young chicks?
- Why greenstuff is as valuable as "greenbacks" to the flock?
- Which is best for round worm treatment—continuous feeding or periodic feeding of tobacco dust?
- Whether the lack of shell-making material causes soft-shelled eggs or shell-less eggs?

Check the questions you want answered, cut out and mail to us. We will answer them fully and without charge or obligation. See coupon below.

SPERRY
SURELAY

Mail this coupon for free Sperry Service and Literature

SPERRY PRODUCTS — SPERRY FLOUR

Poultry and Dairy Service Bureau, Address Dept. T of the mill nearest you.

SPERRY FLOUR CO.

SAN FRANCISCO · LOS ANGELES · TACOMA · SPOKANE · PORTLAND · OGDEN

Please send me, free, "Why Mixed Feeds"; also please answer the questions I have checked in the attached clipping

Name _____ Address _____

Rejoins Land Bank

Jewett to Leave Wheat Growers

Announcement is made at the headquarters of the federal land bank at Spokane that George C. Jewett, former secretary of the bank, but for the past two years active in the building up of cooperative wheat-marketing organizations, will resume his position as secretary of the land bank January 1.

Mr. Jewett became secretary of the bank when it was first organized in the northwest five years ago, coming to it after considerable banking experience in the Palouse country. He severed his connection with it later to become general manager of the Washington Wheat-Growers' association and later of the Northwest Wheat-Growers, Associated. For several months he has been general manager of the American Wheat-Growers, Associated, the national organization coordinating the several state wheat-growers' pooling associations throughout the northwest and the middle west.

The election of Mr. Jewett to be secretary of the land bank follows the resignation of George Dreher, its treasurer, and the election of A. B. Thomson, who has been secretary, to succeed Mr. Dreher.

The Oakesdale Fair

Mules came near being the feature of the Oakesdale Farm Products and Live Stock show in that little pioneer Whitman county town last week. The presence of half a dozen good draft mares with rangy, heavy-boned mule colts added a touch of farm-power interest that is seldom noted in present-day fairs. In addition, a few first-class mule teams were on the ground. The horse and mule show was not of the flashy type found at the larger live stock shows, but was composed entirely of horses whose object in life is handling farm loads on the road or in the field.

The horse and mule show outshone any other feature of the live stock show, though dairy cattle, beef cattle and hogs were represented. In the beef breeds, J. Houston McCroskey showed some first-class Shorthorns. In the purebred dairy cattle J. M. Crow showed Holsteins and A. Patterson a few head of Guernseys. Grade dairy cattle were shown by R. O. Stanke, A. Griffin, W. R. Walker, G. W. Willoughby, John Salmon, G. W. Sumpter, T. F. Cokely Jr. and Charles Komenda. Six head of Brown Swiss, including two husky calves, were shown by Peringer and Salzman, who are trying to solve the big wheat farm problem by the operation of a dairy farm in connection with wheat, using the dual-purpose breed as their milk stock.

Horses or mules were shown by Lloyd Frantz, T. F. Cokely Jr., S. R. Warwick, Sam Ransier, E. J. Frantz, Fred M. Crow, H. E. Elmer, Ben Ellis, S. S. Ellis, Charles Elliott, Marion Montgomery and Claude Comegys. In addition, saddle horses were shown by Glenn Jones, A. Patterson and Claude Eisenbee, while boys' and girls' saddle ponies were shown by Helen Nance, Lee Ellis Kenneth Alexander, Betty Ellis and Ralph Stratton.

Chester White hogs were shown by Louis Emert, E. A. Poe and J. M. Crow. Poland China entrymen included Guy Hughes and Mr. Crow. Claude A. Jones had entered O. I. C.'s, while S. L. Banks of Tekoa showed Duroc Jerseys and A. P. Johnson showed Hampshires.

There was a good little poultry show, with heavy breeds and light breeds represented, together with turkeys, geese, ducks and rabbits. Those showing chickens were Mrs. William Bernard, J. C. Morelock, Mrs. F. Brown, David Willoughby, C. J. Oberst, Joseph Brown, Mrs. Louis Emert, N. B. Land Jr., J. E. Mustard, Mrs. R. V. Peringer, C. A Whaley, Jack McCabe, Mrs. Ira F. Kerns, Lawrence Grayson, Mrs. T. F. Kelly and Fred Boyd. Mrs. King Mustard showed turkeys. Geese were shown by Morris Silzell and Carl Brand, while the duck exhibitors were J. B. McGary, Carl Brand and Mrs. F. L. Horn. The rabbits were shown by Elbert Stoecker and Luther Salmon.

Nearly two score of exhibitors competed in the agricultural and horticultural sections. Exhibitors of grains included Hodges Brothers, R. M. Engelhardt, A. G. Woodward, Morris Silzell, C. J. Oberst, Frank Clement, J. S. Harris and Ben Ellis. Those showing vegetables, fruit, corn, potatoes, etc., included J. H. Sienknecht, R. O. Stanke, Mrs. William Bernard, Mrs. King Mustard, C. F. Zimmerman, Ben Richter, C. W. Richard, Mrs. Claude McCoy, Mrs. Ed Wolfe, J. E. Fox, A. G. Woodward, W. M. Ellis, John Salmon, James Willoughby, Morris Silzell, J. W. Peringer, Ronald James, J. Southard, Robert Mustard, C. J. Oberst, Lawrence Taylor, W. A. Siler, Joseph Waller, Mrs. R. V. Peringer, C. A. Whaley, T. N. Durham, Verne Corlett, J. C. Morelock, Mrs. Tom Kelly, A. D. Blevins, Mrs. E. Wolfe and Mrs. MacCrow. A collection of legumes were entered by E. J. Dineen and Mrs. W. E. Wilson and Mrs. Joe Johnson showed collections of floral plants.

One of the features in the agricultural building were two booths of the state college extension service, one showing the increased profit from a high-producing flock of hens over a low-producing flock and one containing valuable suggestions with reference to live stock breeding and feeding.

A culinary department included a large number of kitchen products from simple canned meats and vegetables to elaborate cakes and pastry. Another section that attracted much interest was the fancywork division, in which much needlework, of which professionals might be proud, was exhibited.

The fair was under the general supervision and management of R. V. Peringer, president, and A. G. Woodward, secretary-manager.

Avoid Sheet Writers

The fair season is almost at an end. It has been very gratifying to The Washington Farmer to note that a comparatively large number of fair managements throughout the state have excluded from their grounds that class of solicitors commonly referred to as sheet writers. By sheet writer is meant the solicitor who uses almost any kind of method to induce his victims to subscribe for a publication which he claims to represent. He frequently does it by high-handed, strong-arm methods and in most instances makes most of his talk upon the worth of some comparatively valueless premium which he is giving away with the paper. In some instances he is actually not authorized to take subscriptions for the paper which he claims to represent

While many fairs excluded this class of solicitor this season, admitting only those representatives who carried the credentials of reputable papers, there were a few who permitted their guests to be annoyed and in some instances virtually robbed by the sheet writers. Even where these pests were excluded from the grounds they, in many cases, worked on the outside or on the street corners near the grounds, where they found the crowd in a more or less spending mood.

The Washington Farmer has been for a long time carrying on a campaign of education against this class of solicitor. We want our readers to be always on the alert to avoid being mulcted. The bona fide agent of a reputable farm magazine can always prove his identity and his relationship to the paper. Representatives of THE FARMER never offer premiums of any kind; they never offer to send this paper to any one who will "merely pay the postage"; they always have samples of the paper with them and they always write receipts for subscribers on pads bearing clearly the name of this paper; they always quote the same subscription price, $1 for five years. As a further test, if any one is in doubt when approached by some one claiming to represent this paper, one should require him to show a button about one and one-half inches in diameter bearing an actual photograph of himself with the words around it, "Representing The Washington Farmer." If he can not produce this identification button he is not our representative.

Many Good Reasons for Sending Your Subscription Order NOW

If you count over the advantages offered by The Washington Farmer, we are confident that you will agree with a host of others who have written us that they don't want to miss a single issue.

Through this magazine you are kept posted regarding all phases of agricultural life and interests, not in some distant locality, where conditions are radically different, but right in the state whose soil you are cultivating. You benefit from the experiences and opinions of others who are grappling with the very same problems which confront you. In addition you are entertained by well-known fiction writers; instructed by leading agricultural authorities, and kept in touch with market quotations and world events by means of telegraphic dispatches.

All of this wealth of fact, fiction and features comes to you at a low rate on account of our cooperative subscription plan:

We say to our friends: "Send your subscription orders direct. Get your neighbor to do the same. We will give you and your neighbor the benefit of every penny which would ordinarily go to the agent handling the subscription."

If you believe in cooperation, help us make our plan an even greater success during the coming year than it has been in the past. Send in your order if you haven't already done so, and let as many neighbors as possible know about our money-saving plan.

Subscription Rates of The Washington Farmer.

$1.00 for Five Years — 25 Cents for 1 Year. 50 Cents for 3 Years.

In Canada add 1 cent a copy for extra postage.

Oct. 11, 1923.
THE WASHINGTON FARMER,
Review Bldg., Spokane, Wash.

I desire to take advantage of your Cooperative Plan in securing new and renewal subscriptions.

I enclose herewith $.....for a.....year subscription to

THE WASHINGTON FARMER.

Name .....

Postoffice .....

R. F. D..... Box ..... State .....

If your subscription is already paid in advance, it will be extended from the date to which it is paid.

Joins State College

Herewith is a picture of Thorland R. Hall, new assistant horticulturist at the State College of Washington experiment station at Pullman. He comes to Washington from the faculty of the Iowa agricultural college, where he has done commendablee work in his chosen line. He joins a branch of the Washington institution that has great problems before it for solution as the fruit industry of this state develops.

FARMERS' WANT ADS

This is the farmers' "want," "sale" and "exchange" department for small advertisements of farmers, including live stock and poultry.

Advertising rates for ads running 1 to 3 times, 10c per word per insertion, with a special rate to Farmer subscribers, as follows: Ads running 4 to 12 times, 9c per word per insertion; ads running 13 times or more, 8c per word per insertion.

All commercial and land advertising, 10 cents per word per insertion. Open also to nonsubscribers.

In using these columns advertisers must observe (1) No advertisement will be accepted for less than $1.00 per insertion. (2) Every word, number and initial, including name and address, must be paid for. (3) New advertisements, changes of copy or cancellations must reach general office, Spokane, Wash., 10 days in advance of publication date. (4) Cash must accompany order.

Above rates include insertion in The Washington Farmer, The Idaho Farmer and The Oregon Farmer, which constitute the Pacific Northwest Farm Trio, 46 Review building, Spokane, Wash.

MONUMENTS F

COMPLETE STOCK. WRITE FOR DESIGNS and prices. Inland Monument Co., N1001 Monroe, Spokane.

HELP WANTED—Female 1

GIRLS DESIRING WORK FOR HALF BOARD and room, while attending school, write Gooding College, Gooding, Idaho, today.

HELP WANTED—MALE 3

FOREST RANGERS, RAILWAY POSTAL clerks and carriers needed. Particulars of exams. free. Write Mokane, Dept. A-11, Denver, Col.

HELP WANTED GENERAL 4

MEN AND WOMEN, AGE 17 TO 30, AT ONCE to train for positions with Western Union Telegraph Co. and various railroads. Pacific Telegraph Institute, Spokane, Wash.

SITUATIONS WANTED—Female 18

WHY STAMMER?—WANT POSITION CURing stammerer (young boy preferred); in his own home. Parents correspond. Clair Doty, Bonners Ferry, Idaho.

SCHOOLS AND COLLEGES 26

EARN $110 TO $250 MONTHLY; EXPENSES paid as railway traffic inspector; position guaranteed after completion of 3 months' home study course or money refunded. Excellent opportunities. Write for free booklet G-157. Stand. Business Training Inst., Buffalo, N. Y.

FRESH FOOD PRODUCTS 51-3

FISH—4 LBS. SMOKED SALMON, $1; 4 LBS. Alaska salmon bellies, $1; 4 lbs. black cod, $1; 3 lbs. best codfish, $1; delivered by mail. Coffin Fish Co., Seattle, Wash.

HONEY 53

ALFALFA-SWEET CLOVER HONEY—2 60-LB. cans, $10.75; one can, $5.50, f. o. b. Rigby; one 40-lb. can, prepaid to fourth zone, $6; quality guaranteed. Heckman & Larsen Honey Co., Rigby, Idaho.

ALFALFA, SWEET CLOVER HONEY, PREpaid second zone, 3 10s, $5; 60 lbs., $8.30; two cans, $14.50, not prepaid. Harry Fisher, Prosser, Wash.

HAPPY HOME HONEY — ALFALFA AND clover; 60-lb. can, $7.50; two cans, $14.50; case six 10-lb. pails, $8.50. H. N. Paul, Mabton, Wash.

PURE WATER-WHITE SWEET CLOVER honey; 60-lb. can, $5.50; two, $10.75. H. R. Bowen, Roberts, Idaho.

EXTRACTED HONEY FOR SALE—WELLS D. Rose, Sunnyside, Wash.

MISCELLANEOUS—FOR SALE 69

SASH AND DOORS—O. B. WILLIAMS CO., 1943 First ave. So., Seattle. Chicken house sash, 20" wide by 25" high, 80c; a dozen different sizes in stock for immediate shipment. Skylights for chicken houses, 36"x40"; price, glazed, $2. This is the size recommended by the Western Washington experiment station. We carry them in stock for immediate shipment. Sash and doors for all purposes at lowest prices. All orders receive prompt attention. Our large illustrated catalog No. 35, showing full line of building material and built-in fixtures for the home, free on request. O. B. Williams Co. Established 1899.

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NATURAL LEAF TOBACCO—CHEWING, 5 lbs., $1.75; 10 lbs., $3; smoking, 5 lbs., $1.25; 10 lbs., $2. Pay when received. Pipe and recipe free. Farmers' Tobacco Union, B19, Paducah, Ky.

LEAF TOBACCO—CHEWING, FOUR POUNDS, $1.40; fifteen, $4; smoking, four pounds, $1; fifteen, $3. Pay when received. Pipe and recipe free. United Tobacco Growers, Paducah, Ky.

KENTUCKY LEAF TOBACCO—5 LBS. CHEWing, $1.75; 10 lbs., $3; 5 lbs. smoking, $1.25; 10 lbs., $2. Pipe and recipe free. Pay when received. Cooperative Farmers, Paducah, Ky.

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50,000 SACKS FOR SALE. INLAND HIDE & Junk Co., W21 Main, Spokane.

AUTOMOBILES—FOR SALE 112

SEE CHEVROLET FIRST—NEW AND USED cars at prices that will surprise you; stop in or write Inland Empire Chevrolet Sales Corp., 916 2d ave., Spokane. Open evenings. Open Sunday.

MACHINERY—For Sale 93

DOLLARS IN YOUR POCKET ON OUR USED engines, wood sawing outfits, farm equipment. New sawmill outfits, etc. Fallquist Brothers, W2½ Riverside, Spokane.

MACHINERY—For Sale (Continued) 93

HOLT 45 CATERPILLAR, $1500; FORDSON tractor, $275; Fordson tractor, $350. Exchange Machinery Co., W20 Riverside, Spokane.

AUTO ACCESSORIES AND PARTS 119

PATRONIZE THE HOUSE THAT CAN GIVE you the best service. Complete stock of automobile repair parts. Pacific Gear and Auto Parts Co., 1022 First ave., Spokane, Wash.

STOVE REPAIRING 128

WRITE MYER RUBENS, SPOKANE, ABOUT stove repairs, welding broken parts, nickel plating.

FUR-BEARING ANIMALS 170

SILVER FOXES, FREE PAMPHLET; SELL one or ten pair. Jenson Silver Fox Ranch, Portland, Ore.

SILVER AND CROSS FOXES FOR SALE. William Rambo, 407 Sprague, Spokane.

PETS—Dogs, Birds, Etc. 171

WANTED—FEMALE GREYHOUND OR PART stag and greyhound, any age; state price. Echo Miller, Wilbur, Wash.

RABBITS and HARES. 173

RABBITS, TOULOUSE GEESE HAVE MADE my living for 10 years. Prize winning blue Flemish Giants, New Zealand Reds, Himalayans, at utility prices. Agnes Brenner, R4, Box 49, Tacoma, Wash.

POULTRY 174

FOR SALE — PULLETS AND BREEDING cockerels; April hatched pullets of Hollywood's best strain, trapnested stock, ready for your laying pens. From real layers mated to cockerels of 250 to 275 egg records. Price f. o. b. Prosser, $1.85 (crates returned). Send 25 per cent with order, balance C. O. D. We guarantee satisfaction or your money back. Choice cockerels from same stock, $1.50 each. Pulletpens, Prosser, Wash.

ACCREDITED CHICKS—ALL OUR CHICKS for 1924 will be from accredited flocks mated with certified cockerels sired by hens with 225-egg record. A limited number of chicks from cockerels sired by our $1000 champion cockerel and our world's record pen of hens. Write for special prices for those who order early. Queen Hatchery, 1430 1st ave., Seattle, Wash.

CERTIFIED WHITE LEGHORN QUALITY chicks for summer and fall months, from selected free range, high egg producing breeding flocks, inspected and accredited by the Sonoma county farm bureau. Send for catalog and attractive prices. Safe delivery and full count guaranteed. Must Hatch Incubator Co., Inc., 445 Seventh st., Petaluma, Cal.

WHITE LEGHORN BABY CHIX FROM flocks mated to males having sire's dam record of 240 to 297 eggs per year. Full particulars and interesting literature on request. We are accredited by Sonoma county farm bureau. The Pioneer Hatchery, 422 Sixth street, Petaluma, Cal.

SUMMER SALE "HENACRES" PULLETS; best for fall and winter eggs, $1.25 to $2 each. Hens for breeders, $1 to $1.50 each. High grade stock at reasonable prices. Booking orders now for 1924 baby chicks. Free catalog and price list. "Henacres." Box A, Prosser, Wash.

BUY SONOMA COUNTY ACCREDITED Hatcheries chicks; electric hatched by the man who put electric incubation where it is today. I am the father of electric incubation. Stock the best. Prices right. Write for booklet. White Hatchery, Petaluma, Cal.

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WANTED—FORTY RHODE ISLAND RED pullets, March hatch; pure stock. R. L. Gile, Roseburg, Ore.

TO MAKE ROOM, WILL SACRIFICE ROCK and Leghorn breeders. D. W. Allen, Laconner, Wash.

R. I. RED COCKERELS, UTAH RANEY strain; $5 each. Mrs. Tom Griffin, St. John, Wash.

BROWN LEGHORN HENS, PULLETS AND cockerels for sale. B. Campbell, Freewater, Ore.

SHIP YOUR POULTRY AND EGGS TO THE Washington Meat & Poultry, Spokane, Wash.

COLUMBIAN PLYMOUTH ROCK COCKERELS for sale. F. B. White, Bonners Ferry, Idaho.

WANTED—BARRED ROCK PULLETS. JAMES Jensen, Bluestem, Wash.

LIVE STOCK 177

SHORTHORNS—DUAL PURPOSE MILK AND beef; best profit producers. Special prices: Herd bull, choice cows, heifers and bull calves. Also March Poland China boars at $30 each. W. S. Steele, Rt. 1, Corvallis, Ore.

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WE PAY TOP PRICES FOR YOUR LIVE OR dressed veal, hogs and poultry. Your check by return mail. Shipping tags on request. M. & J. Packing Co., Spokane.

FINE GUERNSEY BULL CALF, BROTHER of Daisy of Chicona, world's champion Guernsey cow; priced very reasonable. Albion Gile, Chinook, Wash.

FOR SALE—REGISTERED HOLSTEIN BULL, 3 years old; Segis breeding; good type; guaranteed sure. S. L. Pomeroy, New Plymouth, Idaho.

PUREBRED JERSEY BULL CALF, $25. A. A. Ilsby, Freewater, Ore.

LIVE STOCK (Continued) 177

WE GUARANTEE TO PAY THE HIGHEST market price for your poultry and live stock. Veal market growing stronger. Owing to the constant changes in the market we are unable to quote prices in this paper from week to week. We will furnish tags and prices when you are ready to ship. Write us what you have to sell. Prompt returns. John Lewis & Co., Spokane, Wn.

FOR SALE—REGISTERED SHORTHORNS; two yearling heifers, one two-year-old, one cow, eight years old. H. Nelson, Springdale, Wash.

TOP PRICES PAID FOR CREAM, EGGS, poultry, pork, veal. Inland Products company, Second at Cedar. Dept. E. Spokane, Wash.

FOR SALE—80 HEAD PUREBRED HAMPshire ram lambs; these are good; will sell singly or in lots. F. M. Rothrock Co., Spokane.

FOR SALE—TWO BULLS AND A FEW REGistered heifers from the famous Hood Farm strain of Jerseys. T. E. Bradley, Daisy, Wash.

HAMPSHIRE RAMS (REGISTERED); LARGE, well developed and vigorous. Stadacona Farms, Route 1, Spokane, Wash.

REGISTERED HOLSTEINS—BULLS, HEIFers and cows for sale; accredited herd. Oscar Dunlap, Junction City, Oregon.

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MILK GOATS—REGISTERED SAANENS AT prices that will please you. Ferd. H. Dietzel, Portland, Ore.

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HOGS—REGISTERED SPOTTED POLAND China. Howard Tucker, Route 1, Boise, Idaho.

REGISTERED SHROPSHIRE RAMS AND ewes. Write McK. Edwards, Valley, Wash.

REGISTERED ANGORA BUCK GOATS, $15, crated. C. D. Hartman, Silverton, Ore.

FOR SALE—CHOICE JERSEYS, BOTH SEXES. Ralph Billings, Ashland, Ore.

HARNESS and SADDLERY 189

SEND FOR FREE HARNESS AND SADDLE catalog today; cut out the middleman, buy direct from the manufacturer. Lowest prices in the west; satisfaction guaranteed. Established 1881. Write Pierce Harness Co., Dept. T, Spokane, Wash.

HAY FOR SALE. 200

ALFALFA, GRAIN HAY, TIMOTHY AND straw, mill feed, grain, etc.; guaranteed quality; prompt shipment; buy direct and save money. Prices upon application. Richard Nyman, Walla Walla, Wash.

HOTELS 306

FAIRMONT HOTEL—RATES $1 DAY AND UP. 319 Riverside, Spokane. Free bus.

JOB PRINTING. 372

WEDDING ANNOUNCEMENTS AND INVItations, catalogs, booklets, high school annuals, letter heads, envelopes, cards, butter wrappers, etc. Union Printing Co., 412 First ave., Spokane, Wash.

CLEANING, DYEING, Etc. 420

FRENCH DRY CLEANING BY PARCEL post. Ladies' and gents' suits, furs, hats, etc., prompt service. Address City Dye Works (Dept. A), E422 Sprague ave., Spokane, Wash.

TANNING 425

WE WILL TAN YOUR COW OR HORSE HIDE for robes or coats, and guarantee our work. We are custom tanners, manufacturers and taxidermists. Write for prices. Spokane Fur Tanning Co., 7 Pine st., Spokane.

ANY KIND OF HIDE TANNED WITH HAIR on, or for leather. Fur and taxidermy work done to order. M. R. Mohr Co., 321 Sprague, Spokane, Wash.

KODAK FILM DEVELOPING 472

FREE ENLARGEMENT WITH 75C ORDER high gloss print. Spokane Film Co.

FILMS DEVELOPED FREE—KODO, THE PICture King, S15 Stevens, Spokane.

MATERNITY HOMES 497

MATERNITY HOSPITAL; STRICTLY PRIvate; doctor in attendance; prices reasonable. Mrs. Elizabeth Peel, matron. W1324 Broadway, Spokane.

BUILDING MATERIAL 588

TO PATCH A HOLE OR BUILD A HOME use Perfection Plaster Wallboard. Easily handled with hammer and saw; fireproof, waterproof. Western Wallboard Co., Seattle, Wash.

SEEDS 620

FARM SEEDS—RYE GRASS, RED AND ALsike clover, vetch and oats, fall barley and timothy seed of good quality, new, recleaned and ready for shipment. Rhoten Farms, Salem, Ore.

FOR CLOVERSEED, PASTURE GRASSES, vetch, gray oats, etc., get latest prices, stating amount wanted. Lee Hershberger, Hubbard, Ore.

GROWN MIXED TIMOTHY-ALSIKE, 9C; TIMothy, 8c; germinating, 94; recleaned; pasture grades less. Meador, Norwood, Idaho.

NURSERY STOCK 621

TREES—NOW BOOKING MAIL ORDERS AT reduced prices for limited time only. Apples, pears, peaches, nut trees, prunes, cherry, small fruits, etc. Live agents wanted. Lafayette Nursery Co., Lafayette, Ore.

NURSERY STOCK—PRUNES, WALNUTS, FILberts, fruit trees of all kinds, gooseberry and small fruits. Buy direct and save 50 per cent. Brooks Nursery, Lafayette, Ore.

NURSERY STOCK (Continued) 621

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NURSERY STOCK SOLD DIRECT TO PLANTers; apple trees a specialty; no agents employed; can save you money. Write for prices. Lawson Nursery, Gates, Ore.

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FOR SALE—3½ MILLION FT. OF GOOD FIR timber; good location for sawmill. Lee Barker, Drain, Ore.

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CUTOVER LANDS, EASY TO CLEAR; $8 TO $20 per acre; 25 miles north of Spokane; on hard surfaced highway; Great Northern and Milwaukee railways; excellent opportunity for dairying and stock raising with Spokane markets and creamery near at hand. Will help the man who will live upon this land and agree to clear a part each year by giving lumber to help start his buildings, and a purebred Jersey bull to groups of farmers. Interest and payments low. Write Milan Farms Development company, Dept. T, Old National Bank bldg., Spokane, Wash.

POTATO, POULTRY, BERRIES. ALL cleared and in meadow. A few feet from paved highway; located a half mile from railroad station, good store and sawmill; excellent neighbors, fine schools, close to several good towns. Priced at only $100 an acre. Sold in 5, 10 or 20 acre parcels. Small payment down, balance in 10 years at 6 per cent. This is the best land at the price that we know of. Write or call for full information. Carter, MacDonald & Miller, 208 Columbia st., Seattle, Wash.

5000 ACRES, NEWAUKUM RIVER VALLEY; highest type level farming land; all rich, productive soil. No gravel. No floods. No crop failures. Well developed district. Near Chehalis Washington, 20 acres up, $15 to $50, easiest terms. Settlers can get steady employment years to come; good wages; and live at home. See local representative, St. Helens hotel block, Chehalis, or write Graham Land company, American Bank bldg., Seattle.

DO YOU WANT A HOME IN A RICH VALLEY near Spokane, on three transcontinental railroads? Where soil is perfect, rainfall ample. Summers cool, winters moderate? The kind of stump land that pays to clear? Timothy and clover, green eight months in year; natural stock country. Land cheap. 10 yearly payments at 6 per cent. Humbird Lumber Company, Box 00, Sandpoint, Idaho.

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BIG OPENING SALE OF YAKIMA VALLEY farm land, under an assessed state and government approved irrigation project; best, deep soil; close to town and good roads. Price $25 per acre and up. Very easy terms. Western Lands, Inc., owners, 918 Green bldg., Seattle.

SHEEP OR CATTLE RANGE FOR SALE—2300 acres; east of Elgin, Ore.; good range, well watered; fenced, two sides; thousand acres tillable; adjoins reserve; other range available. Price right; terms easy. Jones Land Co., Freewater, Ore.

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SELL YOUR PROPERTY QUICKLY FOR cash; no matter where located. Particulars free. Real Estate Salesman company, 501 Brownell, Lincoln, Neb.

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WESTERN WASHINGTON FARMS—LARGE or small tracts; Puget sound waterfrontage. Charles Somers company, Alaska bldg., Seattle.

15 ACRES GOOD ONION LAND; NINE ROOMS, horse, chickens. William Schwauber, Clackamas, Ore.

BARGAINS IN DRY AND IRRIGATED farms. Oregon Mortgage Co., Paulsen bldg., Spokane.

GOOD 160, NEAR OROFINO; $15 PER ACRE, half cash. Owner, Henry Loseth, Moscow, Idaho.

NINETEEN ACRES; GOOD BUILDINGS; well, orchard. L. Schulz, Route 6, Salem, Ore.

FARM LANDS—Wanted 654

NOW IS THE TIME TO LIST YOUR FARM in order to get it before the thousands of people that we reach through the Farm Bureau in 45 states, and get the advantage of the million dollar advertising campaign by the r. r. companies. Washington Farm Bureau Exchange, 312½ Lindelle, Spokane, Wash.

I HAVE INQUIRIES FOR FARMS IN NORTHwest. Describe fully and state price. R. A. McNown, 310 Wilkinson bldg., Omaha, Neb.

FARM LANDS FOR RENT 657

FOR LEASE—440 ACRES DAIRY FARM; ON Puget Sound; low rent; part cash, part in labor. J. M. Dempsey, owner, 326 East 58th st., Seattle.

FOR RENT—1000-ACRE GRAIN AND STOCK ranch. Write C. M. Baker, Colville, Wash.

IRRIGATED LANDS—For Sale 663

CORBIN ADDITION TO GREENACRES—IN the beautiful Spokane valley; 30 minutes from Spokane paved road; 40 inches of water for irrigation; gravity flow. Ask for booklet with all information.

Return coupon—The Fred B. Grinnell company, Spokane, Wash. I am interested in the Spokane valley. Please send booklet and all information to

Name .....

Address .....

A MONEY MAKER THAT WILL ALWAYS show handsome profits: 130 acres, near Yakima; good water rights; excellent buildings and well equipped; large dairy herd. Price $22,000; good terms. Western Lands, Inc., owners, 918 Green bldg., Seattle.

FOR SALE—10 A., IMPROVED, IRRIGATED; early crop belt; stock, implements, tools, crops, furniture, $3500; crippled, must sell; terms. Henry Hays, Richland, Wash.

WHY RENT WHEN LANDLORD'S SHARE will pay for well imp. home? Write Western Bureau of Exchange, Twin Falls, Idaho.

ACRE TRACTS FOR SALE 669

3-ACRE POULTRY FARM, STOCKED; COW; six-room house, $2300; terms. John Kuper, Route 6, Oregon City, Ore.

Cattle Ranch To College

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CHAPTER XV.

"Range Riding."

"Hello, kid! Who you lookin' for?" The voice was deep and full and had a cheerful, confident ring in it.

John looked up quickly and saw standing in the narrow doorway a man whom he rightly guessed to be Barney Madden. He was a man over 30, of medium height, rather slight, wiry build, showing good, hard condition; his face, decorated with a brown mustache, was a good one—determination, courage and an abundant sense of humor could be seen there. He had deep-set, blue-gray eyes, which could be both stern and merry.

"I'm looking for you, I guess," the youngster answered, after a moment's pause, "if you're Barney Madden. My name's Worth, John Worth, and Mr. Baker sent me out here to help you range-ridin'."

"Sure, I'm Barney Madden. I'm plumb glad to see yer; you look like a good, husky kid, and will help me a lot, I hope. Put your horse in the dug-out yonder, then come back and help me get supper," and he pointed to a little, cave-like house built to shelter the horses of the range riders in winter.

Soon the sorrel was contentedly munching hay in the warm stables with three or four other horses.

Returning to the shack, John found Barney on his knees blowing the fire vigorously.

"Well, kid, you'd better go down to the creek for some water." Barney spoke in a disjointed fashion, between puffs. "Can you cook?"

The youngster said he could a little.

"Well, suppose you try on this supper. I ain't no cook, never was; don't like it. If you'll take care of the eatin' outfit I'll be satisfied all right."

The supper over, Madden expressed his complete satisfaction, and so John was installed chief cook and head (also foot) of the commissary department.

The following morning his work as a cowpuncher began. At mining, sheep-ranching and horse and mule herding he had served a full apprenticeship, and he now became a full-fledged cowboy. Each of his previous occupations had helped to fit him for the present undertaking. Almost from his babyhood he could ride, and about the same time he learned to "throw the rope," as the act of casting the lariat is called, and by constant practice had grown more and more proficient.

The duties of the range-rider, as he soon learned, were to cover a certain territory (which in this case was that section which lay between Saffron and Buffalo creeks) to see that the different bunches of cattle did not get into trouble, or, in case they did get into difficulties, to rescue them. Each morning the two rose with the sun, and after a very simple toilet—to put on a hat and a pair of spurs sufficed sometimes—a breakfast of bacon, bread and coffee was dispatched. Saddling their mounts was the next thing in order, and each day the horse that had been idle the day before was selected. This operation is easier to describe than to accomplish, for, as a rule, the cow pony has a strong dislike for the clinging saddle, and especially for the hind cinch—it interferes with his free breathing and grips him at a tender spot. When the horse has been led out and the 50-pound (or more) saddle is thrown over his back, the fun begins; he prances around as if on hot iron, and a keen eye and quick foot are needed to keep out of reach of hoofs or teeth; at length, during an unguarded second, the flapping cinch is captured and brought under his belly in the twinkling of an eye; the strap on the other side is rove through the ring, and with a quick pull tightened; but the pony, who has been expecting this, takes a deep breath, and at the same time humps his back. If the rider is inexperienced and secures the strap when the pony is thus puffed up he will come to grief when he tries to mount, the saddle promptly slipping round as soon as he puts his weight on the stirrup, and the knowing horse empties his lungs and straightens his back. John was up to all such tricks, and when "Roany" (the sorrel's companion and the spare horse allotted to the young rider) blew himself up, he simply put his foot up against the pony's side and gave a tremendous and sudden heave. It is a rather inconsiderate and humiliating method—for the horse. Roany grunted protestingly; immediately his girth was reduced several inches and John made the cinch fast.

The horse saddled, the two riders went in opposite directions, visiting the well-known haunt of each bunch of cattle in the section of country committed to their care. In pleasant weather, when the feed was good and water plenty, this was by no means an irksome duty. The horse is fresh and full of life; the rider, exhilarated by the bracing air and swift motion, shouts aloud from pure joy at being alive. The day's circuit completed, he comes back to the shack, somewhat tired, but the possessor of an appetite that would make a dyspeptic toiler in a city office still paler with envy.

But John began range-riding during the hardest season of the year, when keen, searching winds had to be faced, blizzards encountered, and work of the hardest, most depressing kind had to be done.

"By gum! this beats all," said Barney one morning, some months after John joined him. He got out of his bunk, walking over to the single window, looked out. "Snowin' yet. Here this thing's been goin' on fer 10 days steady; grass all covered up, cattle near done, and horses worn out—and it's snowin' yet! Seem's if Providence was down on us," and Barney proceeded with his morning toilet, pulling on his boots and grumbling under his breath.

John had something of the same idea in his mind; he began to think all this terrible weather was punishment meted out to him for running away from home. For two weeks the two riders had been in the saddle 14 hours a day, and the strain was beginning to tell on both men and beasts.

But for all that, he had just bucked off Greaser Tony, as good a rider as could be found in a long day's ride.

This was the terrible winter of 1886-87, when many cattlemen were almost ruined.

"Come, kid; get a move on," said Barney rather wearily. "It's tough, but it's got to be done."

They tramped out into the blinding flurry of flakes and routed out their unwilling horses. There was no frisking, and no tricks to avoid saddling; the poor beasts stood resignedly and allowed their masters to put them into their bonds without a protest.

"So long," shouted John.

"S'long," returned the other.

And so they separated. John followed the frozen Saffron creek. It was lined with brush which afforded some shelter for the half-starved cattle that were collected in compact bunches at different points for the sake of warmth. Six hundred head of cattle were thus scattered along the two creeks. Each of these John visited, and with shouts and blows urged them from the cover where otherwise they would stay—dazed, stupid, gradually growing weaker till they died in their tracks. Once in the open, they moved more briskly, butting and crowding each other till their blood got circulating again, and they took some interest in searching for the scanty grass revealed by their trampling hoofs.

This morning, after riding a half mile or so from the shack, John came upon a bunch of stock. He shouted at them and slapped those nearest with his hat; soon all were moving toward the open. All went well till a big snow bank was encountered; this the shivering cattle, weakened by hunger, refused to tackle, so John drove his horse into the white bank, and by floundering through two or three times a trail was made. Still the stock refused to go through; but at last, with much urging and pushing by Roany, breast to rump, three were forced to the other side and the others reluctantly followed. One old cow still remained, weak, wavering, her last calf sapping her vitality; back went John and Roany; the rope was uncoiled and the noose dropped over her horns. A couple of turns having been taken round the saddle horn, Roany scratched and tugged, the old cow struggled a bit and in a jiffy the brave little horse "snaked" her through.

A little further on the same thing was done with another bunch.

From time to time, as he rode along, John saw queer mounds partly or wholly covered with snow: they were the cattle that had succumbed. Many more then living he knew would give up, try as he might and did to protect them.

Further on he noted a fresh victim, and as he drew near two gray, slinking forms left it.

"Hold on, Roany; we'll have to get a shot at those," and suiting the action to the word he pulled his steed up and drew his six-shooter. The wolves were moving off slowly, licking their bloody chops and snarling at the interruption of their feast, their heads turned back toward the boy, their teeth showing, their yellow eyes gleaming. Crack went John's pistol, and one fell over kicking. The other bolted for cover.

Crack, crack, the shots rang out, and he, too, dropped. In a minute both wolves were skinned by making a cut along each leg and down the belly, and then with a strong pull yanking the pelt off. The legs were tied together and both skins hung over the branch of a near-by tree, the location being carefully noted. Then the boy rode on his melancholy task.

As the daylight began to wane, the effect of the hard day's work was felt by both horse and rider, and John looked forward to the time, but a couple of hours off now, when he would return to the warm shack and satisfy his already ravenous hunger. They were still many miles from shelter and he knew that traveling must be difficult, if not dangerous.

"Come, Roany, old boy, brace up!" he called cheerily to his fagged mount, giving him a friendly pat on the neck at the same time. "We've got to get home." And he touched him lightly with his quirt. The good horse responded bravely and floundered through the deep snow, emerging on a bare, wind-swept spot where he could make much better time. The pace was so good that John could almost feel in imagination the warm glow of the fire and smell the fragrance of frying bacon.

As they went on their way they reached a steep little hill, the sides of which were covered deep with snow; down this they plunged with ever-increasing speed. Suddenly Roany stopped, stopped so short, indeed, that John was thrown over his head into a bank of snow. As soon as might be he picked himself up, dug the snow out of his eyes, ears and mouth, and looked to see what the trouble was. Roany was struggling violently. John soon found that he had stepped into a badger hole, the sides and top of which, frozen hard, were unyielding, and held the poor beast's leg like a vise, twisting and breaking the joint badly. The boy saw at once that Roany would have to be killed; that there was no help for him. It would be a mercy to put him out of his misery, for he could feel him quivering, and his eyes bulged out with pain. It was a hazardous position for himself, but for the moment he forgot it in his distress for his horse.

"Roany, old boy, I've got to kill you," he said, feeling that he must justify his act—really one of mercy. "You'll freeze to death if I don't."

He drew his six-shooter from the holster, put the muzzle against the horse's forehead, then, turning his face away, pulled the trigger. A few convulsive struggles and Roany's sufferings were over.

John loosened the cinch, and with considerable difficulty pulled the saddle from under and hung it to a near-by poplar; the bridle was treated likewise; then he stood up and looked around him, wondering what he should do next.

It was no time for sentiment, so he gave his whole thought to the best way of reaching the shack. He was already tired and hungry; the wind was blowing the still falling snow so that it was blinding, and there were seven miles of rough country to cover before shelter could be reached. John set his teeth, and, after giving a final glance at his faithful horse, he set out. This time, fortunately, he had but himself to think of and look out for, and if he could cover the distance before freezing all would be well. He struck off to the right, and, after floundering through drifts, sliding down steep places, and fighting the biting blast in the open, he came to the creek that ran past the shack; he had but to follow it. Hour after hour he toiled along, his body bathed with sweat, his hands, feet and face icy cold. The snow blown in his eyes blinded him, hidden obstructions tripped him and hunger took away his strength. Late that night he stumbled through the door of the shack into the warmth and light.

Barney was wide awake and watching.

"By God! I'm glad you're in," he said, grabbing him by the arm and dragging him forward; then, as the lamp light shone on him clearly, he turned him round and pushed him out again.

"Your face is white: it's frozen. Get snow on it quick."

John thought he had had enough snow on him that day—face and all—to last him the rest of his life, but he submitted to the rough rubbing that Barney gave him without a word, and soon the chalky look gave way to the glow of red blood circulating freely.

He was thoroughly exhausted, but the food and fire prepared by his partner revived him somewhat, and he turned into his rough, hard bunk and slept like a hibernating bear.

When the sun came out bright and warm and the snow began to melt, the havoc wrought by the storm became manifest. Only the strongest cattle remained alive, and of these most were males. The survivors were weak and their bones almost punctured their worn-looking skins. In the more sheltered spots lay many once sturdy cows and heifers that later became a heap of whitened bones. Though the thaw revealed all these horrors, it also

Bits of Fun for Everyone

Practices on de Seat.

"Aunty, what do you do when your children practice deceit on you?"

"Whut you all call dis here dey practices?"

"Deceit; tell you lies, you know."

"In dat case, Ah practices on de seat."—Capper's Farmer.

A Regular Statesman.

A citizen of Nosepaint Gulch was sounding the praises of Congressman Wombat.

"What did Congressman Wombat ever do for you?" asked another citizen.

"Well, he once sent me a package of turnip seed."

Smiles.

"What is the secret of success?" asked the sphinx.

"Push," said the button.

"Take pains," said the window.

"Always keep cool, said the ice.

"Be up-to-date," said the calendar.

"Never lose your head," said the barrel.

"Make light of everything," said the fire.

"Do a driving business," said the hammer.

"Aspire to greater things," said the nutmeg.

"Find a good thing and stick to it," said the glue.—Exchange.

Appreciate Company.

Two farmers met after church and had this conversation:

"I hear you've sold your pig?"

"Yes, sold him last Thursday."

"What d'ye get?"

"Eight dollars."

"What'd it cost ye to raise it?"

"Paid three dollars for the shote, and five more for the feed."

"Didn't make much, did ye?"

"No, but I had the use of the pig all summer."—Exchange.

Why Not a Butcher Shop?

Party on phone—Have you any nice round steak??

Dispr Zachry—No, madam.

Party on phone—Have you any nice loin steak?

Dispr Zachry—No, madam.

Party on phone (much exasperated)—Well, for goodness sake, why haven't you?

Dispr Zachry—This is the dispatcher's office and our trains have not killed any cows lately.—A. C. L. News.

The Only Way.

"The women of today are able to meet any situation," said a clerk in the general manager's office at Detroit.

"If I were to kiss you, how would you meet the situation?" asked her friend.

"Face to face," she replied.—Exchange.

Second Sight.

The young lady palmist of the church bazaar said to one of her girl clients: "I see by your hand you are going to be married."

"Wonderful," said the girl.

"You are engaged to a man named Wilkins," continued the amateur seer.

"How amazing," gasped the girl, "surely the lines on my hand can not reveal the name——"

"Lines," sniffed the palmist. "Who said anything about lines? You are wearing the ring I returned to Mr. Wilkins three weeks ago."—Argonaut.

uncovered the herbage, and little by little the remaining animals began to gain strength and weight.

Now the range riders were kept busy pulling the foolish ones out of big holes. Each day the various bunches of cattle were visited, and with discouraging frequency some of them would be found mired helplessly, weakened by their long fast and rendered crazy by fright; their struggles to get out of the sticky mud only sunk them more deeply. It now became the cowboy's duty to throw his rope over the mired beast's horns, make the other end fast to the saddle horn, then to urge the sturdy little cow-pony forward with whip and spur. The pony tugs, the cow struggles, and soon she is standing on terra firma, exhausted, indeed, but safe. This is hard work for the pony and its rider, to say nothing of the cause of all the trouble—which is looked upon merely as so much beef to be saved.

With steady spring weather came the opportunity to visit the home ranch, and John was glad enough to take advantage of it. It was a long time since he had seen Frank, and, of course, there was much to talk of. It was Sunday, in the forenoon, and work, for the time being, was slack. Eight or 10 cow punchers were at the ranch and were amusing themselves with a little buckskin-colored horse. His viciousness had earned him the title of "Outlaw"—that is, he was considered unbreakable.

He was in the corral, small of stature, and, to the uninitiated, innocent enough in appearance; but for all that he had just bucked off Greaser Tony, as good a rider as one could find in a long day's journey.

The cow punchers sat on the fence and egged each other on to tackle the unconquerable little beast; such an exhibition was great sport to the looker-on, but of doubtful pleasure to the participant.

"Try him, Billy Iron-legs," said one. "You can stick him."

"Try him yourself," responded Iron-legs. "You're lookin" for fun, and that breakfast you put away needs a little shakin' up."

"How'd the earth look from the bird's-eye view you got of it, Tony?" said Frank to Greaser Tony, who was off in a corner counting his bruises and swearing softly.

"Here, Shorty, you ride him; you're always lookin' for somethin' lively."

Shorty's inclination to kick about his mount was well known; he had a way of calling whatever horse was set apart for him to ride "old cow" or "kitten." The proposition to put him on the "Outlaw" and tie him there was hailed with delight, but he dropped from his place on the fance and vanished before any one could lay hands on hm. At this juncture Frank came to where John sat and, pointing to one of the men, said, "That's the horse range boss. I advise you to ride that little buckskin yourself; 'twon't do you any harm and they'll think a lot of you."

Any of these men could ride the horse, but it is never pleasant to ride a bucking broncho, and it is sometimes dangerous.

John accepted his friend's advice, and when Frank shouted, "Here's a chap that'll ride the cayuse," he jumped over the corral and went up to the outlaw. He was already saddled and a hackamore was twisted round his nose. John thought he knew horses pretty well, for his long intimacy with Baldy gave him the inside track of equine character. The little buckskin's unbroken spirit and courage pleased him and he felt friendly. The little fellow had been abused; his sides were cut and barred by quirting, his head and nose were skinned by rough ropes in still rougher hands.

All men were his enemies, and at John's approach he struck out with his fore feet, but the boy avoided them and caught the hackamore close up to the head. He put his left foot in the stirrup. The horse's eye was upon him, but though the pony was quick he was quicker, and was in the saddle and had caught the right stirrup before the first jump was finished.

Round one in favor of the boy, and the on-lookers said "Good!"

Then began some of the "tallest" stiff-legged bucking ever seen in that corral. Head between his legs, back humped, shrilly, the little horse shot up in the air and came down stiff-legged with a jar that made the ground tremble. Every trick known to the cunning breed was tried—jumping sideways, twisting in the air, plunging, rearing front and back—all in vain. John stuck like a leech till the "Outlaw" tired himself out. He lasted 15 minutes with scarcely a pause. Then, with head drooping, nostrils turned out till the red showed, literally drenched with sweat, he stood quiet, his body exhausted, but his spirit unconquered.

John dismounted and pulled off the saddle, patted the little horse's neck and turned him loose.

It was a pretty exhibition of horsemanship, and the spectators appreciated it. It was done fairly, there was no "pulling leather" (holding on) or "hobbling stirrups" (tying them underneath the horse—a great assistance.

A number of the punchers expressed their approbation. "Good work, kid." "That's all right, pardner," said they. The boss said nothing, but a week or two later John got orders to come down to the ranch and bring his bed.

(To be continued.)

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FAMILY CIRCLE

ALICE W. BARLAND
EDITORIAL CONTRIBUTOR

I know not by what methods rare,
But this I know, God answers prayer.
I know not when he sends the word
That tells us fervent prayer is heard,
I know it cometh soon or late,
Therefore we need to watch and wait.
I know not if the blessing sought
Will come in just the guise I thought;
I leave my prayers with him alone,
Whose will is wiser than my own.
—Selected.

Experience Letters

Dear Mrs. Barland: I wish to thank you for the advice and help of the Family Circle and I am especially grateful for the remedy of oil of peppermint for chilblains. My husband had chilblains so bad that his feet were raw and sore, and the oil of peppermint cured them entirely and he hasn't had them since. I will try to do a little to pay up for the help received.

I make a slip similar to a pillow slip to use over my quilts or comforters and I can take it off and wash it and no trouble waiting for fine weather to get it dry. It can be sewed up everywhere except on one end, which may be tied with tapes or fastened with buttons and buttonholes. This makes it possible to have nice, clean quilts with very little work and it prolongs the life of the quilts and the slips can be quite cheaply replaced and are easily mended at the ends, where the wear comes.

Bedspreads dried on the line without wringing are smoother and whiter than otherwise.

When blankets are too short to tuck in sew on a piece of cloth, outing is good, on one end and it will be easy to tuck it under the mattress.

Pack your furs in several thicknesses of newspaper, as moths will not work in printer's ink.

Mark your linen first with a sharp pencil or other sharp point and the ink will not spread when applied.

Apply a coat of paint to the backs of your worn Brussels or tapestry rugs and use them in front of sinks or commodes, where water is apt to be spilled.

To wash old lace or muslin curtains, fold them many times, then squeeze through several soapy waters and then rinse and they will not get torn in the washing.

For toothache place a lump of salt in the cavity or as near as possible to it and it will relieve the pain.

When nervous and wakeful take a glass of buttermilk or warm sweet milk and it will usually produce sleep.

Stitch insertion over worn-out drawn-work in table or bureau covers, then cut out underneath and finish the edges.

Cut around and around stocking legs which are past use and be careful to cut the same width, and you will have some good material to crochet into rugs or for weaving.

Put a coat of kerosene on the screens, one in the fall to prevent rust and one in the spring to keep off mosquitoes.

Sew a tape on the bottom of the chilren's winter drawers, so it can be slipped under the heel and kept in place when the stocking is put on.

To stop bleeding from a cut bathe in strong salt water; it will stop instantly and prevent soreness.

When fowls have much fat try it out and use as a substitute for butter in making cakes.

I would greatly appreciate any information concerning the raising of goats, such as the kind of fencing needed, how often they have young and if there is sale for their milk.

I very much appreciate your good advice to the young, Mrs. Barland. It is a great help to mothers and to inexperienced girls.

Washington. A HAPPY SISTER.

Family Circle Girls

Dear Mrs. Barland: I have been reading this Circle for some time and now since the boys are included and have become readers also I am going to tell them a few things that it won't hurt them to know.

The boys have told us their thoughts concerning the girls and now they can hear a few things that I know about some boys.

First of all I want to say I don't believe in this kissing business between girls and boys, but I want to say that girls are not always to blame when it happens that boys kiss them. Why are the girls blamed entirely when there are two sides to the question? If the boys are mean enough to coax the kisses from the girl I can't see but what he is more to blame than the girl. I insist that he is. If they think it is a disgrace why are they so willing and even anxious to belittle the girl? It seems to me they are glad of a chance to go around talking about her. I think they should be ashamed of themselves.

There are some nice girls who do give in and who do kiss the boys and are led into wrong ways because they are made to believe there is no harm in it. So you boys, if a girl does kiss you after you have urged her again and again, don't decide that she is a bad girl. Many innocent girls have been led astray by this sort of thing. I call this sort of boys and men rogues and beasts!

If you like and admire respectable girls why don't you help to keep good girls so? But you don't; you say, "Oh, she is the modern girl," and get busy to make her as bad as yourselves.

I am not saying the girls are exempt from blame and disgrace. I know of some very tough ones; they are to be found everywhere, and men, too; the cities are full of them both, but the point I want to make, boys, is this: If a girl refuses once to kiss you, for pity's sake stop at that and don't keep on begging her till you break down her good resolutions. You boys should help the girls to keep respectable and not entice them into wrong. I am considered a rather popular girl and have had many boy friends, but I find it the wisest policy to keep them at a distance, but you boys must do your part. You owe it to us as you have your strength and should help us to keep the most precious thing we possess, namely, our character. Be men and play fair.

SHORTY FROM WASHINGTON.

(Will the writer of the above letter please send her name and address and oblige Mrs. Barland.)

Dear Mrs. Barland: We are constant readers of the Family Circle and would like to defend the girls against the harsh criticism of some of the boys and would like to thank the boys who are defending the girls. Thanks, Bill, we are glad you are with us, even if you do call us the weaker sex. We are sure the girls would be willing to follow suit if the men would reform.

We do not believe in smoking ourselves, but we think girls should be allowed to smoke if they choose without being criticized or ridiculed.

Blanch has asked a question which we have asked ourselves for the last two or three years, but have been unable to have it answered: "Why is it that boys do not go with self-respecting girls if they admire them more than the other kind?" We would be glad if some boy would please answer this question. I. D. AND C. T.

Idaho.

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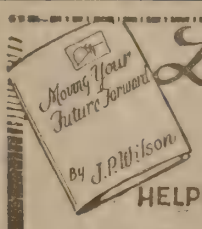

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Your Health

By Royal S. Copeland, M. D., F. A. C. S.

For years and years there has been a great dispute over the effects of salt. Some contend that the system suffers if excessive quantities are sumed. Others say it makes no difference how much is taken.

Dr. Copeland.

Our blood and all the other fluids of the body contain a rather constant salt content. We must take enough salt every day to supply this amount. When an excess is consumed it is eliminated by the kidneys.

When salty food is taken there is great demand for drinking water. This is called for to carry away the excess. Such an unusual supply of water may raise the general blood pressure.

With such unaccustomed consumption of water, greater demands are made on the heart. If this organ is weak there may be harmful results. A healthy kidney and a healthy heart will respond to this extra work. There may be complaint, but no real harm may result. If the individual is on the verge of kidney trouble the continued overwork of this organ by reason of excessive salt consumption may hurry the onset of real disease.

An appetite for salt is frequently associated with excessive indulgence in spices, pepper, relishes and other condiments. These, too, place strain on the kidneys and may raise blood pressure.

It has been estimated that the average person eats fully 10 times as much salt as the body receives. The vegetarian needs more salt than the meat eater, because the potash salts of vegetables drive out the common salt.

There is always a middle path— a sensible course. "Temperance in all things" is a splendid motto. Do not begin your activity at the table by springling salt over everything on your plate. Practice a little self-denial.

Latest High Class Patterns for the Home

Please order the patterns you desire at least two or three weeks before you wish to use them. Desiring to obtain the latest high-class patterns for its readers, THE FARMER has made arrangements to have them sent direct from the east, and under present mailing conditions it takes about that time for them to reach you.

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4102. Girl's Coat. Cut in 5 sizes: 6, 8, 10, 12 and 14 years. A 10-year size requires 4 yards of 44-inch material. Price 10c.

4525-4541. Lady's Costume. Blouse 4525 cut in 7 sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. Skirt 4541 cut in 4 sizes: Small, 34-36; medium, 38-40; large, 42-44; extra large, 46-48 inches bust measure. To make the suit for a medium size requires 8 yards of 36-inch material. Two separate patterns, 10c for each pattern.

4539. Child's Dress. Cut in 4 sizes: 4, 6, 8 and 10 years. A 6-year size requires 2 3-4 yards of 32-inch material. Price 10c.

4305. Misses' Dress. Cut in 4 sizes: 14, 16, 18 and 20 years. An 18-year size requires 4 3-4 yards of 32-inch material. The width at the foot is 2 1-4 yards. Price 10c.

3752. Boy's Suit. Cut in 4 sizes: 6, 8, 10 and 12 years. A 10-year size requires 3 3-4 yards of 36-inch material. Price 10c.

4068. Lady's Apron. Cut in 4 sizes: Small, 34-36; medium, 38-40; large, 42-44, and extra large, 46-48 inches bust measure. A medium size requires 4 1-2 yards of 27-inch material. Price 10c.

4533. Girl's Dress. Cut in 4 sizes: 6, 8, 10 and 12 years. A 10-year size requires 4 1-8 yards of 36-inch material. Price 10c.

4139. Child's Dress. Cut in 4 sizes: 2, 4, 6 and 8 years. A 6-year size requires 3 1-4 yards of 32-inch material. To trim as illustrated requires 5-8 yard of 32-inch contrasting material. Price 10c.

4518. Lady's Morning Dress. Cut in 4 sizes: Small, 34-36; medium, 38-40; large, 42-44; extra large, 46-48 inches bust measure. A medium size requires 4 5-8 yards of one material 32 inches wide. The width at the foot is 2 yards. Price 10c.

4543. Corset Substitute. Cut in 4 sizes: 12, 14, 16 and 18 years. A 16 year size requires 1 1-4 yard of 36-inch material. For gussets of elastic or webbing 1-4 yard 9 inches wide or wider is required. Price 10c.

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—give the light that made the Quick-Lite famous

SEEDS AND NURSERY STOCK—Yes, they are offered in this week's "Want Ad" page.

High Points in News of the Week

Whatever expectation there may have been on the part of wheat-growers in the northwest that President Coolidge would call a special session of congress to consider legislation for the relief of the wheat-growers has been detroyed by the announcement from Washington that the president is sending throughout the wheat-growing sections representatives of the war finance corporation to make a study of the wheat-marketing situation with special reference to the development of cooperative marketing organizations. Among those who will make the tour of investigation are: Managing Director Eugene Meyer and Frank W. Mondell, a member of the board of directors of the war finance corporation. They are holding their first conferences at Chicago and other middle-western points this week. Whether they will come as far west as the Pacific northwestern states is not yet officially announced, but wheat-growers' organizations and individuals interested in the marketing of the wheat crop are laying plans to present northwestern facts to them at conferences either here or elsewhere on their tour.

It is declared that one purpose of this tour is to assist in the formation of cooperative marketing organizations and to convince bankers throughout the wheat-growing sections that they should lend more efficient help to farmers undertaking to form and operate such organizations. Director Meyer emphasizes the point that the war finance board can better function to aid the wheat-growers through organizations than under private marketing methods.

* * *

President Coolidge has instructed the government tariff commission to begin the study of proposals that the tariff on wheat be increased from 30 to perhaps as high as 45 cents a bushel. Under the existing tariff law the president has power to increase or diminish tariffs on particular products when, in his judgment, based upon the commission's investigation, such change is desirable. It is understood that President Coolidge looks with a degree of favor upon an increase in the tariff on wheat.

* * *

From the passage of the emergency tariff law in May, 1921, up to June 30, 1923, a total of over 32,500,000 bushels of wheat had been imported into the United States from Canada. Of this amount 15,450,000 bushels were milled in this country under bond that the flour so manufactured be exported and not placed on the American market. Therefore the tariff duty on wheat imported from Canada was paid on only a little over 17,000,000 bushels. These 17,000,000 bushels competed on the American market directly with wheat grown in the United States.

* * *

The legislative committee of the American Farm Bureau federation last week presented to President Coolidge a program of nine proposals which it hopes to see materialized. These proposals are as follows:

1—Would have government accept Henry Ford's offer for Muscle Shoals with prospect of cheaper fertilizer for farmers.

2—Selective immigation favored, with passports vised at port of embarkation; quota to be limited to 3 per cent of foreign born in this country in 1890, instead of 1910 as at present.

3—Excess profits tax favored if government must raise additional money; irrevocably opposed to general sales tax, consumption tax or expenditure tax.

4—Favor wage increases for farm labor, provided it can be shown labor efficiency has been increased by mechanical devices, but oppose any wage advances unless cost of production can be decreased at same time.

5—As to merchant marine, indorsed cooperation between government and private shipping interests, though criticizing some rulings of shipping board.

6—For crop insurance, but oppose government entering the insurance business.

7—For enactment of truth-in-fabrics law.

8—Oppose government price-fixing on any agricultural commodities.

9—Indorse present federal program of highway construction.

* * *

A new constitution for the Turkish government contains a provision that Turkey shall be proclaimed a republic, with a president elected for four or five years. Other departments of the government will be a national assembly, an executive cabinet and a council of state, the members of this council being appointed by the president and the cabinet being responsible to the assembly.

* * *

According to John J. Leary Jr., labor expert of the New York World, attending the convention in Portland, Ore., of the American Federation of Labor for that paper, the federation will this week adopt resolutions against the Ku Klux Klan, the farmer-labor party and the "one big union" idea. Mr. Leary says that the committees to which these issues have been referred have overwhelmingly decided to make reports against these movements, and that the convention will undoubtedly adopt their reports.

* * *

Railroad executives have summed up what they call the three outstanding menaces to the railroad industry as follows:

1. The forthcoming demands of the big four brotherhoods for a restoration of wages to the war-time peak.
2. The demand of the farmers that railway rates on farm commodities be reduced.
3. The probable attempt of radical senators and representatives to modify the Esch-Cummins law to the detriment of the railroads, repealing all the favorable clauses and stiffening all the unfavorable ones.

* * *

Former Premier Lloyd George of England is now visiting the United States and Canada. He will be on the American continent until early in November.

Farm Business and Markets Outlook

(Continued from page five.)

Cheese Market Higher

Wisconsin cheese markets recovered last week from their recent depression, and prices at distributing markets have advanced. Demand is more dull since the advance but is still fairly active even including some speculative purchases. Receipts at the four leading markets in September show a greater increase over last year than does the rate of distribution so that storage holdings have declined only slightly during the month. Prices on fresh No. 1 American cheese on October 3 were:

Chicago—Twins 25@25½c; S. Daisies, 26@26½c; D. Daisies, 25½@26c; Longhorns, 26½@27c; Sq. Prints, 27@27½c.

Fruits and Vegetables.

The potato market has been extremely weak in the last ten days and prices have declined almost to the level reached during the heavy shipping season in the fal of 1922. In spite of the smaller crop, carlot shipments from producing sections in the last five weeks have been about the same as in the corresponding period a year ago. Prices are probably close to bottom as the peak of shipments will be passed in two or three weeks and at prevailing levels both consumers and storage operators are likely to take hold more freely. Northern round whites, U. S. No. 1 are quoted at 90 cents to $1.15 per 100 pounds and Idaho sacked Russets at $1.50 in the Chicago carlot market.

Carlot shipments of apples continue to expand, gaining 50 per cent last week. Exports are becoming heavy. Jonathans and Grimes Golden A 2 1-4 in. are quoted at $4.75 to $6.00 a barrel, with Northwestern extra fancy Jonathans at $2.25 to $3.00 a box in the Chicago market.

The onion market has been irregular under rather heavy receipts, but prices have held most of their gains. Yellows are quoted at $3.00 to $3.25 per 100 pounds in the Chicago carlot market.

LATEST QUOTATIONS.

The Live Stock Market.

PORTLAND, Oct. 6.—Cattle: Steers—Good grade, $7.00@7.50; medium grade, $6.00@7.00; common, $4.75@6.00.

Cows and heifers—Good to choice, $5.25@6.00; medium, $4.50@5.25; common, $3.75@4.50; canners and cutters, $1.50@3.75.

Calves—Medium to choice, 190 lbs. down, $9.50@11.75; 190 lbs. to 260 lbs., $7.50@9.00; 260 lbs. up, $6.50@8.00; culls and throwouts, $4.50@6.50.

Hogs—Medium to choice, 160 to 200 lbs., $8.90@9.60; 200 to 250 lbs., $7.85@9.00; 250 lbs. up, $7.00@7.85; packing, heavy and smooth, $6.50@7.50; rough, $5.00@6.50; killing pigs, $8.00@9.25; feeder pigs, $8.00@8.50.

Sheep: Lambs—84 lbs., medium to good and choice, $9.50@10.75; culls and commons, $7.00@9.50; yearling wethers, medium to choice, all weights, $6.00@9.00; wethers, $5.50@7.50; ewes, medium to choice, $3.50@6.50.

SPOKANE, Oct. 6.—Cattle—Prime steers, $6.75@7.25; good to choice steers, $6.25@6.75; medium to good steers, $5.50@6.25; fair to medium steers, $5.00@5.50; common to fair steers, $4.25@5.00; choice cows and heifers, $5.00@5.50; good to choice cows, heifers, $4.50@5.00; medium to good cows, heifers, $4.00@4.50; fair to medium cows, heifers, $3.00@4.00; canners, $2.00@2.50; bulls, $3.25@3.50; light veal calves, $8.00@9.00; heavy veal calves, $6.50@8.00.

Hogs—Prime mixed, $8.50@8.75; medium, $8.25@8.50; heavies, $5.50@7.75; fat pigs, $8.25@8.50; stockers and feeders, $7.00@7.50.

Sheep—Prime lambs, $10.00@10.35; fair to medium, $8.50@10.00; yearlings, $7.00@8.00; wethers, $5.50@7.00; mutton ewes, $3.00@5.00.

The Grain Markets.

PORTLAND, Ore., Oct. 6. — Wheat — Hard white, Bluestem, Bart, soft white western white, $1.05; hard winter, $1.01; northern spring and western red, $1.02.

Oats—No. 2 white feed, October, November, $31.50; No. 2 gray feed, October, November, $30.

Barley—No. 2, 46 pounds, October, November, $31.50; 44 pounds, October, November, $31.

Corn—No. 2 eastern yellow, shipment October, 41c; November, $38; No. 3 do November, $37.50.

SEATTLE, Wash., Oct. 6.—Wheat, bid quotations: Hard, soft and western white, $1.04; hard and soft red winter, northern spring, western red, $1.02; Big Bend Bluestem, $1.05.

Hay and Feed Grain.

PORTLAND, Oct. 6.—Millfeed—City delivery prices: Millrun, $29 per ton; middlings, $41; scratch feed, $48; rolled barley, $40@42; cracked corn, $48; rolled oats, $40.

Hay—Buying prices f. o. b. Portland: Alfalfa, $16@16.50 ton; cheat, $12@13; valley timothy, $18@19; eastern Oregon timothy, $20@22; clover, $13@14; oat, $14@15; oat and vetch, $15@16; straw, $8 per ton.

SPOKANE, Oct. 6.—Wheat—Feed wheat, $36 ton; oats, $36 per ton; rolled oats, $38; corn, $44 per ton; cracked corn, $46 per ton; barley, $34 per ton; rolled barley, $36 per ton; bran, $26 per ton; bran and shorts, $27 per ton; shorts, $31 per ton.

Alfalfa, $20 ton in ton lots, $16@18 carload lots; new timothy, $20 in ton lots, delivered.

General Produce.

PORTLAND, Oct. 6.—Butter—Cubes, extra, 46@47c lb.; prices, parchment wrapped box lots, 51c; cartons, 52c. Butterfat, 51c; delivered Portland; average station buying prices, 48c lb.

Eggs—Buying prices: White hennery standards, 46@47c; mixed color standards, 40@42c dozen. Selling prices: Front street, selects 52c; candled ranch, 46@48c. Association selling prices, cash at store: Extras, 48c; standards, 45c; pullets, 35c.

Cheese—Price to jobbers, f. o. b. Tillamook: Triplets, 30c; longhorns, 31c; loaf, 32c per lb. Eastern cheese, prices f. o. b. Wisconsin twins, 26c; triple daisies, 26 1-4c; Wisconsin cream brick, 23½c; limburger, 1sts, 25c; limburger, 2ds, 25½c; block Swiss standards, 31c; fancy open, 33c; wheel Swiss, fancy, large eyes, 41c.

Poultry—Hens, 13@23c; broilers, 23@26c; ducks, nominal; geese, nominal; turkeys, live, 28@30c; dressed, 36@38c.

SPOKANE, Oct. 6.—Poultry, live weight—Hens, 4 lbs. and over, 18c; light hens, under 4 lbs., 14c; springs, 20@22c; old roosters, 8c.

Fresh Ranch Eggs—$8.50 to $9.50 case; fancy poultry farm, $9.50@10.

Butterfat, 49c.

Range of Live Stock Prices for Week Ending October 4

CATTLE.	Chicago.	Spokane.	Portland.	N. S. Lake.
Choice and prime heavy steers (1100 lb. up)	11.65@13.00			
Good heavy steers	10.00@12.50			
Medium heavy steers	8.00@10.50			
Common heavy steers	5.65@ 8.50			
Choice and prime light steers (1100 lb. down)	11.65@12.75			
Good light steers	10.00@11.35			
Medium light steers	8.00@10.35	6.25@ 7.25	6.50@ 7.50	6.25@ 7.15
Common light steers	5.25@ 8.25	4.25@ 6.25	4.75@ 6.50	4.50@ 6.25
Common to choice butcher heifers	4.25@10.90	3.50@ 6.00	3.75@ 6.00	3.50@ 5.10
Common to choice butcher cows	3.40@ 8.50	2.75@ 5.00	3.00@ 5.00	3.00@ 4.50
Bologna and beef bulls	3.15@ 7.00	3.25@ 4.00	3.00@ 4.25	2.00@ 3.75
Canners and cutters, cows and heifers	2.65@ 3.50	2.00@ 3.00	1.50@ 3.75	1.50@ 3.25
Canner steers	3.25@ 5.50	2.50@ 3.50		
Medium to choice light veals	8.00@12.50	8.00@ 9.00	7.25@11.00	6.50@ 7.50
Common to choice heavy veals	3.00@12.25	6.50@ 8.00	5.00@ 7.50	5.50@ 7.00
Common to choice feeders (750 lb. up)	5.15@ 8.50			
Common to choice feeders (750 lb. down)	4.10@ 7.90	4.00@ 5.25		
Common to choice stocker cows and heifers	3.25@ 5.25			
HOGS.				
Top of market	8.30	9.25	9.25	8.10
Bulk of sales	7.20@ 8.30	8.25@ 9.00		7.40@ 8.10
Heavy (250 lb. up)	7.65@ 8.35	8.50@ 9.25	7.00@ 7.75	
Medium (200-250 lb.)	7.85@ 8.40	8.75@ 9.25	7.75@ 8.75	
Light (150-200 lb.)	7.25@ 8.40	7.75@ 9.25	8.75@ 9.25	7.40@ 8.10
Light lights (130-150 lb.)	6.75@ 8.10	8.00@ 7.75		
Smooth packing sows (250 lb. up)	7.10@ 7.40	6.25@ 7.25	5.50@ 7.50	5.75@ 6.05
Rough packing sows (200 lb. up)	6.75@ 7.15	5.50@ 6.50	5.00@ 6.50	5.05@ 5.75
Medium to choice pigs (130 lb. down)	5.75@ 7.25	8.75@ 9.00	8.00@ 9.00	
Stock pigs		7.50@ 8.00	8.25@ 9.00	
SHEEP AND LAMBS.				
Medium to prime lambs (84 lb. down)	11.50@13.25	9.00@10.35	9.50@10.75	9.50@11.00
Culls and common lambs	8.50@11.75	8.00@ 9.00	7.00@ 9.50	8.00@ 9.50
Medium to prime yearling wethers	8.50@11.00	7.00@ 8.00	6.00@ 9.00	5.35@ 6.35
Medium to prime wethers	5.25@ 7.25	5.50@ 7.00	5.50@ 7.50	4.00@ 5.10
Medium to choice ewes	3.75@ 6.75	3.00@ 5.00	3.50@ 6.50	3.00@ 3.85
Canner and cull ewes	1.00@ 3.75	2.00@ 3.00		
Feeder lambs	11.75@13.10			

Serving the People of Washington

In no part of the world is electricity more truly the servant of mankind than in Washington. Here is approximately one-sixth the potential waterpower of the nation—two and one half times as much as California, the second state in water power resources.

The electric light and power companies have already installed 74 hydro-electric plants generating over 449,860 horsepower, a remarkable development for so young a state.

These companies are constantly seeking new consumers and new uses for this power. They are keeping well ahead of demands, yet avoiding premature and unjustified development which would necessarily cause heavy carrying charges which would be reflected in rates to consumers.

The electric light and power companies of this state want the farmers of Washington, as well as the city dwellers, to know more about this great industry and the many ways it serves the public, adding to your comforts and conveniences; saving you money; making you money.

Each week through the forthcoming year we ask that you read our message in the Washington Farmer. We believe you will find there messages interesting and profitable.

NORTHWEST ELECTRIC LIGHT AND POWER ASSOCIATION

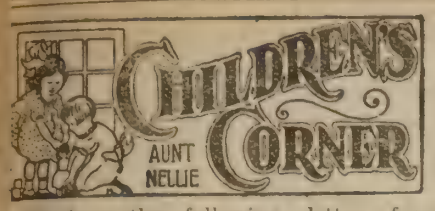
$10 for Opinions

The Washington Farmer will award three cash prizes amounting to $10 to the three best articles on the following subjects:

"What Advertisements in the Four October Issues of The Washington Farmer Appealed to Me Most Strongly and Why?"

Each article must be limited to 100 words.
First prize $5, second prize $3, third prize $2.
All entries must be received by November 1.
Address—

"OPINION" DEPT.
THE WASHINGTON FARMER
SPOKANE, WASH.



We have the following letter from Arthur F. Chess, a Washington boy: "May I enter the Corner? I read the cousins' letters first in THE FARMER and think them very interesting. I was 11 July 6 and will start to school September 4, with Mrs. Nellie Walker as my teacher. I'll be in the sixth grade. We live on an 80-acre ranch and I like the country fine. We have several pets, a Persian cat named Fluffy, also two white kittens, Snowdrop and Snowball. Our three bantams, Snowbird, Cricket and Lady are very tame and will sit on my shoulders or head."

Eleanor Brandt has been busy helping her mother and having a good time this summer. She says she is not big enough to do very much work, but she helps mother with the dishes and picks blackberries. She also goes after the mail. She has had a fine vacation, went to the beach and several other places. The fun will soon be over, and Eleanor is going to study hard when school commences. Her home is near Puget sound, in northwestern Washington. She will be 9 September 24.

We are glad to hear from a new cousin living in Friday Harbor county. She is Selma Peterson, 11 years old August 17. Selma says she has four brothers and two sisters. She had a nice visit with her grandmother this summer, also with her married sister.

Birthday Greetings

THURSDAY, October 11—Sarah Houghton; Melva Hume, 10 years old.

FRIDAY, October 12—Esmer Bohnet, 11 years old; Venice Williams, 10.

SATURDAY, October 13—Helen Tootaker, 11 years old.

SUNDAY, October 14—Maxine Miller, 11 years old; William Steele, 10.

BEDTIME STORIES

By THORNTON W. BURGESS.

WORKERS OF THE NIGHT.

That was a busy day for the little people who were trying to help Farmer Brown's boy by killing all the insects and worms in the old orchard, the berry patch and the garden. But at last jolly, round, red Mr. Sun went to bed behind the purple hills, and then most of those busy little workers went to bed, too. They were tired, but they were happy, for they felt that they had done a great deal. The next day they would continue the good work.

Peter Rabbit, who had faithfully kept watch while the others worked, was almost sorry as he listened to the beautiful evening song of Brownie the thrush. It seemed a pity to stop then. But he knew that Tommy Tit and Drummer the woodpecker, and Chippy the sparrow, and all the other feathered workers needed rest. Besides they could not see in the night as he could.

"It's too bad that the work has to stop," said Peter aloud as he made ready to leave the old orchard.

"What work?" demanded a voice right over his head. There in one of the apple trees sat Timmy the flying squirrel.

Then Peter told Timmy how everybody in the old orchard that day had been trying to help Farmer Brown's boy, and that he meant that it was too bad that the work had to stop at all.

"It doesn't," replied Timmy, suddenly springing on a fat, hard-shelled beetle. "I'm here and I rather think that I shall be

What are you doing?"

rather busy by the looks of things. There are a great many bugs that don't appear in the day time, and there are a few of us that prefer the night in which to work. You can depend on me to do my share to help Farmer Brown's boy. He found my nest a few days ago and took great care not to disturb it. And he chased away that black cat when she came nosing around. I shall be only too glad to do something for him and if catching bugs will help you can count on me. I see Boomer the nighthawk and Flitter the bat are at work already. Excuse me, I see another beetle over yonder."

In a twinkling Timmy was gone. Peter looked up in the air. Sure enough, there was flitter the bat, darting in and out among the trees, and Peter knew that he was catching insects in the air. A second later Boomer the nighthawk swept over his head and he heard the snap of Boomer's bill, which meant that Boomer had caught something. Peter signed happily. He had forgotten all about these little night workers. They could do what the day workers could not do.

"Wouldn't Farmer Brown's boy be glad if he knew," thought Peter as he started for home by way of the garden, for he had a mind to nibble a tender lettuce leaf. When he reached the garden he ate one lettuce leaf and had just begun on another when a voice, a very indignant voice, made him jump guiltily.

"What are you doing?" demanded old Mr. Toad angrily. "Don't you know that everybody is working for Farmer Brown's boy? Of what use is it for us to kill all the bugs and worms so that the green things can grow if you are going to eat them all up? A nice help you are?"

"I—I didn't think," replied Peter, meekly.

"Well, it's time you did think," retorted old Mr. Toad tartly. "There's plenty for you to eat over on the green meadows. I'll have you to know, Peter Rabbit, that I'm not working for you." All the time old Mr. Toad was busily hopping about, snapping up bugs, for he had rested during the heat of the day and loves best to work in the dusk of the evening.

Peter wanted another leaf of lettuce. It seemed to him that he never had wanted a thing more. But he knew that old Mr. Toad was right, it certainly wouldn't be helping Farmer Brown's boy if he ate up his lettuce. So Peter gulped hard once or twice and then bravely turned his back on the garden. After all, sweet clover was very nice and very filling.

Old Mr. Toad's eyes twinkled as he watched Peter hop away. "Peter means all right," said he, and began to hunt bugs harder than ever.—(Copyright.)

LETTERS WELCOMED BY AUNT NELLIE.

Among recent letters received by Aunt Nellie are those from cousins whose names follow. A few of these will be published each week in the regular edition of THE FARMER and others will appear from time to time in The Junior Farmer:

Freeda Klippert, Lois Fisher, Elva Lucille Dyer, Dorothy A. Hutson, Nora Requa, Elsie Stalder, Matilda Anderson, Ernest Toivonen, Bella Havey, Loretta Santo, Lillie Anderson, Astrid Rekdal, Amanda Forsman.

STATEMENT OF THE OWNERSHIP, MANagement, circulation, etc., required by the Act of congress of August 24, 1912, of The Washington Farmer, published weekly at Spokane, Washington, for October 1, 1923.

State of Washington, county of Spokane, ss.

Before me, a notary public, in and for the state and county aforesaid, personally appeared F. Young, who, having been duly sworn according to law, deposes and says that he is the vice president of The Washington Farmer, and that the following is, to the best of his knowledge and belief, a true statement of the ownership, management (and if a daily paper, the circulation,) etc., of the aforesaid publication for the date shown in the above caption, required by the act of August 24, 1912, embodied in section 443, Postal Laws and Regulations printed on the reverse side of this form, to wit:

1. That the names and addresses of the publisher, editor, managing editor and business managers are:

Publisher, Cowles Publishing Company, Spokane, Washington; editor, ...; managing editor, Edwin A. Smith, Spokane, Washington; business managers, none.

2. That the owner is: (If the publication is owned by an individual, his name and address, or if owned by more than one individual the name and address of each, should be given below; if the publication is owned by a corporation the name of the corporation and the names and addresses of the stockholders owning or holding one per cent or more of the total amount of stock should be given.) Cowles Publishing Company (a corporation), Spokane, Washington; W. H. Cowles, Spokane, Washington; H. C. Cowles, Spokane, Washington; J. F. Young, Spokane, Washington; F. J. Whaley, Spokane, Washington.

3. That the known bondholders, mortgagees and other security holders owning or holding 1 per cent or more of total amount of bonds, mortgages or other securities are: (If there are none, so state.) none.

4. That the two paragraphs next above, giving the names of the owners, stockholders and security holders, if any, contain not only the list of stockholders and security holders as they appear upon the books of the company, but also in cases where the stockholder or security holder appears upon the books of the company as trustee or in any other fiduciary relation, the name of the person or corporation for whom such trustee is acting is given; also that the said two paragraphs contain statements embracing affiant's full knowledge and belief as to the circumstances and conditions under which stockholders and security holders, who do not appear upon the books of the company as trustees, hold stock and securities in a capacity other than that of a bona fide owner; and this affiant has no reason to believe that any other person, association or corporation has any interest, direct or indirect, in the said stock, bonds or other securities than as so stated by him.

COWLES PUBLISHING COMPANY,
By J. F. YOUNG, Vice Pres.

Sworn to and subscribed before me this 24th day of September, 1923.
(Seal.) F. J. WHALEY,
(My commission expires Oct. 17, 1923.)

Multiplying Man-power

To the man with pick and shovel the digging of holes for telephone poles is a slow and arduous task. Under favorable soil conditions three to five holes are for him an average day's work. Under adverse conditions perhaps he can account for only one. When the hole is dug, eight or ten men are required to raise the pole with pikes.

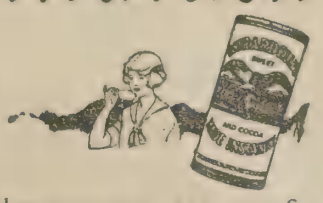
But the hole-borer with derrick attached, operated by only three men, can erect as many as eighty poles in a day—releasing for other telephone work upwards of forty men.

Hundreds of devices to quicken telephone construction, to increase its safety to the employee, and to effect economies are being utilized in the Bell System. Experiments are constantly being made to find the better and the shorter way to do a given job. Each tool invented for the industry must be developed to perfection.

In the aggregate these devices to multiply man-power mean an enormous yearly saving of time, labor and money throughout the whole Bell System. Without them telephone service would be rendered neither as promptly, as efficiently nor as economically as it is to-day.

"BELL SYSTEM"
AMERICAN TELEPHONE AND TELEGRAPH COMPANY
AND ASSOCIATED COMPANIES
One Policy, One System, Universal Service, and all directed toward Better Service

drink to your own health with Ghirardelli's



No sensible woman wants to pay for her morning drink with mid-day "nerves." And she needn't—with Ghirardelli's Ground Chocolate. It has the charm of fine flavor and fragrance—and the charm of health, too! Drink it every morning!

Gear-ar-delly

GHIRARDELLI'S
GROUND CHOCOLATE

(26)

The department editors of this paper are anxious to be of service to you. Do not fail to write to us if they can be of help to you.

Bigger Western Washington Fair

(Continued from page three..)

to house a larger live stock show that will draw the breeders from all over the northwest.

The Dairy Cows.

The Holstein show was made up of animals from the state herd at the Western State hospital at Fort Steilacoom. The show animals were headed by Carnation King Matador Mutual, the junior herd sire. There were two mature cows and eight heifers and a number of bull calves. The herd was not shown for competition. This was a part of the herd that Governor Hart is building up for the purpose of supplying the other state institutions with breeding stock.

The Ayrshires were shown by E. W. Tassell of Wenatchee, who brought his entire show herd, which had been shown on the northwest circuit before coming to Puyallup. The herd bull, Queen's Scottish Cavaleer, was placed senior and grand champion, while Empress Lady of Wenatchee was made senior and grand champion female. She was a 3-year-old with a very smooth appearance and a splendid dairy conformation. The bull was a typical Ayrshire bull and was formerly owned by the state college.

The splendid herd of Jerseys from the Midfields farm, owned by Sears & Little of Winlook, Lewis county, Wash., made up the showing for this breed. Their 2-year-old bull, Fussy's Fern Noble 35th, was made senior and grand champion over any of the other bulls in the herd and the female ribbon went to Brighter Dawn, a 4-year-old. She was a splendid type of Jersey and was in fine condition, although a little small for her age.

The showing made by the fawn and whites was one of the best that has ever been displayed on the grounds at Puyallup. There were 60 head in all, or more than all of the other dairy cattle breeds put together. There were four complete herds that showed in competition and two other breeders entered animals. The two herds shown by local breeders were the Ruby Dell herd, owned by H. E. Angel & Son of Mabton and the A. O. Johnson herd from near Buckley, in Pierce county. C. J. Lawson of Puyallup entered two head, while William J. Buckley showed his new herd bull and three other young animals.

The Chicona herd, owned by A. L. Gile of Chinook, Wash., and a show string from Astoria, owned by W. O. Reith, were the two from the Columbia river district. The Gile herd had the senior and grand champion female, Jewel of Rose City, a typical Guernsey, with all the indications of a good producer. She was sired by Glenwood King of Edgemoor and is out of Kate's Princess Jewel of Springcrest. The junior champion female was also in this herd. She was a senior yearling, Patience of Chicona, who was sired by Chicona Buster and out of Phyliss of Chicona.

The junior and grand champion bull was Ruby Dell Foxy, a senior yearling owned by H. E. Angel. He is a son of the herd bull, France's May King. His masculinity and type placed him above the senior champion, Chicona Hudson of the Reith herd, in the eyes of William Bishop of Chimacum, who judged the classes.

The Beef Cattle.

The herd of Shorthorns entered by F. M. Rothrock company of Spokane were met in competition by the J. D. McGuire herd from Tenino, Thurston county. Hercules Emblem, from the Rothrock herd, was made the junior and grand champion bull and Hercules Sylvia 3d, a junior yearling in the same herd, was made junior and grand champion female. The McGuire herd was showing stronger this year, even with the loss of Hercules Model, the herd sire, which died during the summer.

The Herefords were from Shadeland Stock farm at Daysland, Alberta. The 13 head shown were owned by O. A. Boggs & Sons, who filled all of the classes except junior bull calf class. Albert Panama, the 4-year-old herd bull, was made senior and grand champion bull, while Miss Panama was given the senior and grand champion female honors.

There were 14 head of Aberdeen Angus from the Congdon & Battles herd at Yakima. These animals made a very good showing and took all of the awards. Queenmere 14th, the 2-year-old bull, was made senior and grand champion, while the grand champion female was Barbarba C. B. 2d.

The Horses.

There were three breeds of horses shown by as many breeders. H. W. Merritt of Rosalia brought out 15 head of Shires, including three stallions and three colts. Forrester Prince, the 3-year-old black stallion, was given the senior and grand championship ribbon. Martha Washington, the 6-year-old dark bay mare, was placed at the top of the female classes. A small Shetland pony has been adopted by the attendants of this herd as their mascot.

The Clydesdales were shown by R. C. McCroskey of Garfield, and C. M. Hubbard, who judged the classes, placed Oaks Pride, the splendid bay stallion, at the top of the list. The senior and grand champion mare was Fairholm maiden.

There were nine Percherons and one stallion in the A. C. Ruby company, showing from Portland, and their champion mare, Ethel, was one of the six steel-gray mares in the six-horse hitch that won first place in competition with the other two breeds. The senior and grand champion stallion was Omega Jr., a 3-year-old.

C. M. Hubbard of Pullman judged.

The Swine Breeds.

The showing of hogs was very good and it brought out a number of local breeders as well as one herd from Yakima. This was I. J. Oder, who showed 27 head of Tamworths and 11 Polands. He was the heaviest exhibitor and won both of the sweepstake champion ribbons with King of the Mastodons, a junior yearling Poland boar, and Prospect Lass, a senior sow pig of the same breed.

G. W. Bradshaw of Sumner entered a Duroc boar and a sow with litter and A. J. Kissick of Graham showed four Duroc pigs. Fifteen head of Hampshires were shown by J. H. Stewart of Seattle and Henry Kane of Puyallup had four Berkshires. The other exhibitors were Emory Voss of Auburn, Charles Asbury of Puyallup, S. G. Anderson of Puyallup, A. W. Rhodes of Renton and two club entries shown by Elizabeth Cowan and Raymond Thieman of Puyallup.

Largest Poultry Show.

"The poultry show was the largest and best that has ever been shown in the state of Washington," according to Harry Collier of Tacoma, who helped William Coats judge the classes. "There was a larger number of birds shown and the quality was all first class. The dark Barred Plymouth Rocks had the heaviest entries, while the number shown in the Rhode Island Red classes were a close second, with the White Leghorns ranking third. There were birds from all over the northwest and one showing with several breeds from Vancouver, B. C. There was an excellent showing of pigeons from two local breeders and the turnout of ducks, geese and turkeys was much better than any one had anticipated.

The rabbit show brought out an improvement in color, weight and condition of all breeds," according to John Needham of Seattle, who judged the entries. "The show was put in readiness in much better time this year and the judging was finished at the end of the second day." There were more breeds than have ever been shown at Puyallup and the fur breeds were better represented, which shows that the rabbit is being used as a fur animal as well as for meat.

The new arrangement of the buildings gave the old agricultural building over to the horses and beef cattle. The horse stalls, which occupied half of the building, were filled by 22 head of jumping and performing horses owned by J. McCleave of Victoria, B. C., who put on a horse show three nights during the fair. In the same department were 18 Shetland ponys owned by F. H. Divan & Son of Monroe, Wis. The ponies were also used in the night show and in parades.

The Sheep and Goats.

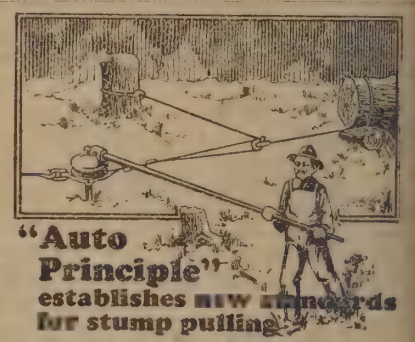
There were a few of the local sheep that were entered, but the main part of the show was made up from the Canadian breeders. A. C. Stewart of Aldergrove, B. C., showed Southdowns and G. F. Brown of the same town had the Romneys, H. V. Harmon of Orting entered six head of Hampshires.

The milk goats made a fine showing and were brought from local herds. M. P. Eggers of Woodinville, the Westwold farm at Edmonds, S. B. Davidson of Tacoma, A. M. Longhney of Seattle and Mrs. O. L. Williams of Sunnyside had the Toggenburgs. The goats were placed in pens built at the side of the poultry building and were separate from the hog division, but were in a good location on the grounds.

The state department of agriculture had four different divisions represented in as many booths next to the poultry building. The food division showed the kinds of meats and canned foods condemned by the inspectors. The dairy and live stock division had a display of milk utensils and machinery that are used by the milk inspectors in their work about the state and there were also some charts which showed the value of milk and its products. The horticultural division showed a few of the most common fruit diseases and demonstrated the value of grading potatoes for the market. The weights and measures department showed a number of weights that had been discarded and different kinds of scales and testing devises.

The Automobile Show.

The automobile show was housed in a separate building and there were many different makes of cars that appealed to a large number of the fair visitors. The space for this department was cut down from that allowed last year, which gave the extra building to the agricultural and horticultural products.



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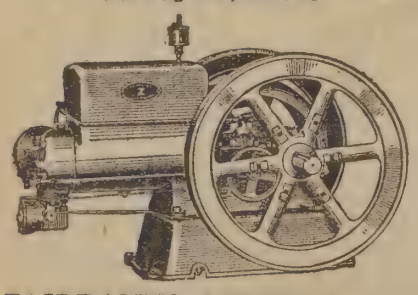

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News for Breeders

One of the best ways to solve the marketing problem is feed as much of the farm produce as possible to the live stock and then sell it in the finished form, declared Joe Tornay, a Jersey breeder and general farmer of Ellensburg, Kittitas county, Wash. Tornay has 16 head of purebred animals and eight grades and feeds a big part of the hay and grain that is raised on the 38 acres to his cows after either grinding the grain or trading it at the local mill for millrun or bran.

This is one of the first Jersey herds to be started in the valley and the start was made with a registered cow of the Stoke Pogis breeding. She is now 9 years old and has four daughters and five granddaughters in the herd at the present time.

The first herd bull, Pansey's Colonel Jack is an animal from the Nichols & Plunket herd and is a grandson of Pogis 75th of Hood farm. As yet there has not been enough improvement in the herd to make any appreciable difference, but the grade calves are all good, strong youngsters and promise to be profitable milkers.

The present herd bull is a son of the well-known Cowslip's Oxford, who was a grandson of Oxford You'll Do. There are five of his purebred heifers in the herd at the present time and one of them freshened too early, but produced 150 pounds of fat in four months.

Although Mr. Tornay does not have the privilege of a cow testing association he weighs the milk from each cow daily and makes his own tests at the end of each month in order to get a check on each cow and be able to weed out any that proves to be unprofitable. All the results so far obtained have been made on alfalfa hay and grains without the aid of silage or root crops.

HIGH TESTING HOLSTEINS.

It is not the amount of butter produced by the first cow of his Holstein herd to be officially tested that pleases John Hagloff, of Oakville, Wash., so much as the high fat test. For Mr. Hagloff recognizes the fact that a high percentage of fat is the goal of every breeder. He has been breeding Holsteins in a small way for four years. He now has 12 registered animals. He has made two official records. The first one, just referred to, was by Iris Cynthis Jewel, a daughter of Hollywood Iris Wit. Her seven days' production was 405 pounds of milk and 18.42 pounds of butter, or 14.74 of butterfat. Her average test was 4.9 per cent. Eight of his herd are in the Thurston and Grays Harbor Cow Testing association and they average from 4.1 to 4.2 per cent, which is the highest of any Holsteins in the association, and "Jewel" has produced as high as 79 pounds of fat in a month. Mr. Hagloff plans to put most of the herd on semi-official year test in the near future. His herd sire, Sir Tacoma Pontiac Violet, is a grandson of Sir Johanna Ruth Fayne on the dam's side and on the sire's side he is a grandson of King of the Pontiacs.

THE COLUMBIA SHEEP.

The federal government's sheep experiment station at Dubois, Idaho, has developed a breed of sheep known as the Columbia. The breed was developed by mating rams and ewes that were originally produced by crossbreeding with Lincolns and Rambouillets. The station reports that the mature weight of the Columbia ram is from 200 to 250 pounds and of the ewe, 125 to 150 pounds. The average fleece is reported as 10 pounds, with a shrinkage of 48 per cent and grading three-eighths and one-fourth blood combing. In 1922 the rate of increase in this breed under the supervision of the experiment station was 103 lambs to each 100 ewes and the lambs averaged 72 pounds each on the range at the age of 110 days.

REPRESENT THE WEST.

Interest is being expressed by breeders of Duroc Jersey hogs in the possible creation of a district comprising Washington, Oregon, Idaho, Montana, California and possibly Colorado to be represented on the board of directors of the national association of that breed. J. R. Pfander, secretary of the organization, who recently visited the northwest, indicated that he might make such recommendation upon his return to headquarters in Illinois. Should this be done it would possibly lead to the setting aside of an appropriation for the maintenance of a Duroc Jersey field man in this western district.

PUREBREDS FOR PORK.

J. R. Pfander, secretary of the National Duroc Jersey association, reports that the sentiment in favor of the use of purebred hogs rather than grades or crossbreds for pork production is increasing. He believes this applies not only to the Duroc Jerseys, but to other breeds as well.

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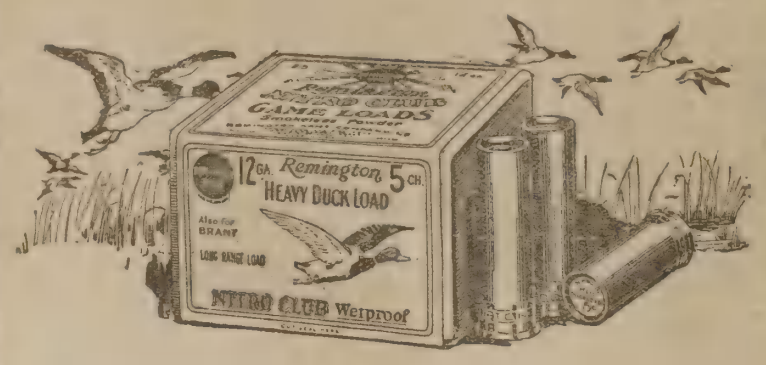
Parker-McAllister

Before Buying Oil Stocks Ask Your Banker About Their Loan Value—Page 4



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Recommended for Grouse, Prairie Chicken, Pheasant, Partridge, Dove, Rabbit, Duck and Squirrel. 12, 16 and 20-gauge; No. 7 Chilled or Soft Shot.

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Recommended for Squirrel and Rabbit. 12, 16 and 20-gauge; No. 6 Chilled or Soft Shot.

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12-gauge only; regulation charge of 1¼ ounces of No. 7½ Chilled Shot and special wadding.

Duck Load
Recommended for Duck, Pheasant, Hawk, Crow, Rabbit, Partridge, Prairie Chicken and Grouse. 12, 16 and 20-gauge; No. 5, 6 or 7 Chilled or Soft Shot.

Buck Shot Load
Recommended for Deer, Black Bear and Wolf. 12-gauge; loaded with 12 pellets of No. 0 Eastern Shot.

Goose Load
Recommended for Goose, Fox, Turkey and Raccoon. 12-gauge; No. 2 Chilled or Soft Shot.

Rabbit Load
Recommended for Rabbit and Squirrel. 12, 16 and 20-gauge; No. 6 Chilled or Soft Shot.

Everything that's in them is selected and backed by Remington—including the powder. Powder varies—*Remington Game Loads do not.*

Write for Booklet A—*"The Complete Story of Remington Game Loads."*

REMINGTON ARMS COMPANY, Inc.
25 Broadway, New York
Established 1816

Remington

THE AUTHORITY IN FIRE ARMS, AMMUNITION AND CUTLERY

Why Freight Rates Cannot Be Reduced

Freight rates are still higher than before the war.

Many farmers repeatedly have heard it said this is because the Esch-Cummins Transportation Act "guarantees" the railways a net return of 5¾ or 6 per cent upon the valuation made by the Interstate Commerce Commission.

No "Guarantees" to the Railways

The railways are not "guaranteed" any specified net return by the Transportation Act.

The railways of western territory never have earned or received a return of either 6 or 5¾ per cent since the Transportation Act was passed. They earned and received an average of only 3.54 per cent on their valuation in 1921; only 4 per cent in 1922, and at the annual rate of only 4.2 per cent in the first six months of 1923.

Their net return in the first six months of 1923 was almost 45 million dollars LESS than in the first six months of 1916, before the Transportation Act was passed.

The last advance in railway rates was in 1920. Western railways in 1921 earned an average of only 3.54 per cent. If they had been guaranteed 6 per cent, their rates would have had to be increased. But in 1922 the Interstate Commerce commission **reduced** their freight rates an average of 16 per cent. This is now saving the shippers and costing the western railways about 300 million dollars a year.

Great Increases in Operating Expenses and Taxes

But freight rates are still higher than before the war. Why is this so? Why can they not be reduced? The answer—the only true answer—is—because railway operating expenses and taxes are still much higher than before the war.

Study the figures in the table below. They show what the western railways earned and what it cost them to do business in the first six months of 1916, and in the first six months of 1923.

Do not be misled by reports that railways are earning much better profits than in 1921 and 1922. This is true of the eastern and southern lines. **It is not true of the western lines.** Few railways in this territory are earning enough to pay any dividends on their stock. Thirty-seven railways, which operate almost one-third of the mileage in the west, have failed throughout the last two and one-half years to earn enough **to pay the interest on their bonds.**

The taxes of western railways are double what they were seven years ago because government authorities have increased them.

Why are their operating expenses almost double what they were then?

The Wages of Employees

Of every $100 of operating expenses of the railways, $61 consists of wages. Some employees are paid by the day, but a large majority by the hour. The following shows the average wages paid to railway employees in 1916 and at present:

Average Wages of Railway Employees

	Hourly	Daily
1923	59.5¢	$7.71
1916	27.5¢	4.41
Increase	32.0¢	$3.30
Per cent increase	116	75

The railways of western territory are paying their employees about $550,000,000 more wages a year than in 1916.

High Prices for Fuel and Materials

The average cost of coal burned by the railways in 1916 was $1.82 per ton. Thus far in 1923 it has been $3.64, or 100 per cent more. Owing mainly to this western railways are spending over $100,000,000 a year more for fuel than in 1916.

The prices of materials and supplies used in the operation and maintenance of railways average more than twice as high as seven years ago. The western railways are spending almost $200,000,000 a year more for materials and supplies than in 1916.

While the operating expenses and taxes of the western railways are **double** what they were in 1916, their average freight rate is only 45 per cent, or less than **one-half**, more than it was then. **It is only 38 per cent more than it was in 1913,** before the war.

Is it any wonder that with their operating expenses and taxes **doubled,** and their average freight rate increased **less than one-half,** they are earning a much smaller net return than before the war? Is it any wonder, in view of these facts, that they cannot reduce their rates any more?

West Needs Prosperous Railways

The west needs prosperous railways. Only prosperous railways can raise capital to increase their facilities and render more and better service to the public. A majority of the railways in western territory are suffering as great adversity as any class of people in this territory, not excepting the farmers. No reduction of rates can reasonably be demanded or considered while this is true.

Earnings and Expenses of Western Railroads for First Six Months of 1916 and 1923:

	1916	1923	Increase	Increase Per Cent
Total Earnings	$658,000,000	$1,089,000,000	$431,000,000	65 per cent
Operating Expenses	441,000,000	878,000,000	437,000,000	99 per cent
Taxes	34,000,000	68,000,000	34,000,000	100 per cent
			Decrease	Decrease
Net Operating Income	177,700,000	133,000,000	44,700,000	25 per cent

This is one of a series of advertisements published to give the farmer authentic information about railroad matters. Any questions that you would like to ask will be cheerfully answered. Address:

WESTERN RAILWAYS' COMMITTEE ON PUBLIC RELATIONS

Transportation Building, Chicago, Illinois

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C. E. SCHAFF, President, Missouri-Kansas-Texas Lines.

SEEDS AND NURSERY STOCK—Yes, they are offered on this week's "Want Ad" page.

What Nurse Crop Gives Legumes Best Start?

By F. J. SIEVERS

Head Department of Soils, State College of Washington

With the increasing interest in diversified farming in the Palouse region of eastern Washington and the gradual attempts at continuous cropping involving the introduction of legumes like clover, alfalfa and sweet clover in a crop rotation system, the matter of a proper nurse crop for these legumes is receiving considerable attention.

There is much misunderstanding concerning the merits of any nurse crop largely because the name "nurse crop" naturally leaves the impression that a crop grown for such purpose will have a beneficial effect on the legume crop with which it is grown. The fact of the matter is that all nurse crops are a handicap to the legume and the only justification for their growth is to give the farmer a profitable crop on his land for the year during which the legume is being started. In all cases, provided weeds are not permitted to interfere and serve as a volunteer nurse crop, all legumes will produce the best stand when grown alone, and if this is the only factor under consideration, nurse crops should never be used.

The farmer, in selecting a nurse crop, should, therefore, give first consideration to such as produce a fairly profitable crop and do the least harm instead of expecting to derive any benefit. To make an intelligent selection, let us see what the requirements of various crops are and in just what respect a nurse crop is a handicap. Wheat is so commonly grown it will serve as a good illustration of a cereal. This crop is seeded either in the fall or early spring and has an opportunity to utilize much of the soil moisture and to make considerable growth before the legume (clover, alfalfa, etc.) makes its appearance. The new legume plant soon learns that it has to compete under conditions of shade and a limited moisture supply and adjusts itself accordingly. This condition continues until harvest time, and harvest time in the Palouse country comes when the wheat has taken out of the soil about all the moisture within its reach. The fact of the matter is that crop maturity and moisture supply are so closely associated here that it frequently happens that the soil moisture gives out before the growth is completed and the crop "burns" or ripens prematurely. When this wheat crop is removed the young legume, assuming that it is still alive, is exposed to the direct sunlight and the hottest winds that are experienced at any time of the year, and both of these factors have a pronounced effect on increasing the water requirements of the plant. This all happens when the soil moisture supply, the only source from which the plant can draw its required water, has been exhausted, at least as far as the wheat plant is concerned. The expected naturally happens; the plant dries up and is dead before the fall rains come. Cereals as a nurse crop for legumes, under soil and climatic conditions, fail so frequently in this region that their recommendation for this purpose is not justified.

Different crops, however, show a wide variation in the amount of water they take from the soil during the growing season. In the extensive investigational work conducted by the soils department of the State College of Washington in an attempt to develop a system of farming for the Palouse region which is not only profitable, but permanent as well, a large number of soil moisture determinations extending over several years were made. The soil samples were taken after harvest in units of one foot to a total depth of 10 feet on field plots grown to a number of different crops and also on plots that were summer fallowed. The table below gives detailed data in percentage of moisture present in each foot of soil to a depth of 10 feet after harvest of wheat, oats, barley, corn, peas, alfalfa and on summer fallow. It was found there is a wide variation here, not only in the total amount of water used, but also in depth from which the different crops draw the soil moisture.

	—Per cent moisture in soil after Harvest of—					
Depth.	Wheat.	Oats.	Barley.	Corn.	Peas.	Alfalfa.	Summer fallow.
First Ft.	9.21	8.23	10.30	12.11	9.85	7.18	23.61
Second Ft.	9.81	9.83	11.32	13.59	10.46	9.47	23.05
Third Ft.	9.83	9.34	11.92	15.25	10.25	8.70	22.45
Fourth Ft.	9.83	9.61	13 09	17.40	15.40	8.93	22.53
Fifth Ft.	11.32	11.76	16.21	20.62	20.23	9.70	22.34
Sixth Ft.	13.56	16.69	18.81	22.13	21.29	11.12	21.93
Seventh Ft.	17.23	19.28	21.41	22.68	21.31	15.34	22.28
Eighth Ft.	19.61	21.47	21.75	23.13	21.40	14.03	23.57
Ninth Ft.	22.79	20.96	21.65	21.42	21.57	16.82	23.13
Tenth Ft.	22.86	21.26	21.67	21.46	21.59	16.70	23.83
Yield in bushels per acre	42.3	76.6	41.1	31.8	31.1	....	None
Moisture loss in T. per A.	155.9	103.8	105.1	64.1	83.9	?	21.7

Wheat, due to its long-root system, which has been found to extend to a depth of eight feet or more in the deep Palouse soils, shows its influence on the moisture down to the ninth foot, oats to the eighth, barley to the seventh, corn and peas to about the fifth, alfalfa beyond the 10th foot and summer fallow shows practically the same moisture content throughout the entire 10 feet. It is very evident here that the small grains utilize moisture more complete than corn or peas, and that alfalfa has them all beaten in this respect.

The results show that a 42.3-bushel crop of wheat removed 155.9 tons of water from the soil, while a 31.1-bushel crop of peas removed only 83.9 tons. All of this loss, however, should not be charged to the crop, because the summer fallow field that grew no crop at all lost 21.7 tons of water. By subtracting this loss of water from the fields cropped to wheat and peas it may be assumed that the remainder represents more nearly the water removed by the crop. This shows a loss of 134.2 tons for wheat and of 62.2 tons per acre for peas—or, in other words, the former crop has taken over twice as much water from the soil as the latter.

If we concede that the moisture content of the soil is an important factor in the establishment of a legume crop, then the fact that a pea field after harvest contains per acre more water by 72 tons than is found in a wheat field at that time of the year should give peas a decided preference as a nurse crop.

Besides this, peas are seeded early in the spring, necessitating the preparation of a seed bed at the time when most legumes can be seeded to best advantage. The crop can be profitably grown either for hay or grain, the decision depending upon the farmer's choice as influenced by the effect that the nurse crop is having on the young seeding. If it becomes evident that the young seedling is beginning to suffer from drought the peas may be harvested for hay and thus, through their early removal, more soil moisture is left available for the young seedling.

Everything taken into consideration, peas have proven more satisfactory as a nurse crop in the Palouse region than any other crop and results from their use are comparable to those obtained where the legume was started without a nurse crop.

The young seedling and the pea nurse crop are seeded together in the spring as early as soil and climatic conditions will permit. The rate of seeding for peas when used as a nurse crop should be about two-thirds as heavy as otherwise recommended and then the crop should be watched during the growing season, so that in case the summer drought appears sufficiently severe to endanger the development of the young seedling, the nurse crop may be removed and harvested as hay.

Regarding Water as an Investment in Irrigation

By E. C. McCLELLAN, C. E.

Tracing the development of plant life from early geologic times to the present, Mr. McClellan, in the following article, comes to the conclusion:

That the biggest plants, encouraged by maximum water supply, do not produce the most or the best food supplies.

That the minimum water supply may produce the best quality, but only a negligible quantity.

That combining quality and quantity the medium-size plant, encouraged by the mean supply of water, produces the largest amount of food supply at the least relative cost.

That the mean supply of water is measured by the quantity of precipitation of from 18 to 22 inches found in the best agricultural sections of the country.

That the mean water supply, given to arid lands by irrigation, will double the food production of the best nonirrigated agricultural lands.

Plants originated in water. Migrating to the land, following the elements they needed for their growth, as the water supply by precipitation decreased they were unable to secure as much as when surrounded by water, and they decreased in size.

When the period arrived when the water, upon being delivered into the ground, changed into a vapor, or fog (as it does at present), they were forced to evolve a new method for securing it. At that period in their evolution they reached their minimum size, but as soon as they were able to evolve and perfect the new method they increased in size again to a maximum a trifle above their present size—as the precipitation has continued to decrease since that new method was perfected—and the size of the plant is again decreasing.

The food products are primarily stored by the plants for purposes of propagation—or feeding their young until they have attained a size and strength sufficient for them to secure their own food.

In attempting to discover how these food products were produced, scientists discovered that these products were not manufactured by the plants at all, but manufactured, or combined in the ground; and that the plants only created the necessary cells, or store rooms, and then took them up after being manufactured and stored them for use.

They also discovered that such food products were only combined when there was a certain proportionate quantity of each element contained in the ground at that point, and when there was any great difference in such proportions they would not be combined.

As about 10 per cent of the food products consists of the two elements entering into water, that means that there must be about that proportion between water and the other elements.

It was also reported that with any great increase in water supply these food products could not be combined; and that should the proportion be right, and the food products manufactured, but an increase in water in the ground—by precipitation or irrigation—destroy that proportion before the plants could take the substances up, they would be dissolved into their original elements.

The result is that when a greater quantity of water is placed into the ground than the plants are accustomed to find there, as they use nearly 90 per cent of water in their structural growth, they will respond with a large-sized plant, and will create large cells or store rooms for food products; but those products not being able to be manufactured the plant can not find them, and will be forced to fill the cells or store rooms with other substances.

In considering water as a medium of exchange for food products, we must take the same viewpoint we do when considering money as a medium of exchange for articles we wish to secure, and figure upon the greatest return in food products we can secure with the spending of any given quantity of water we have to dispose of.

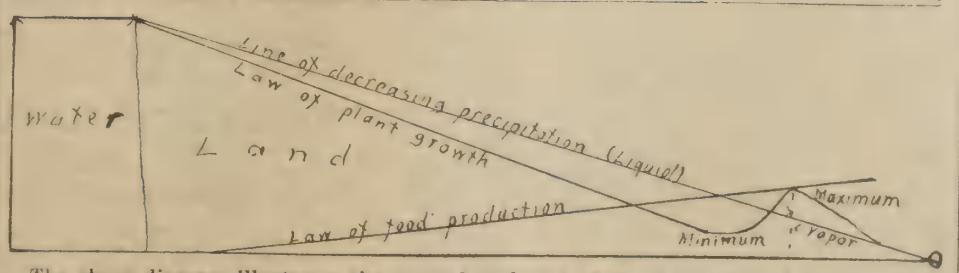
Experiments have been conducted for many years under supervision of competent men to determine just what the return will be for about every food plant cultivated, and table No. 1, made from the returns of 10 years' experiments, shows just what we can expect to secure (or rather what the plants will secure for us), when different plants are provided with different quantities of water.

TABLE NO. 1.

Plant.	Crop per acre.	—Inches in depth of water— furnished. 20	25	40
Alfalfa	Tons	4.80	4.94	4.68
Timothy	Tons	1.90	1.90	3.00
Sugar beets	Tons	13.78	18.63	20.82
Carrots	Tons	17.29	16.80	23.48
Corn	Bushels	79.00	89.52	99.16
Wheat	Bushels	37.81	43.33	46.46
Oats	Bushels	62.28	54.76	80.70
Potatoes	Bushels	154.00	195.00	250.00

TABLE NO. 2.

Acres of land.		One acre	Two acres	Three acres	Average returns on nonirrigated land.
Irrigation per acre.		30 inches	15 inches	10 inches	
Total water supplied.		40 inches	50 inches	60 inches	
Cost of water supply.		$135.00.	$67.50	$45.00	
Plant.	Return.				
Alfalfa	Tons	4.68	9.33	14.40	
Timothy	Tons	2.00	3.00	4.00	1.25
Carrots	Tons	23.43	48.00	51.00	
Sugar beets	Tons	21.00	39.00	41.30	
Corn	Bushels	99.00	179.00	225.00	40.00
Wheat	Bushels	46.50	86.60	113.50	18.00
Oats	Bushels	80.00	143.00	186.80	35.00
Potatoes	Bushels	250.00	390.00	462.00	90.00



The above diagram illustrates the general evolution of plant growth and food production.

Starting in water and surrounded by all the elements a plant needed, its methods for securing them were simple and it attained a large growth. Then, forced to follow the elements to land, it had to evolve methods to secure those elements by sending roots into the ground, and also provide a supply of food for its young to live upon until they were able to forage for themselves. This was done by creating cells into which they stored the food and placed in each cell one of its young.

These cells are the seeds or grains of our cereals. At first the young did not need much food, but as the elements hid themselves deeper in the ground the plant had to secure more food to last the young until they attained a greater strength.

At this present period the water supplied by precipitation in the best agricultural sections of the United States is from 18 to 22 inches in depth annually.

Applying the same law of financing we do in working out any business enterprise to water supply, and adapting it to irrigation as a legitimate business industry, we have table No. 2, showing as a basis 30 acre inches of water for our capital in water and a value of $4.50 in money value for it, and irrigating lands having an annual precipitation of 10 inches.

Raising plants is a distinctly manufacturing enterprise, in which the farmer assists the industry by attending to placing the plant in the ground, providing it with the necessary elements that the soil lacks and by systematic cultivation surrounding it with the environment best suited to the plant.

The necessary elements being in the ground in their proper proportion the plant will respond to the treatment with the best plant growth, and, the necessary food products being manufactured in nature's laboratory, they will be taken up by the plant and stored for man's use.

The most dangerous fallacy circulated regarding irrigation is that different soils require different quantities of water in irrigation. The answer to that false doctrine is that irrigation is carried on for the purpose of supplying plants with the quantity of water they need, and they need exactly the same quantity of water in a loose, porous soil as they do in a fine loam or clay soil—and no more. They need that water delivered into the ground in the same manner—as closely as possible—as it is delivered into the ground by precipitation, so it will immediately turn into a vapor, or fog, and remain within reach of the plant, and that can be done at reasonable cost.

The claim that this can not be done is met by the answer that it is being done in many places. But, if there is a sand bank, or gravel pit, in which the vapor can not be held a reasonable length of time, it should never be irrigated as long as there are any other tracts of good land the water can be carried upon. (Copyright, 1923, by E. C. McClellan.)

FROM A SMALL BEGINNING.

Glenwood farm, near Buckeye, north of Spokane, got its start in Jerseys at the Glen Tana farm sale five years ago, when Mr. Hamann, proprietor, bought two head of cows. Now Glenwood has 13 head of good Jerseys on the farm and has two bulls leased out. Dairying was just a sideline on the farm at first, but is rapidly becoming a leader. Mr. Hamann and his son are now milking seven cows and selling cream in Spokane.

THE WASHINGTON FARMER

Successor to
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What Are Oil Stocks Worth?

There are about 283,000 oil wells in the United States, and W. H. Gray, president of the National Independent Producers' association, affirms that 260,000 of them are operated at a loss. Mr. Gray emphatically denies a persistent assertion of overproduction. On the contrary, he declares, production is dropping off rapidly, and unless the refiners and distributors will pay the producers a price that will cover the cost of production, the second largest industry in the United States will be killed.

Mr. Gray says the oil producers are not getting a square deal from the refiners and distributors, and that if existing treatment continues much longer the American people will awaken to a realization that they must pay abnormally high prices for gasoline.

If the head of the independent oil producers understands the facts, as it seems he should, and is not presenting them in the light of misrepresentation, ownership of a producing oil well is far from assuring the owner a fortune, or even a profit. According to his statistics only one well in 12 is paying, a ratio of loss to profit that should put wheat growers and other farm producers on guard against the glib salesmen of oil stock who hold out the delusive expectation that big and easy profits follow the striking of oil. Discontented grain growers who sell or mortgage good wheat land and buy stocks in oil wells 2000 or 3000 miles away are engaging in a mighty poor trade.

In the Land of Wheat

The other day the electric train from Moscow to Spokane was speeding along through the wheat lands of Whitman county about midway between Oakesdale and Spring Valley. The writer was looking out the window for things of interest when a herd of 50 or so good red hogs, including three or four litters of fall pigs, caught his eye. The 30-mile-an-hour speed of the train gave not a fraction of the time necessary to an adequate appraisal of the prosperous-looking scene. As the observer turned away, his eyes were greeted in the other end of the same pasture by a flock of black-faced sheep that showed every evidence of being equal if not superior to the red hogs from the standpoint of quality. There were probably 30 or 40 of these good sheep in the flock. Again the time for observation was inadequate and the writer is not sure today whether or not they were grazing in an alfalfa stubble pasture, but he believes they were.

This was right in the heart of the great Palouse country that some people think yet can produce nothing but wheat. Wheat is and always will be the leading crop of the Palouse country, but scenes like this indicate that balanced farming even in the Palouse country, is practical. Some fear is expressed that the wheat-growing section will go too rapidly and too far in its change from a strictly one-crop to a balanced farming program, but scenes like the one described are too few up to this time to warrant such fear. Every 640-acre section of the farming land of the great Paulouse should be able to show the equivalent of this herd and this flock in similar herds and flocks, or dairy cattle, beef cattle or poultry.

We Need More Farm Flocks

The woolen mills of the United States make up into various forms of woolen goods twice as much wool each year, under normal conditions, as is produced in this country. That should give us something to think about. For the past several years sheep production, from the standpoint of numbers of sheep and pounds of wool, has been on the decline. Last year there were 37,000,000 sheep in the United States, according to census figures. Ten years ago there were over 50,000,000 and 20 years ago over 60,000,000. In 1921 the wool production of the United States was about 225,000,000 pounds, a reduction of approximately 25,000,000 pounds in two years.

While a number of conditions and influences have brought about these results, at least one of the reasons is the reduction in range area. To offset this, there should be increased numbers of sheep on the general farms of the country. Too few farms in the Pacific northwest carry any sheep as a sideline, notwithstanding the fact that sheep, in a great many cases, will pay their keep by soil improvement and eradication of noxious weeds.

The general farms of Ohio have almost 2,000,000 sheep on them in the form of farm flocks. This is above the average per state of all sheep, both range and farm flock, in the states of the northwest. If it is profitable there it should be here.

There is no get-rich-quick possibility in sheep production on the farms of the northwest, but there is a great opportunity to improve the quality of agriculture in this territory and at the same time add to the farm a very real and dependable source of income.

Quality Should Affect Price

Potatoes are sometimes just spuds. George J. Cannon, a grower of commercial and seed potatoes in Spokane county, believes that the time has arrived when spuds should be kept off of the market and potatoes of real quality offered in their place. He believes that potatoes should be sold on the wholesale and retail markets on the basis of their quality rather than the fact that they are just potatoes.

It would be quite a task to educate the potato-buying public as to the real qualities of potatoes, but the results should be worth the effort. Purchasers in the city markets would be glad to secure superior potatoes if they could, and, if a system of grading and marketing were established which would enable the housewife to order her potatoes by variety and grade, it would be a great advancement not only for the consumer, but for the producer who strives for a high-grade product.

Hard on the Scrub Hen

County Agent Fred Martin of Wahkiakum county played a shabby trick on a lot of unsuspecting hens in the flock of F. V. Grimes the other day. Mr. Martin looked over the flock carefully, one bird at a time, placing the unsuspecting ones in a coop by themselves. What he did it for was revealed a week later when the figures which Mr. Grimes had kept during the week showed that the 134 unsuspecting biddies had produced only seven eggs during the week, while the 411 which Mr. Martin had placed in other quarters had produced 743.

It takes a heartless man to treat hens that way, but the faster we become heartless the better for our bank accounts.

IOWA'S FARM LANDS.

Wallace's Farmer: The fact that the average farm has jumped in value over $21,000 in 10 years is given as satisfactory evidence of the state's prosperity. It might be well to ask who got the benefit of that increase.

Washington State Gleanings

HARRINGTON SHIPS MUCH WHEAT.

Seventy-four cars of wheat have been shipped from Harrington this fall, 12 in August and 62 in September. They contained 96,000 bushels. Wheat is pouring into the warehouses at the rate of 30,000 bushels a day.

CLUB RECORDS COMPLETE.

Mrs. Mabel Gould, boys and girls' club leader of Eden valley, was the first of the club leaders to succeed in collecting and turning in the completed club record books which determine who is eligible to attend the annual Clallam county club banquet at Port Angeles.

PLANS MODEL POULTRY PLANT.

Frank W. Schultz, president of the Commercial National bank of Wenatchee, recently visited the Henacres poultry plant and hatchery at Prosser to get ideas for a poultry plant at Wenatchee. Agricultural conditions around Wenatchee are very much similar to those in the Prosser district, where the poultry industry has been successfully developed, he says.

RED CLOVER SEED PRODUCTION.

Production of red clover seed on a commercial basis in the vicinity of Chehalis is assuming considerable proportions, according to announcement made recently, when a large sale was made by the Elston Seed company to the Portland Seed company. The seed sold for $25,000, and growers netted 20c per pound. Mr. Elston, head of the concern, states that his estimate of the local crop here is from 60,000 to 100,000 pounds of seed.

RUNS THIRTEEN-ACRE RANCH.

Nothing but finished products go off the place of R. P. Rockett of the Cowiche district in Yakima county. He has 13 acres of land and he keeps four dairy cows and nearly 500 chickens. The cows and chickens give him a better income than could be secured from any crop he might grow on the place and sell, he said. The hay he grows is fed to the dairy cows and to the chickens as well.

He is now keeping 480 White Leghorn hens and all the feed which they consume, except green feed and skim milk, is bought. Alfalfa hay is fed to the chickens in racks and they eat all the leaves and even some of the stems, he said. All the ground occupied by the poultry is that on which the house stands, which is 22 by 100 feet, and a yard space of equal size. He does not let the chickens out of this enclosure at all.

Mr. Rockett got his foundation stock in the first instance from the east, both the D. W. Young and the Tom Baron strains being represented. This stock he has crossed with Tancred strain and more recently with the Hollywood strain.

WASHINGTON'S CRANBERRY CROP.

With the doubling this year of the cranberry crop in the Ilwaco district, Washington takes fourth place in the production of these berries. This is the statement of W. E. Schimpff of Astoria, Ore., sales manager for the Pacific Cranberry exchange. "While the growing of cranberries began several years ago, it has only recently settled down to be one of the stable fruit industries of the state," said Mr. Schimpff.

"The appropriation of the last legislature for putting an expert in the field at Ilwaco experiment station has resulted not only in doubling the crop of that section, but the quality of fruit this year is better than it has been.

"The acreage in the Ilwaco district is between 400 and 500 acres, all under intensive cultivation, and there is a small area near Aberdeen now in bearing. There is still in Washington a potential cranberry area of about 3000 acres. The crop is one of the most expensive to bring to bearing. It costs around $1000 an acre to clear, prepare the ground and plant the vines, and four years are required to develop the vines to produce a marketable crop.

"All the sod has to be removed from the bog, and the surface is covered with three inches of sand. The plants are set 10 inches apart, and about 60,000 are set to the acre. All work, as a rule, has to be done by hand, as the bog will not bear the weight of a horse. The total crop in the United States this year is one of the largest ever produced."

RECORD YEAR FOR BERRIES.

With the berry season practically at an end, 1923 will be recorded as undoubtedly the greatest year in the history of the industry in the Puyallup valley, according to reports compiled at Puyallup.

While the season has not been, perhaps, the most profitable one ever enjoyed by growers, owing to market conditions which could not be overcome, the yield has been the heaviest and more berries have been shipped from the valley than during any previous year.

Undoubtedly the most encouraging fact about the industry—the one that will redound to the benefit of the growers and the valley in general—is the exceptionally high quality of the berries produced this year. Especially is this true of the Evergreen blackberries. Growers, canners and shippers point with pride to the fact that the Puyallup valley's blackberry crop of 1923 was remarkable for its large-size berries, their delicious flavor and firmness of texture.

The Pacific Northwest Canning company completed its heavy blackberry run September 29. The canning of Bartlett pears also came to a close the same day. According to W. J. Vary, general manager, the company handled more than 1,500,000 pounds of berries and 100 carloads of pears during the season.

W. H. Paulhamus, president of the Puyallup and Sumner Fruit Growers' association, says 1923 has been a most remarkable year for the berry industry. "We have had to cope with serious situations, such as the three days' heavy rain, shortage of pickers and a none-too-brisk market," said Mr. Paulhamus, "but we have had splendid success in marketing our berries, and I believe the growers are quite satisfied with the results. The association hopes to be in shape next year to render a still greater service to its members."

"Our first berry season, under the present management, has been better than anticipated," said B. F. Emery, manager of the Puyallup Packing company at North Puyallup. "Our pack has been large, considering the limited capacity of our plant. We expect to install additional machinery and double the capacity of the cannery next year."

Those Foreign Debts

President Coolidge Stands Firm for Their Payment in Full

Propaganda has been renewed for cancellation of the war debts owed by allied countries to the United States, the agitation is so vigorous that President Coolidge deemed it advisable to give out a statement from the White House last Friday that he is unalterably opposed to cancellation.

The president takes the reasonable position that we should not unduly press any of or debtors and should be liberal in the terms of settlement. His idéa of liberality is the basis of settlement already reached with Great Britain.

The newly chosen head of the American Bankers' association, elected a few days ago, was quoted in one widely published interview as favoring complete cancellation of these debts. He denies the authenticity of that interview, but says he "is in favor of a recasting of amounts due the United States from foreign governments as a means of making available money to purchase America's excess products."

We doubt if any of our readerss will be caught with that chaff. Borrowing countries owe the United States nearly $12,000,000,000. If they pay back that $12,000,000,000 Uncle Sam can cancel $12,000,000,000 worth of Liberty bonds. But if the borrowing countries do not pay their debts to us Uncle Sam will have to tax his own citizenss $12,000,000,000, for the retirement of the quantity of Liberty bonds. The upshot of all this agitation for cancellation of debts is an effort to take the load off the people of Europe and put it still more heavily on the people of the United States.

But the agitation for cancellation is not confined to the newly-elected president of the bankersss' association. The International Chamber of Commerce has a committee on "economic restoration," and its chairman, Fred I. Kent, is an American. He is back from a tour through the European countries with a recommendation that "some fair way" of cancelling interallied indebtedness be worked out as a means of securing world economic restoration.

President Coolidge's statement followed the renewed agitation started by the president of the bankers' association and the recommendations of Chairman Kent. We are glad that the president is on guard against this dangerous propaganda, and that he is knocking it without delay.

World Farming--Italy

Of the 71,653,000 acres, in round numbers, comprising the area of Italy, 70 per cent is returned as productive; nearly half of this amount is under cultivation. About 60 per cent of the working classes are engaged in agricultural pursuits.

In 1921 Italy produced 102,400,600 cwts. of wheat, 48,000,000 cwts. of maize or corn, 28,000,000 cwts. of potatoes and 30,000,000 cwts. of sugar beets. Other productions include 11,000,000 cwts. of oats, 9,000,000 cwts. of rice and 8,000,000 cwts. of beans. The vines conributed 726,000 gallons of wine and the olive trees 352,000 gallons of oil.

In 1921 the silk cocoon crop was 3000 tons.

In 1918 Italy had 989,786 horses, 949,162 asses, 496,743 mules, 6,239,741 cattle, 24,026 buffaloes, 2,339,926 pigs, 11,753,910 sheep and 3,082,558 goats.

The forests of Italy cover over 11,000,000 acres, with the value of their yields in 1915 about $134,000,000, exclusive of secondary products. Large areas are devoted to hay and grass. Northern Italy is famous for its dairy districts and large cooperative dairies have been established.

Italy has a population of about 36,000,000.

The Great Millstone

Selfishness Lies at the Root of Much of the World's Ills

And the second is like unto it, namely this: Thou shalt love thy neighbor as thyself.—Mark 12:31.

There is a funny song going the rounds, the leading idea of which is that "I love me." It has produced many a laugh, but back of the thought that it contains lies one of the lamentable frailties of humanity, selfishness.

This would be a happy world for everybody if just plain, contemptible selfishness were wiped out of it. What ill known to humanity is not more or less traceable to that trait of the human heart? The thief is in jail because of selfishness. The children of the poor man are hungry, all to often, because of the selfishness of those whose plenty was secure and is withheld because of plenty. Capital and labor are at one another's throat because of selfishness. The world was recently torn asunder by a terrible war that had its source in selfishness and its wounds are healing with snaillike peace because of continued selfishness.

The master religionist knew the fundamental truth when he set forth the two great, basic commandments. The second is great because of the greatness of the first and the second will be obeyed only when mankind has learned to understand and honor the first. "Thou shalt love the Lord thy God with all thy heart and with all thy soul and with all thy mind and with all thy strength." This means inevitably that one must love the good, the pure, the holy, the true, the honorable, the just with complete devotion. And so doing, how can one but love his neighbor as himself? And, loving one's neighbor, how can one be selfish and seek for his own good alone that which is common good and indivisible?

FARM BUSINESS AND MARKETS OUTLOOK

FALL improvement in industry and trade has not been so marked as expected by the extreme optimists, but some expansion has occurred and prospects for the fall and early winter appear favorable. Since the business tide has not moved as the pessimists predicted, many of the latter have become convalescent.

General commodity prices started downward last March, but have pursued an upward course in the last 60 days and there is much more strength and stability apparent in the price structure than a month ago.

Owing to the approach of cold weather, the building industry is not placing orders for materials in such large volume as earlier in the year, railroads have filled their most pressing wants and auto makers, although keeping up a relatively high output, are passing through a seasonal slackening. The steel and iron industries are busy on old contracts, but new orders are not being booked fast enough to continue the present rate of operations. Both woolen and cotton mills are less active than in the boom days of last spring.

In general, buyers are indisposed to make purchases for the distant future, as there is little fear that prices will move up rapidly or that deliveries will not be prompt.

While employment is not so complete as it was five or six months ago, there is little real unemployment, and the income of the industrial classes is high enough to maintain a broad and vigorous demand for the products of the farm and factory. Distribution of goods is active according to reports from retailers and wholesalers. Dollar sales of the two leading mail order houses in September showed gains of 18 and 19 per cent, respectively, over the preceding month, and 25 and 40 per cent over September, 1922.

Foreign conditions are fraught with uncertainty, but unfavorable events abroad have not caused as serious results in this country as expected, so that no reason for increased alarm is apparent. Political dictatorship may be the prelude to more efficient production and an industrial revival abroad, which would mean increased competition for American manufacturers and industrial classes, but should broaden the market for our surpluses of wheat, cotton, pork and lard, and at the same time reduce the cost to farmers of the things they must buy.

Slightly tighter money is incidental to the crop-moving season. Most sections report that farmers are reducing their debts this fall. None of the credit stringency of three years ago exists. This is an important matter in view of the large part which interest rates and credit conditions play in business expansion and contraction. High wages, high taxes and high freight rates are retarding influences, however, and, since heavy production in the last year has filled up the shortage in goods and the acute shortage in new building, demand henceforth is likely to continue on a more normal scale paralleling the growth of the country instead of at the feverish rate of early last spring.

Erratic Trend in Cattle Market.

Recent fluctuations in cattle prices have been violent as a result of sharp changes in receipts. Last week a sharp upturn occurred, but the market is headed the other way at present and is down to the low point of the season. The dressed beef market has been a factor in the price trend, but shows more absorbing ability at present.

Cattle feeders are displaying caution, both in volume and kind of purchases.

Hog Market Sagging.

The hog market shows occasional upturns when receipts decline, but is gradually drifting lower. Well-finished hogs are at a substantial premium. Combined receipts at 10 markets during the current week are running about 30 per cent larger than last year, but average weights are lower.

Are Lamb Feeders Overdoing?

Lamb feeders seem to be throwing caution to the winds this year, although the sheep industry has been so thoroughly liquidated that their operations may still come out on the right side of the ledger. Total shipments to the country have been heavy for several weeks and in the week ended September 28 were 263,827 head, the largest for any like period as far back as records are available. This is more than double the number in the corresponding week last year and two years ago. If the same rate of gain is maintained during the next six weeks there is some likelihood that the fed-lamb market this winter will be oversupplied. Feed costs promise to be higher than last year and a larger feeding margin will be necessary. Most of the increase in feeding is in the corn belt states, as the western irrigated sections have taken only about the same number as last year.

Combined receipts of sheep and lambs at leading markets declined slightly last week and prices strengthened decidedly.

Wool Prices Firm.

Wool prices are firm, although seaboard markets report a smaller volume of buying last week. Mills have fairly large stocks on hand and new orders for goods are not coming in rapidly enough to stimulate heavy purchases of raw material.

Wheat Market Holds Advance.

Wheat prices show stubborn strength and are slightly higher than a week ago. Expectations of government aid were a factor, but trade conditions also are more favorable for higher prices and the advance in corn to practically the same price as wheat was helpful.

The government's October estimate reduced the spring wheat crop 8,000,000 bushels, so that the total of all wheat is placed at only 782,000,000 bushels, against 862,000,000 bushels last year. Of the spring wheat crop 45,779,000 bushels is durum and unsuited for use in American mills, leaving only 168,000,000 bushels of bread spring wheat, compared with 190,000,000 bushels last year. Minnesota, the Dakotas and Montana together have only 97,000,000 bushels other than durums, which is much less than the probable milling needs of the northwestern milling centers and gives ground for the belief that prices in that section will rise to a level at which Canadian wheat can be imported over the 30-cent tariff wall and also will attract wheat from the Pacific coast, thus helping prices in that section.

The rye market has not advanced as rapidly as wheat in the last month, but demand for rye flour has expanded greatly in the last few days and prices are more buoyant.

Advance in Corn Continues.

Corn prices continued to advance last week and are only slightly below wheat at the present time. Old corn is extremely scarce, as the upturn has not attracted an increase in offerings.

The October oat crop estimate was reduced 9,000,000 bushels to a total of 1,302,000,000 bushels, compared with 1,201,000,000 last year. The barley crop estimate was practically unchanged at about 7 per cent larger than in 1922. The flax seed estimate was raised to 19,623,000 bushels, compared with 11,668,000 bushels harvested a year ago.

Cash Grain Markets.

The range of cash grain prices for the week ended October 10 was as follows:

CHICAGO—Wheat—No. 2 red, $1.09 1-2@1.12 3-4; No. 3, $1.08 1-2; No. 2 hard, $1.10@1.14 3-4; No. 3, $1.08@1.11 3-4; No. 4, $1.07 1-4. Corn—No. 2 mixed, $1.04 3-4@1.09; No. 3, $1.03 3-4@1.07 1-4; No. 2 yellow, $1.04@1.10; No. 3, $1.04@1.07; No. 2 white, $1.04@1.09; No. 3, $1.04 1-2. Oats—No. 2 white, 43 1-4@47 1-2c; No. 3, 42 3-4@44 3-4c; No. 4, 42@43 3-4c. Rye—71 1-2@73 1-2c. Barley—62@75c.

Seed and Feed.

Clover seed prices advanced again last week.

CHICAGO, per 100 pounds—Clover, $19@23; timothy, $7@8.

Storage stocks of wheat feeds at lake ports are more strongly held by jobbers and prices are firmer. Argentine bran is being offered in the east below domestic prices.

Firmness Rules in Hay Markets.

Hay markets remain firm as a result of light receipts. Demand for good timothy is excellent and stockyards interests and the southern trade are good buyers of alfalfa. The crop estimate was raised nearly 5,000,000 tons in the October returns, but is still 10,000,000 tons less than last year.

Prices per ton in carlots: Chicago—No. 1 timothy, $27@28; No. 2, $24@26; No. 1 light clover mixed, $24@26; No. 1 clover, $22@24; No. 2 clover, $16@18; midland prairie, $18@21; rye straw, $11.50@12.50; oat and wheat straw, $9@10.50.

Eggs, Butter and Cheese.

Egg prices have held relatively steady during the last week, although fine quality eggs advanced to a new high for the season.

Butter prices declined sharply after issuance of the government's storage report, but have recovered part of the loss. Receipts of butter at leading markets continue to run ahead of last year and creamery reports indicate a moderate gain in production over the fall of 1922. Consumptive demand for fresh butter is excellent, but storage butter is not being distributed quite as rapidly as last year and the statistical position is gradually losing its strength.

Demand for cheese has slackened in the last few days, as buyers are disposed to go slow at the higher quotations.

Fruits and Vegetables.

Carlot shipments of potatoes from producing sections declined last week and consuming markets strengthened. The movement last week was the smallest in a month and below the average of the corresponding week in the last four years. For the season up to September 29 leading late-crop sections have shipped 30,157 cars, compared with 28,514 cars to the same date late year. The minor late-crop states, however, have shipped only 11,884 cars, against 21,045 cars last year, most of the production being in New Jersey. Northern round whites are quoted at $1.05 to $1.35 per 100 pounds in the Chicago market.

Apple markets were irregular, but with the main trend slightly lower last week. Carlot shipments have averaged about 1100 cars daily during the last 10 days. The carlot movement from the barrel areas has been the heaviest ever known at this season. Midwestern Jonathans and Grimes Golden are quoted at $4.50 to $6.25 per barrel in the Chicago market. Extra fancy Washington Jonathans, medium to large, are quoted at $2.25 to $2.75 per box, with very large Delicious at $3.50 to $3.75 and large Bananas at $2.75 to $3.

Onion prices have declined slightly under heavy shipments from producing sections. Midwest yellows are quoted at $3 per 100 pounds at Chicago.

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FOR THE FIFTIETH TIME.

Rural New Yorker: We say it again for the fiftieth time, and to make it emphatic we say it in rhyme. Anonymous letters still come every day, although we have said, till the words are quite gray, that we pay no attention to letters unsigned; right into the waste-basket they are aligned. We welcome your questions and try to be fair, and provide for your wants with the greatest of care. You may hand out your confidence safely to us; we will keep and respect it without any fuss. But we must have your name and your right address, too, as a mark of good faith in our dealings with you. Don't sign your initials, or some fancy name, and when you're not answered come back with the blame. We are here at your service—we'll do our full part—but sign your name, boys, spell it out—have a heart. Sign your name! Sign your name! Sign your name, boys, for we can not answer your call till we know who you be.

American Farm Bureau Methods and Finances

Committee Reports Need of Greater Cooperation, More Funds and Membership Campaigns

The report of the committee appointed by the executive committee to investigate the offices, methods, practices and functions of the departments of the American Farm Bureau federation is published in the American Farm Bureau News Letter. The committee met in the executive offices of the American Farm Bureau federation September 17, 1923. There were present F. M. Smith, J. F. Reid and W. H. Walker.

In the accompanying table the $69,250 estimated to be paid before the end of the year probably includes sums by state federations which had not contributed during the year up to September 1.

Liberal extracts from the report of the investigating committee follow:

In reviewing the work of the American Farm Bureau federation it has been the policy since the beginning to fix the authority in the executive officer, or the president, who is held responsible for the conduct and the direction of the policies of the federation. Such executive powers he may temporarily delegate to others, giving them the right to act, but the responsibility and consequences of their action still is vested in the president of the organization. Each department has certain activities which are approved by the executive committee, and this executive committee—in their inability to be constantly on the ground or to be always familiar with the work—have instructed the president to supervise, and hold him responsible for, the department carrying out the policies of the federation.

The various committees of the executive committee have been appointed to expedite time of the executive committee. This subcommittee is supposed to take up the activities and map out a program of work and recommend policies for the work assigned this committee, which report is brought to the executive committee by the subcommittee, and when adopted by the executive committee it becomes the official policy of the department for the year. From time to time the committee is supposed to be familiar (as much as is possible) with the activities of their department, and at the end of the year make a careful investigation of the accomplishments of their department and make a report to the executive committee for their department.

In making our investigation with the above understanding in mind, we find that many expenditures are made for traveling without any apparent authorization from the central executive head. The committee recommend and have had prepared a travel request form for all travel, stating the place desired to go, the reasons for going and what was purpose of meeting. This is to be approved by the executive officer before any voucher of expense can be presented and authorized payment made. While the various departments are expected to map out their work, their work must be correlated, directed and approved by the executive officer. The requisition and rules of conducting the office have been very satisfactory. All requisitions for supplies have required the approval of the executive officer before purchases were made.

In reviewing the statements made by the various departments and on a careful investigation and questioning of the department heads, it appears to the committee that there is a lack of coordination of the departments and lack of cooperation, due largely to the one department being unfamilar with the work attempted by the other department. * * * It is not enough to adopt a policy and then leave each department the choice of method of carrying out that work, but they should keep in mind the work and activities of the other departments, that the whole project may be carefully carried to completion.

The source of strength of all farm bureau activity is service. As the demand for this service is constantly increasing, we believe that as opportunities are created to render service, plans should at the same time be made with those who are to receive the service, either as individuals or through their cooperative organization, to tie themselves in with the farm bureau that the farm bureau can be compensated for the service they are rendering. It is our belief that in some of the departments' desire to serve, they are rendering service and giving strength to organizations which are not paying the farm bureau for the services rendered, but are withdrawing their support and loyalty from the farm bureau in their eagerness to perfect this secondary organization.

We have found throughout the entire organization a handicap due to the lack of sufficient funds to inspire confidence and aggressiveness on the parts of those who are undertaking the work. In going carefully over the budget which was prepared for and approved by the executive committee we find that the authorized expenditures on the budget for 1923 were $208,000. We find that the receipts up to September 1, 1923, were $139,540.21. The best estimate that can be made as to what can be reasonably expected between now and the first of the year, will amount to $69,250. This will come within about $790 of keeping within the budget during the year.

Arrangements should be made with the states, whereby effective membership campaigns can be carried on throughout the states, through the advice and with the assistance of the American Farm Bureau federation.

We believe that the bonding plan suggested by the collecting department would have a beneficial effect upon securing the moneys collected in the various counties for the state and the American Farm Bureau federation, and recommend its adoption.

There never was a time in the history of the farm bureau movement when we have established confidential relations with as many helpful sources as at present.

A. F. B. F. YEARLY RECEIPTS BY STATES.

State.	1920.	1921.	1922.	1923 to Sept. 1.
Alabama	.....	$ 303.84	$ 1,344.04	$ 3,409.81
Arizona	$ 300.00	641.50	359.90	.....
Arkansas	.....	.....	.....	.....
California	2,850.00	7,125.00	13,283.22	10,809.16
Colorado	337.50	600.00	890.59	536.30
Connecticut	.....	1,550.00	1,611.50	1,000.00
Delaware	.....	915.50	571.50	482.00
Florida	.....	.....	.....	.....
Georgia	750.00	1,022.97	1,200.00	.....
Idaho	400.00	300.00	100.00	.....
Illinois	45,468.34	35,461.00	34,522.17	25,562.40
Indiana	13,925.99	30,816.61	19,832.32	17,013.00
Iowa	32,275.80	50,886.51	32,519.01	25,304.70
Kansas	6,223.10	1,000.00	1,557.50	500.00
Kentucy	843.42	2,335.50	500.00	500.00
Louisiana	.....	250.00	321.98	.....
Maine	.....	.....	.....	.....
Maryland	250.00	500.00	806.97	785.99
Massachusetts	800.00	2,297.00	956.50	1,008.50
Michigan	23,750.00	10,890.78	23,048.64	9,293.45
Minnesota	1,000.00	12,268.50	5,181.25	1,010.43
Missouri	10,861.45	4,327.63	586.53	925.00
Montana	.....	168.00	153.43	90.50
Nebraska	250.00	500.00	1,499.52	295.50
Nevada	.....	490.00	475.61	298.50
New Hampshire	450.00	2,117.01	3,505.04	1,960.07
New Jersey	400.00	3,712.76	3,935.50	2,957.00
New Mexico	.....	.....	266.50	25.00
New York	5,071.35	16,700.00	16,503.04	6,311.15
North Carolina	250.00	159.00	181.59	.....
Oklahoma	250.00	.....	.....	.....
North Dakota	.....	1,000.00	155.84	.....
Ohio	7,624.19	47,105.97	29,484.34	17,176.29
Oregon	.....	150.000	338.37	.....
Pennsylvania	.....	.....	346.33	.....
Rhode Island	.....	341.00	.....	.....
South Dakota	495.00	1,875.00	3,000.00	2,386.50
Tennesee	.....	.....	.....	.....
Texas	250.00	1,250.00	6,763.63	2,900.90
Utah	1,277.00	1,200.00	1,500.00	3,542.35
Vermont	264.98	1,029.76	2,264.50	116.32
Virginia	250.00	314.00	159.00	752.75
Washington	.....	845.00	1,547.28	775.05
West Virginia	1,125.00	s 2,000.00	631.93	.....
Wisconsin	250.00	1,000.00	2,169.67	1,505.50
Wyoming	310.00	506.00	408.60	296.00
	$158,553.12	$$245,945.84	$214,483.34	$139,540.21
Amount estimated to be paid before end of year				69,250.00
				$208,790.21

Note: The executive board further increased the secretary's estimated income to $75,000.

Higher Production Follows Cow Testing

There has been a steady increase in the butterfat production of the herds in the Thurston county testing association during the last three years, according to E. B. Stookey, the county agent. The August record shows 31.1 pounds as the average of all the herds, while in 1921 the average was 27.6 pounds. Otto J. Hill, the tester, reports 507 cows being listed and 496 of the number were milking during August.

The three high herds of 15 cows or over averaged 38.9, 35.7 and 35.3 pounds of butterfat. The three high herds of less than 15 cows averaged 50.3, 47.5 and 42.5 pounds.

The high cow for the month was A. E. Lundeen's purebred Jersey, St. Mawes of Glen Thelma, with 68.7 pounds of fat. The high grade cow was Sommers Bros. grade Holstein, Bonnie, with 67.2 pounds. Last month Bonnie led this class and was also high cow in the mature class, with 76.2 pounds. Unfortunately she was left off the July list.

There were 91 cows in the association making 40 pounds or more of butterfat for the month. They were distributed as follows:

E. Munn and Son, 7; Lee Kegley, H. W. Myers and L. G. Nelson, 5 each; Ed Cross, D. R. Hughes, Elmer Kaiser, Sam Kegley, John McGowan, Sommers Bros., and Utterback and Son, 4 each; C. C. Aspinwall, F. C. Baker, Frank Clough, Cloverfields farm and Paul Hacker, 3 each; Charles Gifford, E. E. McPherson, Charles E. Starr, Robert Smith and L. L. Snow, 2 each, and Ansell Erickson, John Hagglof, R. E. Hawthorne, A. E. Lundeen, Wilfred Mattson, Ernest Neat, T. A. Rutledge, Fred Schultze and J. T. Sinclair, 1 each.

For Comfort and Economy

The efficient operation of a home heating plant depends on many factors, some of which, such as the correct degree of humidity, good ventilation and tight house construction, can be controlled with a little careful attention at the start of the winter season, experts of the United States deparment of agriculture say.

Cracks around doors and windows and in floors should be filled in with storm sash, weather stripping and calking materials.

The proper amount of ventilation and humidity is best determined by experience and individual conditions as a rule. If frost forms freely on the inside of the window glass on a cold day there is no doubt but that the inside air has sufficient humidity. If there is no sign of frost the air is likely too dry.

SPRAY FOR ANTHRACNOSE.

Apply second spray for anthracnose of apple and pear immediately after fruit is picked. Use Bordeaux 6-6-50.

Grape-Nuts and Milk—

One of the few

COMPLETE FOODS

WHEN you watch robust men and women at work or at play, does it ever occur to you that their strength and health are largely due to the kind of food they eat?

Grape-Nuts and milk supplies complete and balanced nourishment of the highest order. This delicious dish provides the valuable wheat and milk proteins; the "food minerals," phosphorus, iron and calcium; also the vitamins.

Because of its nutritive properties, its crisp texture, and its easy digestibility, Grape-Nuts is the best-balanced cereal food for young and old.

When used as an ingredient in other foods, it adds remarkable zest and valuable nutritive elements. Recipes will gladly be furnished on request.

Grape-Nuts

—THE BODY BUILDER

"There's a Reason"

Sold by Grocers Everywhere!

Made by Postum Cereal Company, Inc.
Battle Creek, Mich.

There never will be a better opportunity to save money than this page offers. There are timely needs for all the family at prices which we guarantee to be the lowest in America. Remember, we do not ask you to take our word for it. Order on approval at our risk. Return goods if not absolutely amazed at their value.

We Challenge the World to Match these Bargains

Don't send one cent. Just letter or postcard brings anything. Merely give Number of Each Article You Want. Also state size, and write your name and address plainly. Pay nothing till goods arrive — then only the bargain price and postage. If not delighted with your bargain simply return the goods and your money will be cheerfully refunded.

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Bulgarian Effect Gabardine Frock For Women and Misses

$2.98

An exceptionally attractive fine quality cotton gabardine dress for women and misses. Long roll collar in shawl effect, sleeves and belt piped in red. Entire front of blouse enhanced with exquisite allover embroidered design in Bulgarian effect with rich harmonious colors. Two streamers at both sides and front. Wide belt embroidered to match blouse. Sizes for women, 34 to 44 bust; for misses, 32 to 38 bust. State length desired. Colors, navy or brown

Order navy by No. 52E7500. Brown by No. 52E7502. Send no money. Pay $2.98 and postage on arrival for either color. State size.

Fur Trimmed Thibet Coat For Women

$5.98

Another sensational value in a warm winter coat. This becoming model is of splendid Thibet cloth in choice of rich brown or navy blue. The ample collar is of genuine brown Coney fur. Coat is finished with all-around self material belt and two patch pockets, trimmed with pretty buttons. Imitation cuff is also button trimmed. Coat measures about 48 inches long, and comes in sizes 34 to 44 bust.

Order brown by No. 52E7094. Navy by No. 52E7096. Order black by No. 52E7095. Send no money. Pay $5.98 and postage on arrival. State size.

Sporty Style Silk Seal Plush Coat For Women and Misses

$10.98

Where else can you buy a genuine silk seal plush coat of this jaunty style and splendid quality for such a low price? Beautifully modeled of soft, warm, lustrous, deep pile silk plush with full lining of beautiful flowered sateen. Newest loose back flared style with belt. Wide 10-in. shawl collar, two pockets and roomy bell sleeves. Length about 34 inches. Women's sizes 34 to 44; Misses' 32 to 38 bust measure. State size. **Order No. 52E-7000. Send no money. Pay $10.98 and postage on arrival. Money back if not satisfied.**

Heavy Fleeced Union Suit

$1.29 Up

Men's heavy flat knit union suit of good quality cotton yarn, with heavy, fleece lining. A sure protection from cold. Closed crotch, flap seat, flat seams. Knit cuffs at wrist and ankle. Sizes 34 to 46. **Order tan Jaeger color by No. 52C1279. Order gray Random color by No. 52C1280. Send no money. Pay $1.29 and postage on arrival. Order boys' sizes, 22 to 34, Natural Jaeger color, by No 52C1358. Pay 89c and postage on arrival.**

Log Cabin Brown or Gray Suede Walking Oxfords

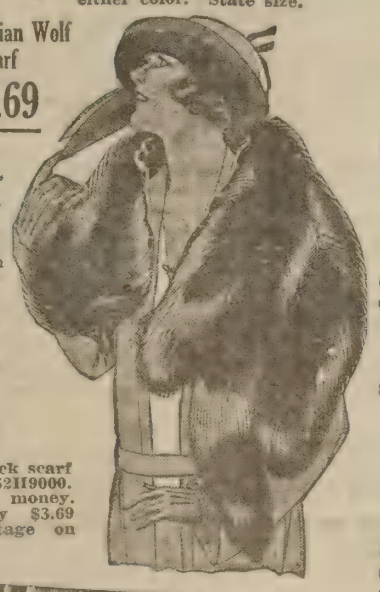
$2.98

State Size

Women's combination sport oxford with Log Cabin or gray suede vamp and quarter with contrasting brown calf or patent leather trimming at tip, lace row and quarter. One-piece genuine oak sole; low walking heel with rubber top lift. Sizes 2½ to 8. Wide widths. **Order Log Cabin with brown calf trimming by No. 52S119. Order gray with patent trimming by No. 52S120. Send no money. Pay $2.98 and postage on arrival.**

Manchurian Wolf Scarf

$3.69



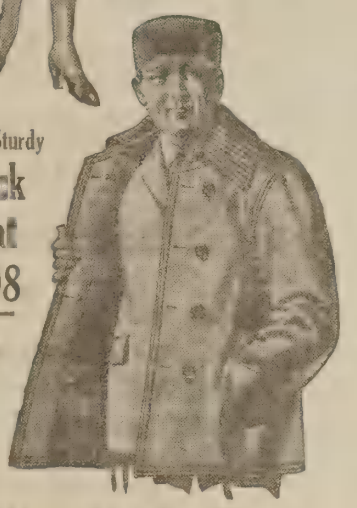
Beautiful, soft, inexpensive Manchurian wolf scarf lined with Messaline silk. Length about 44 inches. Width about 12 inches. Tail 13 inches, large and bushy.

Order black scarf by No. 52H9000. Send no money. Pay only $3.69 and postage on arrival.

Men's Sturdy Duck Coat

$2.98

Always Give Size



Strongly made of serviceable dark brown duck with heavy blanket lining. 2 large set-in pockets with flaps. Wide corduroy collar. Patent riveted-on buttons. Double stitched seams. Length 32 inches. Men's sizes, 36 to 46 chest. **Order No. 52B2314. price $2.98. Same style in boys' sizes, 6 to 9 years, No. 52B2358. Price, $1.98. Youths' sizes, 10 to 14 years, No. 52B2359. Price $2.49. Send no money. Pay bargain price and postage on arrival. State size.**

Fur Trimmed Polo Coat for Girls and Children

$4.48

Girl's stylish coat of polo with warm Coney fur collar. Two novelty pockets. All around belt. Novelty buttons trim pockets and belt. An amazingly low price. Sizes 7 to 14 years. Navy No. 52E7308. Brown 52E7310. **Send no money. Pay $4.98 and postage on arrival.**

Same style for children, sizes 2 to 6 years. Navy 52E7458, Brown 52E7460. Send no money. **Pay $3.48 and postage on arrival. State size.**

Women's Patent Leather Gun Metal or Brown Calf Finished Oxfords

$1.98

Made with imitation shield tip and medallion perforated vamp, perforated lace stay and circular foxing. Has medium rubber heel and medium pointed toe. Sizes 2½ to 8. Wide widths. **Order patent by No. 52S121. Order gunmetal by No. 52S122. Order brown by No. 52S123. Send no money. Pay $1.98 and postage on arrival.**

State size wanted

Dressy Kid Finish Walking Boot

$1.98

Women's black or brown kid finish leather walking boot, in hi-cut lace style. Fancy perforated stitched tip with medallion on toe; neat perforations at vamp and lace row. Medium extension oak sole with proper height walking heel rubber tipped. A distinct Sharood bargain, suitable for dress or street wear. Soft kid finish leathers are dressy and comfortable. Sizes 2½ to 8; wide widths. **Order brown kid finish by No. 52S 195, $1.98. Order black kid finish by No. 52S194. $1.98.**

Men's Four-Buckle All Rubber Arctics

$2.79

State Size

Order Quick.

Guaranteed best quality all rubber 4-buckle hi-cut arctic for men. Made with double thick soles and seams reinforced, snow-excluding tongue. Furnished in men's sizes 6 to 15. Wide widths. Sensational value. Send quick. **Order by No. 52A990. Send no money. Pay $2.79 and postage on arrival.**

Women's Fleece Lined Soft Black Kid Finished Comfort Shoes

$2.29

Give Size.

Positively America's greatest bargain in women's shoe of this kind. Soft kid finished, pliable leather uppers have heavy fleeced lining that keeps feet warm as toast in most severe winter weather. Excellent grade natural oak leather soles and low rubber heels. A roomy last that is also dressy in appearance. Simply unbeatable value at Sharood's low price. Women's sizes 3 to 9, wide widths. **Order No. 52A880. Send money. Pay $2.29 and postage on arrival.**

Men's and Boys' Sturdy Blucher Work Shoe

$1.79 Up

Give Size

Brown or black work shoe of durable leather. Solid leather inner soles. Heavy double soles. Green chrome outsole. Leather heel. Sizes 6 to 12. Wide widths only. **Order brown by No. 52A758. Order black by No. 52A760. Send no money. Pay $1.98 and postage on arrival.**

Order boys' sizes 1 to 5½ by No. 52A354, price $1.89. Order little boys' sizes 9 to 13½ by No. 52A555, price $1.79.

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BARGAIN CATALOG

Your order from this ad brings you our beautifully illustrated 160-page catalog of more than 4000 bargains in everything to wear. You get a new bargain catalog every six weeks. This is Sharood's way of keeping you supplied with fresh up-to-date merchandise at the lowest prices in America—a method vastly superior to the old way of sending out a big catalog only once or twice a year. Sharood's goods are always the newest—prices guaranteed the lowest.

Be Sure to Mention All Sizes, Colors, etc., and Send All Orders From This Page Direct to **SHAROOD CO.** Dept. 52 MINNEAPOLIS MINNESOTA

Too Many Remedies

Farmers Must Unite on a Proposal

By T. C. ATKESON, Washington Representative National Grange.

Much noise has been made in Washington in the last two weeks by congressmen, high government officials and others in the suggestion and discussion of proposed remedies for what is generally recognized as the serious condition of the farmers. The Washington representative of the grange has been at some pains to make a list of the proposals which have been advanced and many of them proposed to the president and made the basis of an argument for calling a special session of congress, to which request, up to this time, President Coolidge has not decided. Here is a partial list of what has been proposed:

Storage of wheat in farm elevators to be licensed as warehouses and made the basis of loans from intermediate credit and other banks.
Government fixing of wheat prices at $1.75 a bushel.
Government purchase of 200,000,000 bushels of wheat to be held off the market.
Creation of a $50,000,000 government export corporation, possibly by the revival of the United States grain corporation.
Increase of tariff rates on wheat.
Payment of an export bounty on all wheat exported.
Twenty-five per cent reduction of freight rates on wheat and flour.
Repeal of section 15A of the Esch-Cummins transportation act.
Decrease in tariff rates on all manufactured articles which farmers must buy.
Reduction of freight rates on everything the farmer produces and buys.
Appropriation from the federal treasury for loans to farmers.
Closing of the grain exchanges or more radical control of exchanges and boards of trade.
Repeal of the grain futures control act.
Abolition of the federal reserve bank system and issue of large amount of treasury notes.
Enactment of a federal compulsory cooperative marketing law.
Sale of Muscle Shoals to Henry Ford.
Sweeping reduction in federal, state and county taxes.
Campaign to induce farmers to grow different kinds of crops.
Eat-more-wheat campaign.
Collection and publication by department of agriculture of complete data on farmers' intent to plant.
Compulsory reduction of crop acreage, especially wheat.

The mere statement of these suggestions coming from the professed friends of farmers indicates the great diversity of proposed remedies. How many of these suggestions are economically sound or will accomplish any good results?

President Collidge's reply has been uniformly an expression of sincere sympathy for farmers and others who suffer financial losses and a statement that he will not call congress in special session unless something definite can be suggested which offers hope of a remedy.

Better Sire Demonstration

Polly and Beauty were two of the visitors at the Grays Harbor county fair at Elma, Wash., August 28-September 1, and spent the entire week there. But, being only grade Holstein cows, Polly and Beauty did not take much interest in the fair as most of the other visitors took in them. They were part of a better sire demonstration made by Cow Testing Supervisor Clarence Wivel nad County Agriculturist Robert Cowan.

This is one of the largest associations of the kind in the state, with 45 herds and 810 cows. As a proof of the value of this association, it is pointed out that the average increase per cow yas 57 pounds of butter fat and the returns for butter fat above cost were $38 per cow. These facts were set down in large letters. Besides this, two representative daughters of two of the five purebred bulls used by A. A. Seifert, of Ford's Prairie, were shown. These were Polly and Beauty, referred to above. Both are good type grade Holsteins, Beauty being mostly white and Polly mostly black. Beauty produced 370 pounds of fat in a year, beginning at 2 1-2 years of age. She is a daughter of King DeVries, whose daughters at mature age average 443 pounds of fat. Polly, at four years old, produced 468 pounds of fat. She is by Sir Violet Blossom Fayne, whose daughters average 412 pounds of fat.

This demonstration was alongside of the exhibit made by the state college showing the feed consumed by a cow producing 400 pounds of butter to be greater than that consumed by a 200-pound cow, and yet the cow eating the most returned much the greater profit. Together the two booths contained a valuable lesson for the dairyman, and judged by the number who spent time visiting and studying the figures, as well as the cows, the lesson went home to a great many.

HAUL OUT THE FERTILIZER.

Remove the manure from the barnyards before heavy rains come. This manure can be used as a top dressing or plowed under.

Cash for Your Opinion

The Washington Farmer will award three cash prizes amounting to $10 to the three best articles on the following subject:

"What Advertisements in the four October Issues of the Washington Farmer appealed to me most strongly and why."

Each article must not exceed 100 words. First prize, $5; second prize, $3; third prize, $2. All entries must be received by November 1. Address:

"Opinion" Dept.
THE WASHINGTON FARMER,
Spokane, Wash.

In writing advertisers, be sure to say you saw their advertisement in The Washington Farmer.

Have you glanced over the farm bargains on the "Want Ad" page?

Dependable

For hard and varied work—day in and day out—no engine can equal the sturdy

WITTE Throttling Governor ENGINE

SIMPLE, trouble-proof and equipped with the famous WICO Magneto, this WITTE is guaranteed for a lifetime of hard work in any climate or temperature. Lowest in price and upkeep—the WITTE burns kerosene, gasoline, distillate or gas for less than 2c an hour. Known for over 40 years as the best ALL-PURPOSE engine, the standard of power.

All Sizes, 1 to 25 Horse-Power.

Ask Your Dealer About the WITTE ENGINE

If he can't supply you write our nearest office for full information.

WITTE ENGINE WORKS
(Founded in 1870)
San Francisco Kansas City Pittsburgh

McCormick-Deering
Ball-Bearing
Cream Separators

FIVE FACTS *That Prove Dairy Farmers Appreciate Easy-Turning, Slow Crank Speed, and Long Life!*

1 Already, *thousands* of dairy farmers in every section have invested in McCormick-Deering Primrose Ball-Bearing Cream Separators in preference to plain-bearing machines! Satisfactory performance in everyday service explains this instantaneous success.

2 McCormick-Deering Primrose factories are working at the topmost peak of production. This year more Primroses will be built than ever before, in an attempt to keep pace with the growing demand for modern equipment.

3 Letters from enthusiastic McCormick-Deering Primrose owners in every state point out easy-turning, clean-skimming, slow crank speed and long life as results of McCormick-Deeering Primrose advanced design.

4 McCormick-Deering Primrose success has spread rapidly. Already, dairy-farmers are *demanding* ball-bearings in the cream separators they buy. Only the McCormick-Deering dealer can supply such modern machines.

5 In answer to a nation-wide demand, all five sizes of the McCormick-Deering Primrose are now equipped with ball bearings. The same design, the same easy-turning—a McCormick-Deering Primrose for any size of farm.

Consider the facts—then act! There is a McCormick-Deering Dealer near you.

INTERNATIONAL HARVESTER COMPANY
606 So. Michigan Ave. of America [Incorporated] Chicago, Ill.

VETERINARY

By DR. S. B. NELSON.

Sick Cow—My cow has been sick for a week. The first two days she trembled all over and she is so stiff she can hardly walk. The left hind quarter of her udder is swollen hard and has no milk in it, only blood and pus. We are not feeding anything as the cows are on pasture, but she don't eat anything. M. L. T.
Tonasket, Wash.

Inject the quarter of the udder affected with mammitis or garget with a 2 per cent solution of boracic acid in boiled water. Boil the instruments used for injection and dip the end of the teat in iodine just before injecting. Your animal has a very bad case of mammitis, I would judge. Apply to the quarter of the udder morning and evening the following liniment: Fluid extract of belladonna, 1 ounce; fluid extract of phytolacca, 1 ounce. Apply with considerable friction.

Give the cow 1 1-2 pounds of Epsom salts in three quarts of water. Do not feed her anything to speak of. Then after this you can give her daily a teaspoonful of potassium nitrate in her drinking water. As she gets better in a couple of days begin feeding her soft feeds, like bran mashes, etc., and a little hay or grain.

Garget—Will a calf get garget from drinking the milk from a cow that has it? Is there any danger for yearlings running with a cow with a light case of garget? How is it contracted? Is there any way of preventing it? Would there be any danger from using the same salt lick or eating out of the same feed boxes? J. H.
Bellingham, Wash.

No, calves will not get garget from the milk obtained by sucking the cow; neither will yearlings. There is no danger of using the same salt lick. The danger is that the barn becomes infected and is never disinfected.

A good cleaning and disinfection of the barn is to first scrub it with a 1-1000 solution of corrosive sublimate in water. Three or four days later scrub the barn thoroughly again with a saturated solution of copper sulphate, hot. Manger, floors and walls should be treated.

Four or five days later give it a good white-washing, and it is a good habit to spread, every day or so, a little lime about the barn.

The disease is caused by bacteria infesting he barn, and, of course, the contact of the udder and teats on the floors is one of the common ways of obtaining the infection.

Worms—I have some calves that cough. They are not doing well and do not have a good appetite. I think they have worms in their throat. Is there a cure? V. R.
Alder, Wash.

Put the animals in a tight room. Place a tub with three or four inches of water in the room. Put a few bricks in the water and on the bricks put a pan of sulfur. Set fire to the sulfur and allow the animals to breathe the fumes until they are nearly overcome, and then turn them out into the fresh air. This treatment may be repeated three or four times four or five days apart if necessary.

Lymphangitis—I have a mare that has a big leg. She is strong and has a good appetite and is in fair condition. Is there anything I can do to take this swelling down this winter? She also has small pimples or sores come out on her belly and legs and she bites them, causing open sores. E. E. R.
La Center, Wash.

Your horse has the trouble which we know as chronic lymphangitis. It is questionable whether you can help her any. First give your mare an alloe ball composed of one ounce of alloes, two drams of ginger mixed together with a little glycerin and give to her as one dose, then the second day give her one dram of potassium iodide once daily for a week and then follow with one ounce of Fowler's solution of arsenic morning and night for a week or 10 days. This last medicine may be given on the feed. For the external open sores, try painting them with a 1-2 per cent solution of picric acid in water, morning and night.

Tries to Eat Bones—I have a cow that tries to eat bones every time she finds one and I fear she may choke on one. What does she crave? I have another cow that was hit by a train a year ago and since then she has trouble to urinate. Can anything be done for her? C. H. H.
Camas, Wash.

The cow craves bone meal and I would suggest that you purchase a quantity of bone meal and begin giving it to her in her feed. Begin with a small quantity and enlarge it a little bit if necessary. For your second cow you will need the services of a veterinarian to see what the trouble is that prevents the natural functions mentioned, and see if it can be relieved. It may be that the bone was broken which gives pressure on the urethra or it may be calculus that has become lodged in the mouth of the urethra. It will take an examination to determine the trouble.

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EARN up to $500 a Month

THE HARVEST DAYS ARE OVER, PREPARE NOW TO EARN MORE MONEY. SPECIAL OCTOBER RATES.

Automobile, Airplane and Tractor mechanics, Vulcanizers, Acetylene Welders needed everywhere. We teach you to be an expert so that you can make the biggest kind of money. Our Graduates command the biggest pay.

WE ARE THE ONLY AUTOMOBILE AND TRACTOR SCHOOL NORTH OF MISSOURI, WHICH WAS APPROVED AND EMPLOYED BY THE U. S. GOVERNMENT WAR DEPARTMENT FOR TRAINING SOLDIER AUTO MECHANICS.

You can learn this attractive, well-paying business in a practical school that has complete equipment. Transfers to all schools—St. Paul, Seattle, Spokane, San Francisco and Vancouver. The Largest Trade School System in America. Day and evening classes.

FREE—Send for our Free 100-page illustrated Catalog which will explain everything fully. Write for it today.

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Many of our advertisers offer free booklets and information which is very much worth your while to send for. A postal will bring them. Why not place a dime or so in your rural mail box with a note requesting the carrier to leave you some cards? Then use the cards in writing advertisers. When you do so be sure to mention THE WASHINGTON FARMER.

TRAIN to Be an AUTOMOTIVE MECHANIC

A six months complete automotive course that gives you all the knowledge of automobiles and all the skill in handling and repairing parts that can be crowded into 26 weeks of hard study and earnest effort. You get: **250 HOURS** mastering the facts and principles of automobile construction and operation. **120 HOURS** taking apart and assembling automobile equipment. **120 HOURS** working with auto electrical equipment. **180 HOURS** actually repairing automobiles. **175 HOURS** operating the machine tools used in up-to-date repair shops. Skilled teachers; ample equipment; thorough training.

We actually believe that there is no more practical or more thorough course offered anywhere. We want you to have the fullest possible freedom in investigating the school. Come and see the equipment for yourself. Take a few days absolutely free training if you wish. Talk first hand with the large employers of automobile mechanics in Seattle who give first preference to Y. M. C. A. graduates. Write for free catalog.

YMCA

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Fourth and Madison,
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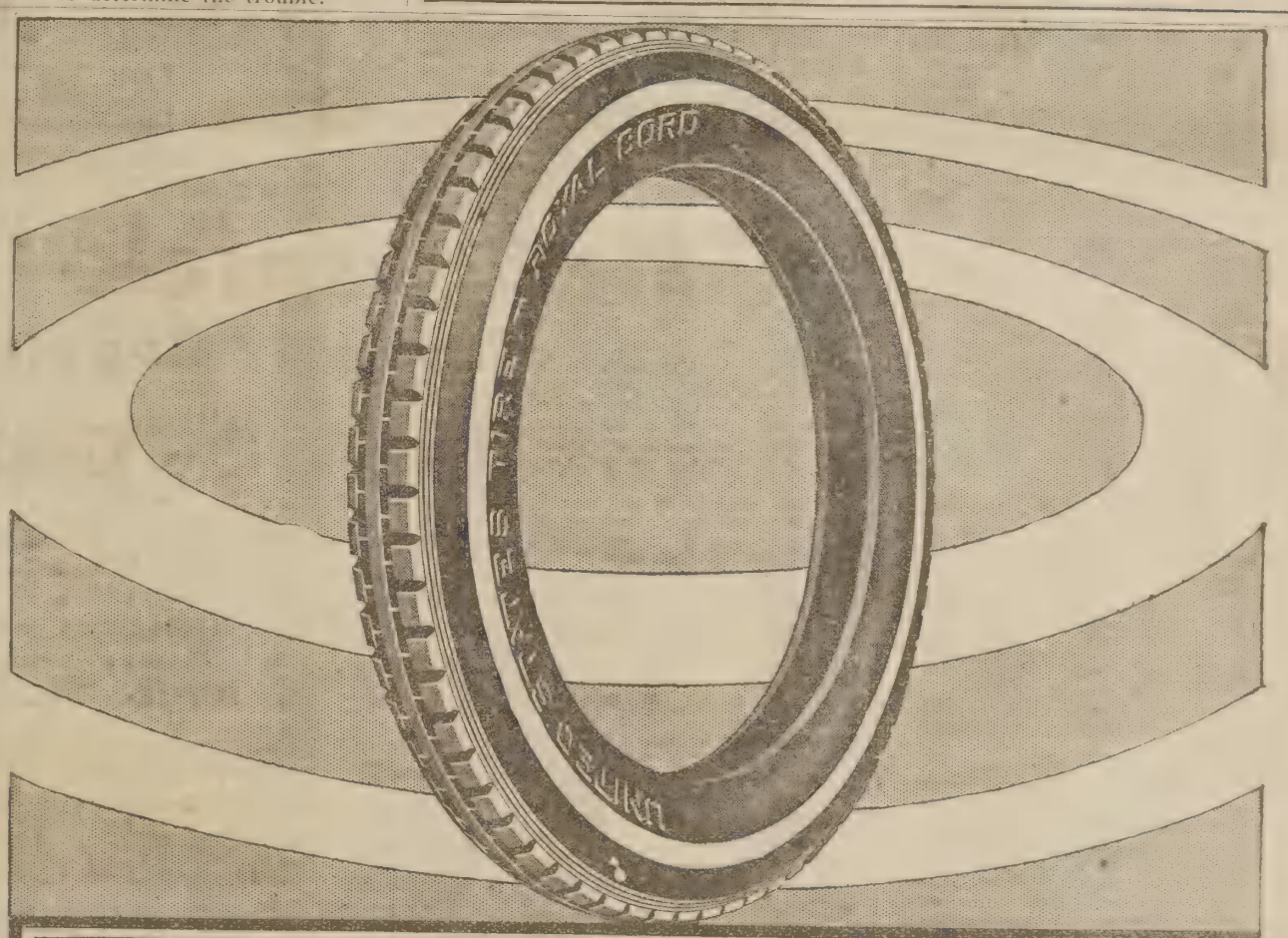

Let your Dealer prove to you that now is the time for Royal Cords all around

MOST men expect a certain amount of tire trouble in winter driving.

But go to your Royal Cord Dealer and let him show you how the three new U. S. Discoveries have *changed all that.*

Web Cord has no cross tie-threads. So a Royal Cord Tire flexes easily over the ruts and bumps of frozen roads.

The Flat Band Process of cord tire building ensures the *equal resistance* of each individual cord. A Royal Cord Tire is an organic unit—and combats winter hardships as a unit.

Sprayed Rubber is the first absolutely pure rubber. A Royal Cord maintains vitality against weather that ages ordinary rubber.

These are advantages that nobody can give you but the dealer in U. S. Royal Cords.

He can show you how it will be worth while to take off your old tires *now*, and put on *Royal Cords all around.*

United States Tires are Good Tires

NOTE TO LIGHT CAR OWNERS—*The three U. S. Discoveries apply to Royal Cords in all sizes from 30 x 3½ inch up.*

U. S. Royal Cord Tires

United States Rubber Company

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LIVESTOCK AND DAIRY

What Is a Dairy?

When Subject to Inspection?

By A. H. RISHOI, Instructor of Dairy Manufactures, State College of Washington.

What are the requirements exacted by law in the handling of cream for shipment to a creamery? What constitutes a dairy subject to state inspection? Is an outside separator room obligatory? What are the regulations concerning the stable as to gutter, manure piles, whitewash, etc., on the average farm? Mrs. L. A. S.

Your question as to what constitutes a dairy, subject to state inspection can, I think, best be answered by stating the definition of a dairy as found in the laws and regulations of the state as relating to that subject. The laws of Washington define the term dairying as any place where milk from two or more cows is produced for sale. You will note that this paragraph makes no mention of the word cream, but in preceding parts of the same section of the law reference is made to the word cream and for that reason it would seem that the law intends that any place where the milk or cream from two or more cows is produced for sale constitutes a dairy and is therefore subject to inspection. The regulations as contained in the law deal with the sanitary conditions under which the cream must be produced and kept, and are, I think, very reasonable. The regulations are for the purpose of preventing cream that is impure or unwholesome from being offered for sale and being manufactured into food for human consumption. A part of the regulations read that a dairy is deemed unsanitary if the milk or cream shall be cooled, stored, mixed, bottled, canned or kept in any room or place occupied by any person as a sleeping or living apartment; or occupied by horses, cows, hogs or other animals; or by fowl of any kind, or if any urinal, privy vault, open cesspool, pig pens, stagnant water, accumulation of manure or other filth, shall be permitted within 100 feet of a milk house or milk room or within 50 feet of any cow stalls or stanchions or other place where milking is done.

The provisions of the law relative to a separator room or a milk house read as follows: "A dairy is considered unsanitary if a suitable milk house or milk room is not provided and maintained, properly screened to exclude flies and insects for the purpose of cooling, mixing, bottling, canning, keeping or separating the milk and cream. Such milk house or milk room shall not be located in or be a part of any barn or poultry house. It shall not be used for any other purpose whatsoever, and if contained in any building or structure in which any business, occupation or trade other than handling, bottling, or processing milk is conducted or carried on, such milk rooms shall be separated from the portion of each building or structure in which such business, trade or occupation is conducted or carried on, by a tightly sealed or plastered partition constructed in such a manner to meet with the approval and comply with any regulations issued by the department of agriculture.

In regard to separators specifically the law states as follows: "No person shall sell, offer for sale, or propose for sale any milk or cream taken from any cream separator kept in any stable or other buildings wherein any animal or fowl is housed, or kept in any place where the conditions are unsanitary or the air is foul, or contaminated; or in the open air or in any place other than a milk house, milk room as defined above; provided, however, that this shall not be construed to prohibit the keeping of such cream separator in any room which is wholly separated by tightly sealed or plastered partitions having no openings from that part of the stable or buildings in which milking cows are housed or kept. Further, that any milk or cream produced or kept in a dairy must at all times while at said dairy be kept in a milk house or milk room as defined above."

This would seem to indicate that a separate separator room is necessary, while it is not necessary that this room be in another building.

A further regulation regarding separators states as follows: "No person shall sell, offer to sell or dispose for sale any milk or cream taken from any cream separator not kept thoroughly washed and cleaned, and not regularly washed and cleaned in a thorough manner within three hours after each use thereof." You understand that this direction simply means that a separator must be washed thoroughly after each time it has been used.

In regard to that part of your question which deals with the handling of cream for shipping to a creamery, the law reads as follows: "Milk, cream, ice cream, iced milk and other products when being shipped or transported by freight, express truck or wagon or other carrier, shall be handled, kept and maintained during such transportation in a clean and sanitary condition and manner and shall not be exposed to contamination by dirt, dust, foul odors, or to other contaminating influences; nor shall such milk, cream, ice cream, or iced milk be allowed to remain in any place where it or its container shall be exposed to the direct rays of the sun."

This, you see, is a further safeguard to the buyer of creams that the milk or cream has not been exposed to such conditions as would render it unwholesome or spoiled.

In all the regulations concerning the production and sale of milk or any of its products we find that while they may become somewhat lengthy and involved they seem to be very reasonable, a safeguard to both the producer and the person who buys the milk or cream or the products made from it.

If you will write to Mr. E. L. French, director of agriculture, department of agriculture, Olympia, Wash., and ask him for a copy of the laws and regulations relating to live stock and dairying for the state of Washington and also a small pamphlet issued by that department on the subject of "How to Produce Cream That Makes Good Butter," you will get a comprehensive understanding of the requirements of the law, besides some helpful instruction regarding the handling of milk and cream.

LOADING HOGS.

Crowding too many hogs in a car, particularly in hot weather, is likely to result in a number of them dying in transit. Loading hogs after a heavy feed is injurious to them. A little hunger is far better for them on the journey than indigestion. There is nothing to be gained in added weight of the animals by forced feeding just before shipping. The aim should be to get as many hogs as possible to the stockyards in good condition.

GENERAL ADVERTISING.

NEW LAMP BURNS 94 PER CENT AIR

Beats Electric or Gas

A new oil lamp that gives an amazingly brilliant, soft, white light, even better than gas or electricity, has been tested by the U. S. government and 35 leading universities and found to be superior to 10 ordinary oil lamps. It burns without odor, smoke or noise—no pumping up, is simple, clean, safe. Burns 95% air and 6% common kerosene (coal oil).

The inventor, W. W. Johnson, 161 Union Ave., Portland, Ore., is offering to send a lamp on 10 days' FREE trial, or even to give one FREE to the first user in each locality who will help him introduce it. Write him today for full particulars. Also ask him to explain how you can get the agency, and without experience or money make $250 to $500 per month.—Adv.

A LITTLE "WANT AD" FREQUENTLY OFFERS A BIG BARGAIN. MAKE IT A PRACTICE TO READ OUR "WANT ADS."

Potato Show

Also Potato Growers' Conference

The Pacific Northwest Potato show puts forth as its sole purpose that of the betterment and development of the certified seed and commercial potato industry of the Pacific northwest by affording an opportunity for the growers from all districts to get together, compare the results of their last year's work and discuss the various problems that confront them.

This, the third annual potato show, will be held in the assembly rooms of the Chamber of Commerce building, Spokane, November 20-23, 1923.

In class A of certified seed potatoes there are six series of prizes, running from the first prize of $40 to a fourth prize of $5 for each of the following varieties: Netted Gem, Idaho Rural, Burbank, Bliss Triumph, Irish Cobbler, Early Ohio and a seventh series of similar prizes for miscellaneous varieties.

In class B the commercial potato prizes for the same varieties are from $25 down to $5.

The fourth annual meeting of the Pacific Northwest Potato Growers' association and the potato growers' conference will be held in connection with the show, an attractive program being prepared by Secretary E. R. Bennett of Boise, Idaho. One of the leading speakers at the conference will be W. C. Edmundson of Greeley, Col., superintendent of the federal potato experiment station, will talk on "Five Years' Experiments With Potatoes."

For a copy of the premium list and any further information address W. P. Romans, general manager, Chamber of Commerce building, Spokane, Wash.

Crop Estimates

Slight reduction in crop production forecasts for a month ago, except for potatoes, hay and flax seed, are shown in the department of agriculture's October report.

Corn registered a decline of 54,332,000 bushels, the forecast being placed at 3,021,454,000 bushels. This would make it rank as the country's fourth largest corn crop and make the fourth time it has passed the three billion figure. Wheat was estimated at 7,490,000 bushels less than a month ago, production being estimated at 781,737,000 bushels. Oats production declined 9,234,000 bushels and tobacco showed a severe reduction of 89,005,000 pounds.

Potatoes improved to the extent of 11,750,000 bushels more during September, tame hay estimates increased 4,667,000 tons and peanuts 40,737,000 pounds more than a month ago.

Frost damaged corn in practically all of the north central and northeastern states, but while the damage was severe in a number of sections it will not affect the yield so much as the quality. Indications were that the quality would be below that of last year, the report said.

The reduced spring wheat yields were attributed largely to rust and hot weather just before harvest. Extremely low yields were reported for North Dakota, South Dakota, Nebraska and Kansas. The quality for the country as a whole was given as below the 10-year average.

Yields of potatoes in eastern states are turning out better than expected, the report said, and the quality was reported to be excellent. Frost in Wisconsin and Ohio, and wet, unfavorable weather in Tennessee and Kentucky, were said to have caused heavy losses in tobacco.

Apple production was reported as 10 per cent less than last year.

Preliminary estimates of spring wheat by important producing states follow:

Minnesota, 20,024,000 bushels; North Dakota, 56,466,000; South Dakota, 26,106,000; Montana, 40,695,000; Idaho, 19,404,000; Washington, 23,320,000.

Other Crop Estimates.

Rice, 32,737,000 bushels.
Peaches, 45,555,000 bushels.
Apples, 199,727,000 bushels.
Hay (tame), 86,538,000 tons.
Hay (wild), 16,376,000 tons.
Sugar beets, 6,623,000 tons.
Grain, sorghums, 105,877,000 bushels.

Construction and Repair

A new Houghton-Mifflin publication which it is a pleasure to greet is that entitled "Construction and Repair Work for the Farm," by F. Theodore Struck. It not only abounds with diagram as clear and as full as the busiest farmer could wish, but in half-tones equally useful. The tabling of all specifications, materials and even the successive steps in the directions for construction makes the volume quick reading and the more easily fastened in memory. Tools and the sharpening of tools, common materials, self-made equipment for the shop, belt and harness repairing, etc., form the themes of general chapters, while field and truck crops, horticulture, poultry and every other staple live stock and the farm home are subjects of a special chapter each on construction. An appendix treats of the strength of materials. The work is indexed and fills nearly 400 pages.

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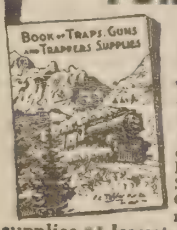

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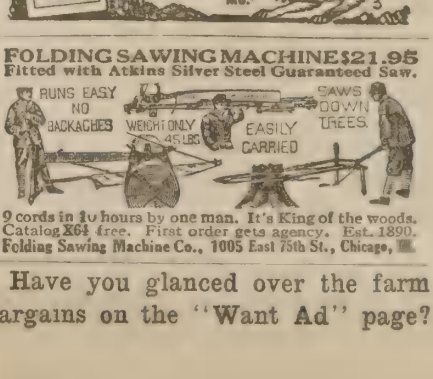

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POULTRY AND RABBITS

Vigor Is Vital

May Pullets Be Used as Breeders?

The hatching results for the season of 1923 were generally unsatisfactory throughout most parts of the United States, according to reports. There are doubtless a number of contributing causes and, according to Dr. M. A. Jull, in charge of poultry investigations of the United States department of agriculture, one of the causes of poor hatches has been the use from year to year of pullets as breeders.

In a general sense it is apparent that the hatchability of eggs depends upon the constitutional vigor of the breeding stock producing the eggs. If the breeders are healthy and vigorous and are kept in comfortable quarters, then the eggs should hatch well, providing the methods of incubation have been satisfactory. Taking the country as a whole, however, Dr. Jull believes that the hatching results from one season to another are not as good as might be expected.

The use of pullets as breeders may affect this situation in the following manner: The practice of using pullets as breeders frequently leads to the use of immature birds. In this way hatching results are affected because the young pullets do not seem to have the abundance of constitutional vigor possessed by older birds. Moreover, birds as pullets usually lay a smaller egg than as yearlings. Since the size of chick hatched depends to a considerable extent upon the size of the egg producing the chick, it is obvious that, as a rule, larger chicks are produced from the eggs of yearlings. Then again, it has been a matter of common observation among poultrymen that the chicks from yearlings are usually stronger and grow better than the chicks from pullets.

Another very important matter to which poultrymen should give more attention is the influence of forced feeding on hatchability. Many flocks of pullets are fed heavily throughout the fall and winter to induce heavy egg production, and then in the hatching season the eggs from these pullets are used for incubation purposes. This is a questionable practice, says Dr. Jull, since heavy egg production is a heavy strain upon the stamina of the hen and the eggs from birds that have been fed heavily are very apt to be low in hatching quality. Finally, it would seem that all factors point to the advisability of the use of yearling birds as breeders rather than pullets.

Poultry Problems

By W. D. BUCHANAN,

My chickens have layed very well since they started, but now they have stopped. I give them grain morning and evening and mash during the day, then as they have free range, I cut out grain in the morning and was short on sour milk, which they always had before them. Do you think if I give them plenty of milk and grain and beef scraps that they will start again? They are a year old.

MRS. C. L.

Your chickens quit laying because they did not have enough to eat. If they are in a moult it will be hard to get them back. If they were carefully culled you would probably find about half of them that it would pay to keep for fall and winter eggs. A properly balanced ration should bring them back in two months. Feed a light grain feed in the morning, keep a dry egg mash before them during the day and give them all the grain they will eat in the evening.

What would you advise sowing in chicken yards for green feed at this time of the year?

A. H. A.

If you want to pasture it this fall, nothing is better than rye for quick growth. For early spring I would advise fall oats and vetch. Fall sown kale is sometimes highly successful. So also is rape. Your county agent can give you expert advice.

I am losing several of my year-old pullets. They are not sick long and apparently look well, except that they don't eat. In the morning I notice one standing around and the next morning I find her dead. I feed sprouted oats in the morning and wheat and cracked corn at night and they have prepared mash all the time with plenty of clean water, oyster shell and grit; they also get some sour milk. I have some hens that are fed the same, but kept in a different house and I haven't lost any of them.

J. W.

It is impossible from your description to tell whether this is a disease or due to something wrong with the feed. If you examine a dead bird and find blood in the intestines, or in the "blind pouches," it is coccidiosis. This means getting them on new ground at once, cleaning and disinfecting the brooder house every day or two, and giving them 2-3 ounce of catechu in every 30 gallons of water for a period of three weeks.

If no disease is found, look to the feed. It may be musty or moldy, or it may be too rich, that is, too much protein without enough green feed. If the latter, I would recommend mixing 50 pounds each of ground corn and bran in each 100 pounds of the mash. Wash and scald the milk vessels daily; see that they have plenty of fresh air; that they are not crowded at night; that there are no mites in the house and no lice on the chicks.

Flock Average

Rather Than Individual Records

The very keen demand for heavy laying strains has sometimes led to injudicious practices and has frequently produced harmful results, according to Dr. Morley A. Jull, new man in charge of poultry investigation of the United States department of agriculture. In many cases breed type and other characteristics have been neglected and constitutional vigor has been lowered. Sometimes also the size of the birds is below standard and there has been evidence of decreased egg size. The value of high individual egg records from a breeding standpoint has often been overemphasized. In this connection the fact should not be overlooked that flock averages are much more significant than individual records.

There have been certain features in the management of many flocks which seem open to question. There has been very extensive use of pullets as breeders, when it is becoming more apparent that yearling birds lay larger eggs, which produce larger and stronger chicks. Constitutional vigor is certainly inherited, but the extremely poor hatches of the last season would indicate that breeders in general are not paying enough attention to this important problem. Then again, many breeders feed rather heavy rations to their layers to force production and then use the eggs for incubation purposes, and this practice may be a major cause of poor results.

Mail-o-Grams

From Washington State College

Apiculture—If you do not know how to pack your bees, obtain directions from the extension service, State College of Washington.

Clothing—Simple clothes cost less, wear longer and look better than fussy ones.

Dairy—Arrange plenty of tall windows in your barn so your cows will get abundance of light and sunshine this winter.

Farm Crops—Make an effort to save seed of every kind for next year. Take it from well matured plants.

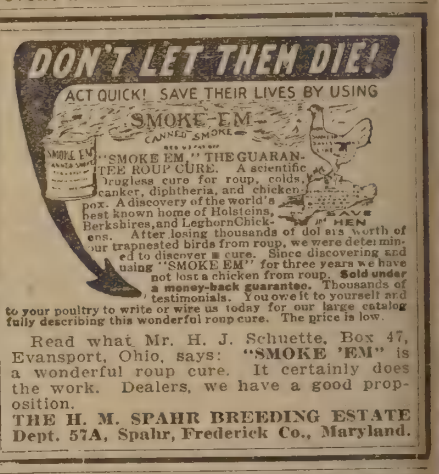
Farm Management—Reduce the most per egg by producing more eggs per bird.

Home Management—In setting colors the first attempt on new garments or material may not be permanent. It may be necessary to repeat before each washing.

Horticulture—Rush the apple to good storage. Every day's delay shortens their season and lessens their quality.

Live Stock—Successful farmers and hog men know that small pigs use less feed per pound of grain than do older hogs. Keep small pigs growing.

Plant Pathology—Good potato storage is necessary. Proper ventilation and a temperature of about 36 degrees F. will prevent black heart and most storage rots.



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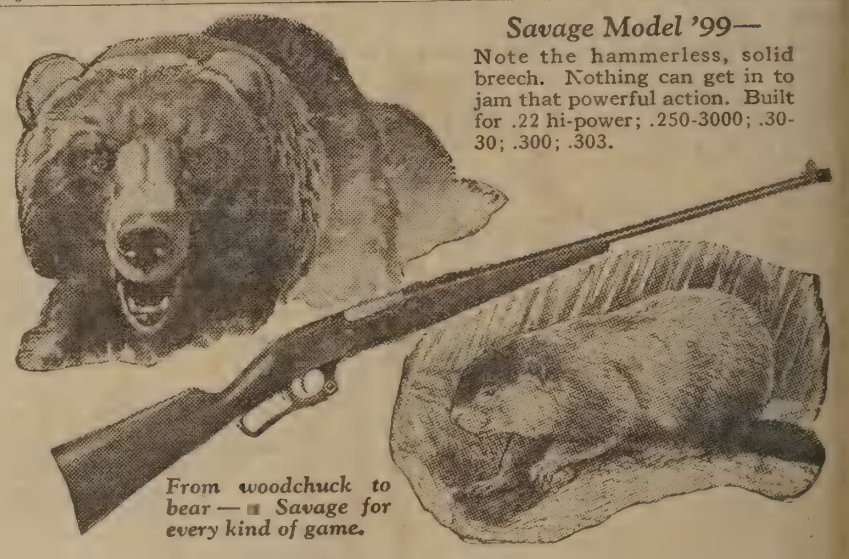

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ORCHARD AND GARDEN

Storing Cabbage

There are various ways of pitting the cabbage for winter use. One of the most common ways is to open up a trench in the fall one and one-half to three feet wide, according to the number of heads to be stored on the bottom layer, on a well-drained slope which has a sandy or gravelly soil. It will depend somewhat on the size of the heads as to what width to make the trench and also on the amount of cabbage you have to store. If two heads are placed side by side probably one and one-half feet will be sufficient, but if three, four or more heads are to be placed side by side in the trench the width will have to be greater. The depth of the trench will vary from six inches to one foot, depending on the size of the heads to be stored.

The cabbages to be pitted are pulled roots and all and placed in the trench, heads down. Do not remove the outer leaves. After filling the bottom of the trench, which may be two, three or four plants wide, the next layer of heads must be placed so that the heads will fit between the stalks and the roots of the bottom layer. For example, if the bottom layer is four plants wide, then the second layer will be three plants wide, or if the bottom layer is only two plants wide, then the second layer will contain only one row of plants. After packing the heads together in this fashion put a covering of burlap or a thin layer of straw over the plants in the trench, to protect them from the layer of dirt which is to be put on next. Only a sufficient amount of soil to protect the plants from freezing should be put on at this time. After severe winter weather sets in a sufficiently large amount of manure or straw should be put on to prevent severe freezing and alternate freezing and thawing. This will also enable the grower to remove the heads as the market or home desires them during the winter.

The outside leaves of the heads will have rotted some by late spring, but this does not affect the flavor of the cabbage in any way. After removing the decayed leaves you will have a beautifully bleached head of cabbage, which is crisp and juicy and consequently of higher quality than heads simply stored in the dry cellar or basement without paying any attention to the humidity of the air.

If only a few heads are to be stored for winter use, the following is suggested: Cut the heads from the stems of the plants and wrap them first in the large outer leaves of the plant and then in paper and pack between layers of sand in a barrel or in boxes. The sand should be kept moist, but not wet. Keep the barrel in a cool cellar. In this case also the outer leaves will decay, but, as suggested before, the flavor is in no way impaired.—C. L. V.

A Beekeepers' Library

About three years ago there passed from earth possibly the most widely known practical beekeeper that ever lived. His name was Dr. Charles C. Miller, and for 60 years he lived at Marengo, Ill. He was in his 89th year when he died. He had written more on the subject of bees and beekeeping than any other man. During the last 25 years of his life he answered over 10,000 questions about bees and their management, in one bee periodical alone.

Dr. Miller held the world's record in comb honey production, having secured an average of 245 pounds from each of over 70 colonies of bees in one season. And he was 82 years old when he did this!

As a memorial to the greatness of Dr. Miller and as a token of their esteem for him, the beekeepers have raised nearly $2000 for the endowment of the "Dr. C. C. Miller Memorial Apicultural Library," located at the University of Wisconsin, at Madison. Already it has over 1000 volumes. On August 18th it was dedicated. There were over 350 beekeepers present, 75 of whom came from 13 different states.

After the dedication ceremonies, a caravan of 16 automobile loads of beekeepers proceeded from Madison to Marengo, Ill. (a distance of 90 miles), for the purpose of placing a bronze tablet in the church that Dr. Miller attended and where he led the Sunday school singing for 60 years. The wording on the tablet is this:

"This tablet is erected by beekeepers to Charles C. Miller, a former resident of Marengo, in appreciation of his service to beekeeping and as a mark of esteem. A Library of Beekeeping Literature has been endowed at the University of Wisconsin to his memory."

The Bark Louse

Many a farm orchard is troubled by oystershell scale, or bark louse, and many a farmer is at a loss to know what to do about it. The results of this pest are more evident as the season progresses and many an inquiry is made at this time of year as to what should be done and when.

The shell-like objects on the small limbs and twigs at this season of the year contain the eggs from which the scale will hatch in the spring. The pest can be destroyed either in the egg stage or after hatching.

During the dormant season the proper spray is lime-sulphur. This should be applied at a time when the tree is completely inactive—after the leaves are all off and the sap down and before they begin to swell in the spring. It should, of course, be applied in a period of settled weather if possible.

In the spring careful observations should be made to see when the eggs that are not destroyed hatch. This can be learned by the presence of the tiny scales or lice moving about on the bark. These live insects may be killed by the application of a nicotine spray, of which blackleaf 40 is the most commonly used.

In many an uncared-for orchard these pests virtually destroy the trees. They are also destructive of certain shrubs, among them lilacs. They are sap suckers, taking the very life blood of the tree or shrub on which they live.

A PROMISING FORAGE CROP.

Hungarian vetch is one of the many promising forage crops introduced in the United States by the department of agriculture.

The crop has been most extensively tested in the Pacific coast states, where it is especially well adapted.

Dairy cows at the experiment station at Corvallis, Ore., and elsewhere, have consumed it readily.

In western Oregon and Washington the best seeding time is with the first fall rains during September and October.

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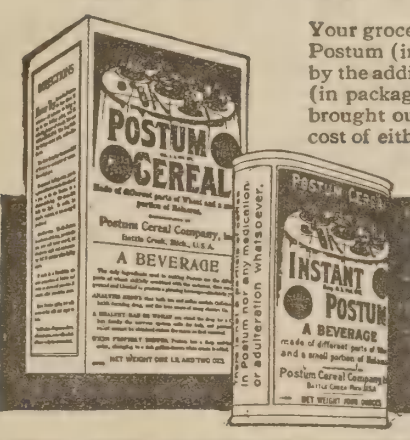

Your grocer sells Postum in two forms: Instant Postum (in tins) prepared instantly in the cup by the addition of boiling water. Postum Cereal (in packages) for those who prefer the flavor brought out by boiling fully 20 minutes. The cost of either form is about one-half cent a cup.

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Insures Healthy Hogs

An occasional RED SEAL Lye bath for Mr. and Mrs. Hog and their pen pays big profits. Lye will also sweeten the swill and insure healthy pork at killing-time.

Successful stockmen, dairy-farmers and poultrymen use RED-SEAL Lye in a hundred different ways—as a spray for trees when dormant, a cleaner for automobile transmission-cases, farm-machinery and household needs. (Do not use on aluminum.)

RED SEAL Lye softens water and makes the best soap you ever saw. Booklet explaining uses in detail, sent on request.

Full directions in each can. Be sure and buy only the genuine RED SEAL Lye.

P. C. Tomson & Co.
PHILADELPHIA, PA.

A LITTLE "WANT AD" FREQUENTLY OFFERS A BIG BARGAIN. MAKE IT A PRACTICE TO READ OUR "WANT ADS."

Trapping Suggestions

By Isaac Motes.

To catch coons, dig a perpendicular hole in the ground four or five feet deep and some three feet square, in a part of the woods which you know is frequented by them, and near a stream of water. Into this hole throw a quantity of crawfish and other small fish. Coons are very fond of fish, and when they find them here they get into the hole after them and can not get out again. The sides should be smooth and perpendicular, and it will be better if the soil is loose and loamy rather than hard clay, so the coons can not get a foothold in it and climb out. If the soil is loose it will crumble when they attempt to climb up the sides.

A trap of this kind may catch a mink, as they are also fond of fish, but are a good deal more suspicious of anything to which attaches human scent. To catch a mink the pit should be five feet deep, as a mink has a longer body than a coon and can jump higher.

Muskrats can also be caught in this manner if near the water, though if you don't visit the place soon they may dig out and get away. A better way to catch muskrats is to sink a barrel into the ground near the water, with the top just level with the surface of the ground, and put some green vegetables, parsnips or turnips in the bottom. The inside of the barrel should be smooth, otherwise the muskrats may get out, though they are not very good climbers.

Another way to catch muskrats is to take a thick, heavy, water-tight barrel and sink it into the water out in some shallow pond or lake, where you know there are muskrats, and where the water remains at about the same height all the time. Select a place where the water comes up to within two or three inches of the top of the barrel. Put sufficient rocks inside the barrel to weight it down. Throw in a quantity of vegetables or fruits, such as apples, parsnips, turnips, cabbage leaves and the like. Visit the barrel in your boat early every morning, and you are apt to find muskrats in it. They get in after the fruit and vegetables and can not get out again. In very cold weather keep the ice broken up and thin around the outside of the barrel.

Muskrat pelts are worth real money nowadays.

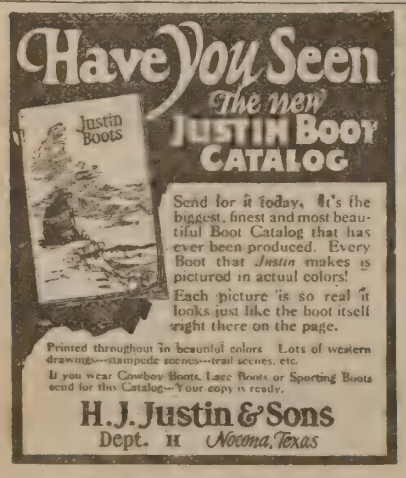
To catch wolves, foxes, wildcats, opossums, skunks and coons in a steel trap take a barrel and knock out both ends. Drive a staple on the inside, about midway from the ends, and tie a live rabbit or chicken by the legs close down to the staple. Be careful to tie it so it will be as comfortable as possible. Then take the barrel out some distance from the house into the field, or wherever you have seen signs of any of these animals, locate it in a smooth place and prop it with rocks or pieces of wood, with the side to which the chicken or rabbit is tied resting on the ground. Then set four good No. 1 1-2 or No. 2 steel traps, two at each end of the barrel, so that an animal can not reach the chicken rabbit inside without getting caught.

winter, when timber wolves, coyotes foxes are hungry, and inclined to around farmhouses this is a good way to catch them, for when the animal in the barrel sees them approaching it begins to flutter or jump and jerk, and in the case of a chicken it will doubtless squail, and this will excite the night prowler, and in its eagerness to seize its prey it will rush up to it regardless of human scent about the place, which it might not do if the chicken or rabbit were not there fluttering or jerking.

It will be best to fasten the chain to a rock or good-sized piece of timber, rather than to a stake, so the animals can drag it away slowly. If fastened to a stake they may gnaw or twist a foot off and escape, but if fastened to something they can drag a little they will delude themselves into believing they are escaping, and will drag the weight until tired out, and you can easily follow them next morning.

SOME PUNKINS!

A. G. Woodward of Fairbanks, near Oakesdale, in Whitman county, had on exhibition at the recent community fair at the latter place five pumpkins weighing 184 pounds. They were grown on the same vine, and still a sixth pumpkin would have been shown had not the horses reached over the fence and mutilated it. Mr. Woodward was unable to identify the variety of this pumpkin, this being the first year that it was grown. Its appearance would have led many to consider it a squash, had not Mr. Woodward stoutly maintained that it was a pumpkin.



Emphasized Value of Milk

That milk is the indispensable food for children and that they should have plenty of milk to drink, was the thought emphasized by large signs placed about the child welfare lunch booth at the Western Washington fair at Puyallup. The booth was fostered by the farm bureau women of Pierce county, and has been carried on for the last four years, the original plan being to furnish milk and milk products to the children who attended the fair, but it was later decided to sell lunches to any one, except on children's day, when the booth was crowded with school children.

The milk used for drinking and for preparing cocoa and soup was a special milk produced by members of the Pierce County Dairyman's association. It was sold for 5 cents for a one-half pint bottle and was served in the bottle, a straw being furnished with each bottle. Over 20 gallons of milk was used at this booth daily during fair week this year.

Eight women from the farm bureau had charge of the work or preparing the sandwiches and other dishes to those who came at noon hour and in the evening. Everything was served cafeteria style and 36 chairs were placed at tables and counters about the room, all of which was screened in. Ice cream sandwiches were made from graham crackers and vanilla ice cream produced at the dairyman's association creamery at Tacoma. Much credit for carrying on this work is due to Mrs. Frank Kehr of Puyallup and Mrs. A. W. Langdon of Sumner.

The menu consisted of the following: Cream of tomato soup, 10 cents; egg sandwich, 10 cents; cheese sandwich, 10 cents; lettuce sandwich, 10 cents; whole wheat bread and butter, 5 cents; jams, 5 cents; cottage cheese, 5 cents; milk, 5 cents; cocoa with whipped cream, 10 cents; ice cream sandwich, 10 cents.

It is needless to say that such an attractive menu as the above drew many of the fair attendants and stockmen, as well as children and their parents who visited the grounds.

Farmers' Want Ads

MONUMENTS F

COMPLETE STOCK. WRITE FOR DESIGNS and prices. Inland Monument Co., N1001 Monroe, Spokane.

HELP WANTED—Female 1

GIRLS DESIRING WORK FOR HALF BOARD and room, while attending school, write Gooding College, Gooding, Idaho, today.

HELP WANTED—MALE 3

FOREST RANGERS, RAILWAY POSTAL clerks and carriers needed. Particulars of exams. free. Write Mokane, Dept. A-11, Denver, Col.

AGENTS WANTED 9

DISTRICT SALESMEN WANTED—ALL OR spare time. Earn $1500 to $3600 yearly. We train the inexperienced. Novelty Cutlery Co., 456 Bar st., Canton, Ohio.

SCHOOLS AND COLLEGES 26

EARN $110 TO $250 MONTHLY; EXPENSES paid as railway traffic inspector; position guaranteed after completion of 3 months' home study course or money refunded. Excellent opportunities. Write for free booklet G-157. Stand. Business Training Inst., Buffalo, N. Y.

(Continued on following page.)

When you write to advertisers be sure to state that you saw their advertisement in this paper.

GREAT NORTHERN PREPARES FOR BUSY SEASON

The territory served by the Great Northern Railway harvests its crops and ships to market its heaviest load in the fall season.

This year the Great Northern is prepared to handle a larger traffic than ever before. It has purchased nearly a hundred large, new locomotives of the most modern type, as well as four thousand new freight cars; it has built new track and improved old; it is equipped to do the people's work well. A supply of cars is one of the important elements in this preparation. The Great Northern not only owns ample equipment for the crop moving season, but it has these cars on its own lines ready for business and in excellent condition. Here is the actual record:

	Owned by Great Northern	On Great Northern Lines
Box Cars (including automobile and furniture cars)	32,572	34,046
Stock Cars	1,893	1,946
Refrigerator Cars	5,508	9,352
Other Freight Cars	18,926	20,315
Total Freight Cars	58,899	65,659

So prepared the Great Northern is confident that it can give adequate service to the Northwest throughout the busiest season of the year. It appreciates your patronage and asks, in your own and its interest, that you help it to

Load cars to capacity

Load and unload promptly

Avoid diversion wherever possible

LOUIS W. HILL,
Chairman of the Board.

Talk No. 8.

FARMERS' WANT ADS

This is the farmers' "want," "sale" and "exchange" department for small advertisements of farmers, including live stock and poultry.

Advertising rates for ads running 1 to 3 times, 10c per word per insertion, with special rate to Farmer subscribers, as follows: Ads running 4 to 12 times, 9c per word per insertion; ads running 13 times or more, 8c per word per insertion.

All commercial and land advertising, 10 cents per word per insertion. Open also to nonsubscribers.

In using these columns advertisers must observe (1) No advertisement will be accepted for less than $1.00 per insertion. (2) Every word, number and initial, including name and address, must be paid for. (3) New advertisements, changes of copy or cancellations must reach general office, Spokane, Wash., 10 days in advance of publication date. (4) Cash must accompany order.

Above rates include insertion in The Washington Farmer, The Idaho Farmer and The Oregon Farmer, which constitute the Pacific Northwest Farm Trio, 46 Review building, Spokane, Wash.

FRESH FOOD PRODUCTS 51-3

FISH—4 LBS. SMOKED SALMON, $1; 4 LBS. Alaska salmon bellies, $1; 4 lbs. black cod, $1; 3 lbs. best codfish, $1; delivered by mail. Coffin Fish Co., Seattle, Wash.

MERCHANDISE 51-5

YOUR ANNUAL OPPORTUNITY—FOR QUICK disposal we offer salesmen's samples of woolen goods, underwear, hosiery, blankets, sheep-lined coats, mackinaws, leather vests, etc., at one-third to one-half less than regular prices. Our price list of sample goods is now ready. Send for it today. Minneapolis Woolen Mills Co., 611 1st ave. North, Minneapolis.

SPECIAL—ONE-POUND TIN "SATISFACTION tobacco" and pipe for $1. Smoking, chewing tobacco, cigars, cigarettes and complete line of pipes. Wholesale and retail. Peter M. Jacoy, 3 Washington st., Spokane.

HONEY 53

ALFALFA-SWEET CLOVER HONEY—2 60-LB. cans, $10.75; one can, $5.50, f. o. b. Rigby; one 40-lb. can, prepaid to fourth zone, $6; quality guaranteed. Heckman & Larsen Honey Co., Rigby, Idaho.

ALFALFA, SWEET CLOVER HONEY, PREpaid second zone, 3 10s, $5; 60 lbs., $8.30; two cans, $14.50, not prepaid. Harry Fisher, Prosser, Wash.

HAPPY HOME HONEY — ALFALFA AND clover; 60-lb. can, $7.50; two cans, $14.50; case six 10-lb. pails, $8.50. H. N. Paul, Mabton, Wash.

PURE WATER-WHITE SWEET CLOVER honey; 60-lb. can, $5.50; two, $10.75. H. R. Bowen, Roberts, Idaho.

EXTRACTED HONEY FOR SALE—WELLS D. Rose, Sunnyside, Wash.

MISCELLANEOUS—FOR SALE 60

SASH AND DOORS—O. B. WILLIAMS CO., 1943 First ave. So., Seattle. Chicken house sash, 20" wide by 25" high, 80c; a dozen different sizes in stock for immediate shipment. Skylights for chicken houses, 36"x40"; price, glazed, $2. This is the size recommended by the Western Washington experiment station. We carry them in stock for immediate shipment. Sash and doors for all purposes at lowest prices. All orders receive prompt attention. Our large illustrated catalog No. 35, showing full line of building material and built-in fixtures for the home, free on request. O. B. Williams Co. Established 1899.

PIPE—GET PARTICULARS ON OUR SPEcial flue pipe, 1¼, 1½ and 2 inch. Big saving on it. We also have all sizes second-hand and new standard pipe at low prices. We also save you on roofing, belting, pumps, engines, cables, etc. Alaska Junk Co., S120 Adams, Spokane, Wash.

WALL BOARD—WRITE FOR SAMPLE OF Washington plaster wall board; won't warp, won't burn. Manufactured by Washington Building Products company, 6851 E. Marginal Way, Seattle, Wash.

NATURAL LEAF TOBACCO—CHEWING, 5 lbs., $1.75; 10 lbs., $3; smoking, 5 lbs., $1.25; 10 lbs., $2. Pay when received. Pipe and recipe free. Farmers' Tobacco Union, B19, Paducah, Ky.

TOBACCO—KENTUCKY'S PRIDE: EXTRA fine chewing; 10 pounds, $3; smoking, 10 pounds, $2; 20 pounds, $3.50. Farmers' Club, Mayfield, Ky.

ALL WOOL KNITTING YARN FOR SALE from manufacturer, 95c up per lb; golf and plain socks. Free samples. H. A. Bartlett, Harmony, Maine.

COMPLETE LINE LATEST STYLE HAWAIian beads, $1.50 to $2.50 string; all colors. Margaret A. Capps, Grandview, Wash.

ARMY GOODS BARGAINS—WRITE FOR catalogue. Simon's Army Supply Store, 309 Riverside ave., Spokane.

50,000 SACKS FOR SALE. INLAND HIDE & Junk Co., W21 Main, Spokane.

GAS PUMP AND TANK, $98. E. R. WILKINS, Helmer, Idaho.

AUTOMOBILES—FOR SALE 112

SEE CHEVROLET FIRST—NEW AND USED cars at prices that will surprise you; stop in or write Inland Empire Chrevolet Cales Corp., 916 2d ave., Spokane. Open evenings. Open Sunday.

AUTO ACCESSORIES AND PARTS 119

NEW AND USED AUTO PARTS, NEARLY ALL cars. Our low prices and prompt service will convince you. Money refunded if not satisfied. C. & D. Auto Salvage & Supply Co., 1904 Grand ave., Kansas City, Mo.

PATRONIZE THE HOUSE THAT CAN GIVE you the best service. Complete stock of automobile repair parts. Pacific Gear and Auto Parts Co., 1022 First ave., Spokane, Wash.

FREE CATALOGUE, AUTOMOBILE PARTS and accessories; latest price reductions. Write Riffner's Bargain Supply House, Salina, Kansas.

STOVE REPAIRING 128

WRITE MYER RUBENS, SPOKANE, ABOUT stove repairs, welding broken parts, nickel plating.

FUR-BEARING ANIMALS 170

SILVER FOXES, FREE PAMPHLET; SELL one or ten pair. Jenson Silver Fox Ranch, Portland, Ore.

RABBITS and HARES. 173

RABBITS, TOULOUSE GEESE HAVE MADE my living for 10 years. Prize winning blue Flemish Giants, New Zealand Reds, Himalayans, at utility prices. Agnes Brenner, R4, Box 49, Tacoma, Wash.

POULTRY 174

FOR SALE — PULLETS AND BREEDING cockerels; April hatched pullets of Hollywood's best strain, trapnested stock, ready for your laying pens. From real layers mated to cockerels of 250 to 275 egg records. Price f. o. b. Prosser, $1.85 (crates returned). Send 25 per cent with order, balance C. O. D. We guarantee satisfaction or your money back. Choice cockerels from same stock. $1.50 each. Pulletpens, Prosser, Wash.

ACCREDITED CHICKS—ALL OUR CHICKS for 1924 will be from accredited flocks mated with certified cockerels sired by hens with 225-egg record. A limited number of chicks from cockerels sired by our $1000 champion cockerel and our world's record pen of hens. Write for special prices for those who order early. Queen Hatchery, 1430 1st ave., Seattle, Wash.

CERTIFIED WHITE LEGHORN QUALITY chicks for summer and fall months, from selected free range, high egg producing breeding flocks, inspected and accredited by the Sonoma county farm bureau. Send for catalog and attractive prices. Safe delivery and full count guaranteed. Must Hatch Incubator Co., Inc., 445 Seventh st., Petaluma, Cal.

WANTED—BARRED ROCK PULLETS. JAMES Jensen, Bluestem, Wash.

POULTRY (Continued) 174

"HENACRES" BABY CHICKS FOR 1924—Booking orders now. Early orders get delivery when wanted. We never have enough February, March or April chicks to meet the demand. Strictly high grade chicks at common chick cost. $22 per 100; $200 per 1000. Free catalog. "Henacres," Box A, Prosser, Wash.

S. C. WHITE LEGHORN CHICKS, 100 PER cent live, delivery guaranteed; 20 per cent books order. 100, $16; 500, $75; 1000, $140, postpaid; hatch only eggs from my own flock; no lights; trap records to 292. Absolutely only one grade. Catalog free. Roy S. Hands, B614, Cottage Grove, Ore.

WHITE LEGHORN BABY CHIX FROM flocks mated to males having sire's dam record of 240 to 297 eggs per year. Full particulars and interesting literature on request. We are accredited by Sonoma county farm bureau. The Pioneer Hatchery, 422 Sixth street, Petaluma, Cal.

BUY SONOMA COUNTY ACCREDITED Hatcheries chicks; electric hatched by the man who put electric incubation where it is today. I am the father of electric incubation. Stock the best. Prices right. Write for booklet. White Hatchery, Petaluma, Cal.

DANIEL'S "IDEALS"—WHITE ROCKS AND White Leghorns; 100 per cent trapnested stock used; place your 1924 baby chick orders now. Our capacity, 2000 chicks every seven days. Free list. Ideal Poultry Yards, Hoquiam, Wash.

"FRESHLAID" WHITE LEGHORN CHICKS for 1924 will produce results. Thirteen years production of real chicks. World's largest electric incubator. Free catalog. Freshlaid Farm, Colfax, Wash.

HUNT'S BARRED ROCKS, UTILITY COCKerels from the best egg producers, Imperial Ringlets, both matings. Prices right, satisfaction guaranteed. W. A. Hunt, Lebanon, Ore.

ANCONAS—BACKED BY OFFICIAL CONTEST records and splendid list of winnings in the west's leading shows. Booking chick and egg orders. Oscar Dunlap, Junction City, Ore.

DOLLARS FOR YOUR EGGS—WE PAY THE top market prices for your eggs and poultry. Daily cash remittances. McClintock-Trunkey Co., produce department, Spokane.

SPECIAL PRICES ON GUARANTEED DAYold pullets; fall and winter delivery. Write for particulars. Eureka Hatchery, Petaluma, Cal.

BARRED PLYMOUTH ROCKS, DARK MATing; pullets and cockerels from exceptionally fine stock. Wm. Heimsoth, Pomona, Wash.

ROSE COMB BLACK MINORCAS—COCKERels, $2; pullets, $1; hens, $2. Mrs. Carley, Carley, Wash.

TO MAKE ROOM, WILL SACRIFICE ROCK and Leghorn breeders. D. W. Allen, Laconner, Wash.

R. I. RED COCKERELS, UTAH RANEY strain; $5 each. Mrs. Tom Griffin, St. John, Wash.

BROWN LEGHORN HENS, PULLETS AND cockerels for sale. B. Campbell, Freewater, Ore.

SHIP YOUR POULTRY AND EGGS TO THE Washington Meat & Poultry, Spokane, Wash.

COLUMBIAN PLYMOUTH ROCK COCKERELS for sale. F. B. White, Bonners Ferry, Idaho.

BLUE ANDALUSIAN COCKERELS FOR SALE. Mrs. Dan Calbreath, Monmouth, Ore.

GOLD BRONZE TOMS, EXTRA FINE, $8 each. Meadors, Norwood, Idaho.

LIVE STOCK 177

NOTICE TO SHEEP MEN—I HAVE 50 RAMbouillet yearling bucks for sale. They are large, smooth, heavy, tight fleeced and very heavy shearers. Two bucks from this bunch have completed the fair circuit of the northwest. They took first and champion at Spokane, Yakima and Salem fairs. The decision of the judges is to the effec' that these are the best Rambouillets in the northwest. I will price these sheep to you at a reasonable figure. Order promptly as no reservations will be made. Orders will be filled as received. E. C. Burlingame, Walla Walla, Wash.

WE GUARANTEE TO PAY THE HIGHEST market price for your poultry and live stock. Veal market growing stronger. Owing to the constant changes in the market we are unable to quote prices in this paper from week to week. We will furnish tags and prices when you are ready to ship. Write us what you have to sell. Prompt returns. John Lewis & Co., Spokane, Wn.

JERSEY BULL FOR SALE—BIG BOY'S ARMistice No. 222764, dropped November 11, 1922. Solid dark color, first prize junior bull class, Twin Falls county fair, 1923. A bargain for this particular individual. $100. Filer Seed company, Filer, Idaho.

25 REGISTERED GUERNSEY FEMALES FOR sale; imported and American bred young cows, heifers and heifer calves of correct type and blood lines. Leslie G. Perry, Wendell, Idaho.

WE PAY TOP PRICES FOR YOUR LIVE OR dressed veal, hogs and poultry. Your check by return mail. Shipping tags on request. M. & J. Packing Co., Spokane.

FINE GUERNSEY BULL CALF, BROTHER of Daisy of Chicona, world's champion Guernsey cow; priced very reasonable. Albion Gile, Chinook, Wash.

TWO GUERNSEY BULLS FOR SALE; ONE purebred, one good grade, sired by Topsy's Robin Hood. W. O. Peterson, Route 2, Renton, Wash.

FOR SALE—TWO BULLS AND A FEW REGistered heifers from the famous Hood Farm strain of Jerseys. T. E. Bradley, Daisy, Wash.

FOR SALE—80 HEAD PUREBRED HAMPshire ram lambs; these are good; will sell singly or in lots. F. M. Rothrock Co., Spokane.

FOR SALE—HOLSTEIN BULLS, COWS AND heifers, sired by senior champion Washington state fair. D. F. Nugent, Granger, Wash.

$1000 BUYS 10 HEAD OF REGISTERED JERseys. G. C. Sorensen, Route 1, Astoria, Ore.

REGISTERED ANGORA BUCK GOATS, $15, crated. C. D. Hartman, Silverton, Ore.

FOR REGISTERED DUROCS, WRITE F. L. Stocking, Caldwell, Idaho, R4.

MILK GOATS, BRED DOES, $10 TO $25. FANnie Branson, Dallas, Ore.

LIVE STOCK (Continued) 177

TOP PRICES PAID FOR CREAM, EGGS, poultry, pork, veal. Inland Products company, Second at Cedar. Dept. E. Spokane, Wash.

HAMPSHIRE RAMS (REGISTERED); LARGE, well developed and vigorous. Stadacona Farms, Route 1, Spokane, Wash.

REGISTERED HOLSTEINS—BULLS, HEIFers and cows for sale; accredited herd. Oscar Dunlap, Junction City, Oregon.

FOR SALE—10 HEAD OF REGISTERED Shorthorns, priced for immediate sale. E. W. Haag, Sandpoint, Idaho.

MILK GOATS—REGISTERED SAANENS AT prices that will please you. Ferd. H. Dietzel, Portland, Ore.

REGISTERED HAMPSHIRE BREEDING bucks and ewe lambs. Far Niente Farm, R2, Bothell, Wash.

WANTED—ABOUT TWO HUNDRED OLD ewes; state price. A. J. Perard, Toppenish, Wash.

HOGS—REGISTERED SPOTTED POLAND China. Howard Tucker, Route 1, Boise, Idaho.

REGISTERED SHROPSHIRE RAMS AND ewes. Write McK. Edwards, Valley, Wash.

HARNESS and SADDLERY 189

SEND FOR FREE HARNESS AND SADDLE catalog today; cut out the middleman, buy direct from the manufacturer. Lowest prices in the west; satisfaction guaranteed. Established 1881. Write Pierce Harness Co., Dept. T, Spokane, Wash.

HAY FOR SALE. 200

ALFALFA, GRAIN HAY, TIMOTHY AND straw, mill feed, grain, etc.; guaranteed quality; prompt shipment; buy direct and save money. Prices upon application. Richard Nyman, Walla Walla, Wash.

JOB PRINTING. 372

WEDDING ANNOUNCEMENTS AND INVItations, catalogs, booklets, high school annuals, letter heads, envelopes, cards, butter wrappers, etc. Union Printing Co., 412 First ave., Spokane, Wash.

CLEANING, DYEING, Etc. 420

FRENCH DRY CLEANING BY PARCEL post. Ladies' and gents' suits, furs, hats, etc., prompt service. Address City Dye Works (Dept. A), E422 Sprague ave., Spokane, Wash.

TANNING 425

WE WILL TAN YOUR COW OR HORSE HIDE for robes or coats, and guarantee our work. We are custom tanners, manufacturers and taxidermists. Write for prices. Spokane Fur Tanning Co., 7 Pine st., Spokane.

ANY KIND OF HIDE TANNED WITH HAIR on, or for leather. Fur and taxidermy work done to order. M. R. Mohr Co., 321 Sprague, Spokane, Wash.

KODAK FILM DEVELOPING 472

FREE ENLARGEMENT WITH 75C ORDER high gloss print. Spokane Film Co.

FILMS DEVELOPED FREE—KODO, THE PIcture King, 815 Stevens, Spokane.

MATERNITY HOMES 497

MATERNITY HOSPITAL; STRICTLY PRIvate; doctor in attendance; prices reasonable. Mrs. Elizabeth Peel, matron. W1324 Broadway, Spokane.

BUILDING MATERIAL 510

TURNS PLASTERING INTO PLAY—PERFECtion plaster wall board can be nailed on just like lumber, and makes a perfect plaster job. Western Wallboard Co., Seattle, Wash.

SEEDS 620

FARM SEEDS—RYE GRASS, RED AND Alsike clover, vetch and oats, fall barley and timothy seed of good quality, new, recleaned and ready for shipment. Rhoten Farms, Salem, Ore.

NURSERY STOCK 621

TREES—NOW BOOKING MAIL ORDERS AT reduced prices for limited time only. Apples, pears, peaches, nut trees, prunes, cherry, small fruits, etc. Live agents wanted. Lafayette Nursery Co., Lafayette, Ore.

NURSERY STOCK—PRUNES, WALNUTS, FILberts, fruit trees of all kinds, gooseberry and small fruits. Buy direct and save 50 per cent. Brooks Nursery, Lafayette, Ore.

TREES—CHERRY, PEAR, PRUNE, APPLE, walnut, filbert. Mazzard cherry seedlings. Prices based on production costs only. Homer R. Brixey, McMinnville, Ore.

NURSERY STOCK SOLD DIRECT TO PLANTers; apple trees a specialty; no agents employed; can save you money. Write for prices. Lawson Nursery, Gates, Ore.

FARM LANDS FOR SALE 651

PROFITABLE FARMING—FERTILE SOIL, ample moisture, favorable crop growing climate, convenient market, low priced land are conditions that make profitable farming possible. These conditions are found in the Lethbridge northern irrigation district in Sunny Southern Alberta, Canada, where the bringing of 105,000 acres of rich land under irrigation in a well settled district is providing opportunities for double the number of people now there to own paying farms. Water available this year, low prices and favorable terms make starting easy. Investigate this first. Write for descriptive booklet to the Irrigation Council of Alberta, 12 Provincial building, Lethbridge, Alberta, Canada.

POTATO, POULTRY, BERRIES. ALL cleared and in meadow. A few feet from paved highway; located a half mile from railroad station, good store and sawmill; excellent neighbors, fine schools, close to several good towns. Priced at only $100 an acre. Sold in 5, 10 or 20 acre parcels. Small payment down, balance in 10 years at 6 per cent. This is the best land at the price that we know of. Write or call for full information. Carter, MacDonald & Miller, 208 Columbia st., Seattle, Wash.

NINETEEN ACRES; GOOD BUILDINGS; well, orchard. L. Schulz, Route 6, Salem, Ore.

FARM LANDS FOR SALE (Continued) 651

CUTOVER LANDS, EASY TO CLEAR; $8 TO $20 per acre; 25 miles north of Spokane; on hard surfaced highway; Great Northern and Milwaukee railways; excellent opportunity for dairying and stock raising with Spokane markets and creamery near at hand. Will help the man who will live upon this land and agree to clear a part each year by giving lumber to help start his buildings, and a purebred Jersey bull to groups of farmers. Interest and payments low. Write Milan Farms Development company, Dept. T, Old National Bank bldg., Spokane, Wash.

PUGET SOUND WATERFRONT FARM, THIRty acres, all cleared; 1-3 well drained marsh, balance good upland; 1000 ft. beach frontage; good house and barn, with water piped into both; hog house, poultry house; well settled neighborhood; school, cream, phone route; 3 miles from live trading center. This farm splendidly adapted to dairy and poultry; owner has business in town; will include some personal property and sacrifice on price if taken soon. D. W. Packard, Oak Harbor, Wash.

5000 ACRES, NEWAUKUM RIVER VALLEY; highest type level farming land; all rich, productive soil. No gravel. No floods. No crop failures. Well developed district. Near Chehalis, Washington, 20 acres up, $15 to $50, easiest terms. Settlers can get steady employment years to come; good wages; and live at home. See local representative, St. Helens hotel block, Chehalis, or write Graham Land company, American Bank bldg., Seattle.

80 ACRES, NEAR CITY LIMITS, COLFAX; improved for dairy; two houses, large barn, silo, electric lights, power; all under cultivation; unlimited water, piped to buildings. $14,000; $5300 federal loan, balance cash; appraised value $19,500, would sell 25 cows and equipment with route paying $500 to $900 month. W. T. Smith, Box 184, Colfax, Wash.

BIG OPENING SALE OF YAKIMA VALLEY farm land, under an assessed state and government approved irrigation project; best, deep soil; close to town and good roads. Price $25 per acre and up. Very easy terms. Western Lands, Inc., owners, 918 Green bldg., Seattle.

SPLENDID OPPORTUNITY—POULTRY FARM with hatchery; five-room plastered house, five chicken houses, waterworks, garage, outbuildings, orchard; on Columbia highway, McNulty station, near St. Helens and Portland; part cash, balance easy. A. B. Larson, Warren, Ore.

SHEEP OR CATTLE RANGE FOR SALE—2300 acres; east of Elgin, Ore.; good range, well watered; fenced, two sides; thousand acres tillable; adjoins reserve; other range available. Price right; terms easy. Jones Land Co., Freewater, Ore.

BIG LUMBER COMPANY LAND SALE—IN Skagit county; 40-acre tracts, $1400; $200 cash, balance easy. Lots work for the settler. Splendid district, roads, schools, towns. Information free. H. C. Peters, 726 3d ave., Seattle.

SELL YOUR PROPERTY QUICKLY FOR cash; no matter where located. Particulars free. Real Estate Salesman company, 501 Brownell, Lincoln, Neb.

$2400 CASH—160 ACRES SAGEBRUSH LAND in Harney valley, Ore.; sandy soil; easily cleared; water at 20 feet. Box 172, Kootenai, Idaho.

WESTERN WASHINGTON FARMS—LARGE or small tracts; Puget sound waterfrontage. Charles Somers company, Alaska bldg., Seattle.

40 ACRES, RUNNING WATER, BUILDINGS; $8000; TERMS. Helen Zumsteg, Route 1, Hubbard, Ore.

15 ACRES GOOD ONION LAND; NINE ROOMS, horse, chickens. William Schwauber, Clackamas, Ore.

GOOD 160, NEAR OROFINO; $15 PER ACRE, half cash. Owner, Henry Loseth, Moscow, Idaho.

FARM LANDS—Wanted 654

NOW IS THE TIME TO LIST YOUR FARM in order to get it before the thousands of people that we reach through the Farm Bureau in 45 states, and get the advantage of the million dollar advertising campaign by the r. r. companies. Washington Farm Bureau Exchange, 312½ Lindelle, Spokane, Wash.

WANT TO HEAR FROM OWNER HAVING farm for sale; give particulars and lowest price. John J. Black, Chippewa Falls, Wis.

I HAVE INQUIRIES FOR FARMS IN NORTHwest. Describe fully and state price. R. A. McNown, 310 Wilkinson bldg., Omaha, Neb.

HOUSE AND TWO LOTS IN FERDINAND, Idaho; will trade on ranch as part payment. Charles Perkins, Kartar, Wash.

FARM LANDS FOR RENT 657

FOR RENT—1000-ACRE GRAIN AND STOCK ranch. Write C. M. Baker, Colville, Wash.

600 ACRES, ¼ MILE FROM RAILROAD. J. Hadden, Midvale, Idaho.

IRRIGATED LANDS—For Sale 663

CORBIN ADDITION TO GREENACRES—IN the beautiful Spokane valley; 30 minutes from Spokane paved road; 40 inches of water for irrigation; gravity flow. Ask for booklet with all information.

Return coupon—The Fred B. Grinnell company, Spokane, Wash. I am interested in the Spokane valley. Please send booklet and all information to

Name .....
Address .....

A MONEY MAKER THAT WILL ALWAYS show handsome profits: 130 acres, near Yakima; good water rights; excellent buildings and well equipped; large dairy herd. Price $22,000; good terms. Western Lands, Inc., owners, 918 Green bldg., Seattle.

51 ACRES, IRRIGATED; CROPS, ALFALFA, berries, asparagus, potatoes, corn; house, barn; highschool and station two miles; terms if desired; will trade cattle or sheep. Chris H. Olsen, Benton City, Wash.

FOR SALE—10 A., IMPROVED, IRRIGATED; early crop belt; stock, implements, tools, crops, furniture, $3500; crippled, must sell; terms. Henry Hays, Richland, Wash.

WHY RENT WHEN LANDLORD'S SHARE will pay for well imp. home? Write Western Bureau of Exchange, Twin Falls, Idaho.

FOR SALE OR EXCHANGE 703

FOR SALE OR TRADE—200 A. GOOD BLACK soil, in Oneida county, Idaho; 120 a. summer fallow; 160 under plow; 8 head of good mules and horses, 9 head of cattle, 3000 bu. this year's wheat goes with place; all necessary farm implements, 4 sheep, 200 chickens. $4500 cash, or trade for tract on coast. A. W. Featherkile, Arbon, Idaho.

2-STORY BRICK HOTEL, FURNISHED; FOR stock, dairy or timber land; $30,000. Name your terms. W1504 Fairview ave., Spokane.

TO EXCHANGE—Real Estate 703

360 ACRES, GRANT COUNTY, ORE., WITH stock and equipment, to exchange for dairy and mixed farming combined; partly improved; would assume to $5000. A. F. Murphy, Range, Ore.

Cattle Ranch To College

By Russell Doubleday Copyright by Doubleday & McClure Co

CHAPTER XVI.
A Broncho Buster.

The Sun River Ranch was a large one, and many cowboys were employed to look after the stock; practically all the work was done on horse-back, the cow-puncher or the ranchman never deigning to go afoot—indeed it would not have been possible to cover the necessary ground by any other means. A great many horses therefore were needed, each cowboy requiring three or four, especially at those times of the year when they are ridden very hard and have to be changed frequently. The care and raising of the horse herd were consequently very important parts of the cattle-ranch business. The cow-ponies were bred on the ranch and allowed to run free (it being a well-known fact that they would not stray very far) until the colts were old enough to break to the saddle, when they were taken in hand by certain of the men who showed particular skill in that direction.

John did not appreciate the full significance of the order to return to the home ranch till Frank, who seemed to be a walking information bureau, enlightened him.

"If you want to go on the horse range Harris will take you," he was informed. "It's cleaner work than chasing cows, and there's more money in it. Want to go?"

"You bet," was John's short and emphatic answer. His encounter with the little buckskin broncho was exciting and he wanted more; then, too, cattle are tame, stupid creatures compared with horses.

"Here's your man," said Frank to Harris, the head of the horse outfit, introducing John. "He says he's ready now."

"Good! You'll find Matt and Jerry in the corral now. Go over and pitch in. There's twenty-five head that I want ridable by the time round-up begins; that's only a week, and you'll have to work 'em hard."

And so John became a broncho buster.

He reached the rough circular enclosure made of split rails laid one over the other alternately and strongly braced to stand the strain that would surely be brought to bear. Inside the corral were about 25 horses that had not seen a man half a dozen times in their lives; they were now trying to get as far away as possible from the two men, Matt and Jerry, and ran frantically around close to the fence that walled them in. They were as wild as deer and about as swift.

Swish! hissed the rope. As John climbed the fence it settled over the neck of a big bay. In a second the boy was inside and hanging on with the other two men to the end of the rope. The bay plunged and [illegible] almost frantic with fright and [illegible] but the three kept their grip and [illegible]ually pulled him by jerks away from [illegible]unch and towards the center.

[illegible]arer and nearer he is worked towards the "snubbing post," a stout log stuck upright in the ground; a couple of turns round this holds him fast. Jerry takes in the slack as he plunges and jumps until he faces the post only a few yards off; then he stops, plants his feet, and sets back on the rope; the tightening noose shuts off his wind, and he wheezes and struggles for a few moments, totters, and falls breathless. Matt springs to his head and sits down on it, the rope is relaxed, and the poor beast is allowed to breathe again. Matt still holding him down, though he struggles with might and main, John knots the rope loosely round his neck and shoulders, runs it back under the hind fetlock, draws it tight, pulling the leg up close to the body, and makes it fast. At a word from Jerry, Matt jumps to one side and the bay struggles to his feet—helpless, as he has but three legs to stand on. John rubs his neck soothingly, keeping a sharp watch the while for nipping teeth; he believes even a horse has some feelings. Matt then takes the noose from the neck, and, forcing it into his mouth, leads the end back to the ears, makes a half-hitch round the nose, then passes the end through the noose again—lo! a rough sort of bridle or "hackamore." Taking the loose end, Matt begins to pull the animal's head from side to side until he understands that he must follow. The first lesson is, never run against a rope; it prevents comfortable breathing.

Saddling comes next. A saddle blanket is thrown over the horse and rubbed gently up and down his back to acquaint him with the feel of it, then comes the saddle; the trappings frighten him and he struggles, trips, and falls. The operation is repeated, until finally the cinches are drawn and buckled securely. The big bay snorts and trembles in every fibre, terrified at his bonds, the first he has encountered in his wild, free life—he can not understand it.

Matt and Jerry have ridden two wild horses apiece that morning, so John volunteers to tackle the bay. The horse is still thrashing round at a great rate, but his foot is still tied up and he can do little. John reaches up and knots his handkerchief round the poor beast's eyes, then releases the foot, mounts quickly into the saddle, and leaning forward removes the blindfold. The frightened animal stands still, cowering like a whipped cur or a chicken that sees a hawk circling above her; he seems to be waiting for the strange, dreadful creature on his back to strike him some fearful blow or sink its claws into his flesh—dreading he knows not what. He bounds forward a few steps—still the burden sticks, and he stops and looks round at it. His fear fades and the courage and energy of his race return; he determines to get rid of this thing that clings so tightly. He leaps forward, runs a few yards full tilt, then stops short, fore legs stiff, hind legs crouching; it's a very sudden jerk, but John hangs on with his knees, leaning far back in the saddle. Again the horse tries the manoeuvre; no use; he rears on his hind legs and then on his fore legs; he jumps sideways, bucks, pitches, kicks, without a moment's rest for fifteen minutes. There is no pause, no chance to get a better hold, to take breath; it is a continuous violent paroxysm of motion. At the end of it the bay is well-night exhausted and all in a tremble, while John, though pretty well jarred, is calm and master of the situation. The horse at length submits to the superior will, and, magnificent still but now under control, does his best to carry out his master's wishes.

By the time the bay was well in hand and John was ready to take the saddle off and let him go free for the rest of the day, Matt and Jerry had roped another horse and the same tactics were pursued with it. So the work was carried through till dark, each man taking his turn riding horses that had never been bestrode by a living creature before. There was a kind of wild, exhilarating excitement about it, but it was terribly wearing, and the jar and strain were enough to use up a dozen men unaccustomed to the work.

The following day all the horses were ridden again, with less difficulty this time, though they were lively enough to suit any one. Some took a week's training, some a month's, some were never wholly subdued. To this latter class belonged the little buckskin "Outlaw," with which John had had such a lively time and who made his reputation as a broncho buster. The boy and the horse had much to do with each other for a number of years. Their close acquaintanceship came about thus:

The little buckskin was roped regularly every morning, choked down, and after a great deal of struggling, saddled; then some one of the cowpunchers would ride him until he was thoroughly exhausted. This was continued so long that the little horse became but a bag of bones, chafed and bruised, a wreck, but unbroken in spirit. In spite of everything he continued a fighter with each ounce of strength that was in him—a "dead game horse."

"He's an outlaw if ever there was one," said Harris one day. "If we can't give him away we'll have to shoot him, for he's making every other horse wild, though he's near ridden to death."

"Let me have him," said John, who happened to be standing near and overheard the remark. "He's a dead game little beast and I like him. I think I can work him."

"Take him and welcome, kid," said Harris, with an air of relief. "The wilder he is the tougher. Tame him and you'll have a star."

And so John came into possession of the little buckskin, whom he named appropriately "Lightning" or "Lite." Jerry said, when the question of giving him a proper name was under consideration, "I've known several horses named Lightning, but I've never seen a hoss as would fit the name like him." The boy's heart had not so gone out to a horse since Baldy's time, and though the two ponies were very different in appearance and disposition, in after years John found it hard to tell which he most cared for.

Before beginning the training he let up on the terrible strain, the constant struggle, to which "Lite" had been subjected and allowed him to recuperate; he took care of him himself, and later, when he grew stronger, allowed no one else to ride him. Gradually the horse learned to know his master and understood that that master would not ill-treat him; and so there grew up a sort of sympathy between them. "Pitch" he always did when John first mounted him, but he soon settled down to steady business, and a mighty capable beast he proved to be.

Though John found the wages of a broncho buster good, the work was very hard, it being the most violent sort of gymnastics all day long. When night came he was glad enough to sit down and rest; he would, in fact, not have been sorry to turn in right after supper, but the talk and stories the men told were too good to be lost. It was near round-up season and the riders were being gathered, preparatory to starting off on that great yearly summing-up expedition. There were men from all over the United States and Mexico, college-bred men and men of the soil. No man knew the other's history, nor would any one ask questions. There was hardly one but had strange experiences, some of which they told. Then there were songs, many of which were familiar to all and therefore popular. Frank Bridges soon became a favorite with every one; his good nature and jolly fellowship won him many friends. Moreover, he had a good voice and was constantly called upon to exhibit his ability.

It was on a restful evening, after supper was over and the last rays of the sun were sinking; the men were lounging about in the most comfortable positions they could find; the talk had died down to a monosyllable now and then. Matt, the broncho buster, broke the silence: "Frank, give us the 'Grass of Uncle Sam'; you're only feller that can remember words and tune both."

There is no pause, no chance to get a better hold.

And Frank, obliging as always, without any excuses or palavering, sang the following in a good, strong baritone:

THE GRASS OF UNCLE SAM.

Now, people of the eastern towns,
It's little that you know
About the western prairies:
Where the beef you eat does grow;
Where the horses they run wild
With the mountain-sheep and ram;
And the cow-boy sleeps contented
On the grass of Uncle Sam.

We go out onto the round-up
To brand the sucking calf.
The stranger gets the bucking horse
(You bet then we all laugh).
He flings his arms towards the sky,
His legs get in a jam;
He turns a flying somersault
On the grass of Uncle Sam.

The angry bull takes after us
With blood in both his eyes;
We run, but when his back is turned
He gets a big surprise;
Our ropes jerk out his legs behind
And he goes down kerslam!
We drag the fighting out of him
On the grass of Uncle Sam.

The horse-thief comes along at night
To steal our ponies true
We're always looking out for him,
And sometimes get him, too.
We ask him if he's ready
And when he says "I am."
The bottoms of his feet they itch
For the grass of Uncle Sam.

And when the round-up's over
To town we go for fun.
The dollars we have hoarded up
Are blown in, every one.
Then broke, we hit the trail for camp
But we don't care a ———
Wages are good when the grass is good,
The grass of Uncle Sam.

By the time the singer was half-way through most of the impromptu audience were singing the familiar air too. Their voices were none too sweet or soft, for the icy blasts of winter and the dust-laden breezes of summer did not tend to improve them; but it was with a right good will that they applauded Frank when he finished. The song over, the talk began again, quietly, with long pauses, while this man puffed his pipe or that rolled a cigarette. The light had entirely gone out of the sky now, and only the dim glow of the shack lamp through the open door showed one man to the other.

"Well, kid, think you can tame the buckskin?" drawled Jerry lazily.

"Sure—after a fashion. 'Lite' 'll never be an easy thing; he's got too much life in him, but we have got to know each other pretty well now and we'll get along all right."

"You get that little horse so's you can ride him and you'll have the best pony goin'." Matt spoke with conviction.

The talk grew more and more disjointed, and finally stopped altogether. Then one by one the men stalked without a word into the cabin, and in a few minutes all hands were drinking in the sleep as only thoroughly tired, healthy men can.

(To be continued.)

A FEW GOOD IDEAS.

In beating eggs for icing add a pinch of baking powder.

Sticky fly paper can be removed with kerosene or alcohol.

When eggs are scarce one tablespoon of corn starch is a good substitute for one egg.

When whipping cream, if the beaten white of an egg is added it will make the cream stand up better.

Bits of Fun FOR Everyone

A Big Job.

"Let me kiss those tears away, sweetheart," he begged tenderly.

She fell into his arms and he was very busy for a few minutes. But the tears flowed on.

"Can nothing stop them?" he asked breathlessly.

"No," she murmured. "It's hay fever."—Exchange.

Something in This.

"Please read me the poem you are reading, mother," begged a little boy, sweetly.

"But I'm afraid it's too old for you, dear," his mother answered. "I'm afraid you wouldn't be able to understand it."

"Oh, yes, I would," was the calm answer, "so long as you didn't try to explain it."—Washington Star.

Out to Tea.

Warden: "Whom do you wish to see?"

Welfare Worker: "Lifer No. 439. Is he in?"—Exchange.

A Good Comeback.

Sometimes the Yankee's humor of exaggeration is met by as good as he gave. An American in London stopped at a coster's stall, and lifting up a good-sized melon, said:

"Are these the largest apples you have?"

"Put that bloomin' grape dahn, will yer?" said the coster.—Boston Transcript.

Dismissed Him Gently.

The head of a large shop, while passing through the packing room, observed a boy lounging against a case of goods and whistling cheerily.

The chief stopped and looked at him.

"How much do you get a week?" he demanded.

"Five dollars."

"Then here's a week's money; now clear out."

The boy pocketed the money and departed.

"When did we hire that boy?" the chief inquired of the departmental manager.

"Never," was the reply. "He had just brought a note from another firm."—The Christian Evangelist.

Right.

Teacher: "Willie, what is a cubic yard?"

Willie: "I don't know for sure, but it must be a yard that them Cuban kids play in."—New York American.

Cannibalistic.

"My dear, listen to this," exclaimed the elderly lady to her husband on their first visit to the States. She held the hotel menu almost at arm's length and spoke in a tone of horror: "Baked Indian pudding! Can it be possible in a civilized country?"—Western Fruit Jobber.

A Reliable Mining Business.

"I think you said, 'Rastus, that you had a brother in the mining business in the west?"

"Yes, suh, dat's right."

"What kind of mining—gold mining, silver mining, copper mining?"

"No, sah, none o' dose; kalsomining."—Everybody's Magazine.

A Little Slip.

Sunday School Teacher: "Who can tell me the name of the first man and the first woman?"

Little Boy: "Adam and Evil."—Selected.

GOODYEAR RUBBER CO. GOLD SEAL 1872 TRADE MARK

This is the one Gold Seal —round and gold colored — not rightfully used by any other organization.

Red Soled Boots *of pure para rubber!*

GOLD SEAL red soled 'manure' boots are practical boots for the practical farmer.

You can depend on Goodyear Gold Seal rubber footwear—it is made from the finest pure para rubber. We guarantee all Gold Seal models not to crack. They are scientifically constructed and vulcanized by our own exclusive processes.

Any good store on the Pacific coast can fit you with Gold Seal rubber footwear in your choice of style, weight and size. If you are out in the weather much, you'll also appreciate Gold Seal oiled clothing.

We are the original and only Goodyear Rubber Company. Portland and San Francisco.

Goodyear
Gold Seal
Rubber Footwear

Authorized since the 70's to use the name of Charles Goodyear, inventor of vulcanizing

Get New 1923 Model Stump Puller FREE

Clear your stump land WITHOUT COST. Your richest land lies under those tax-eating stumps. Pull them—make this valuable land WORK FOR YOU. Get a Stump Puller FREE by being a

Kirstin Demonstrator

"I made [illegible] my KIRSTIN last year." F. Cook, Dewey Illinois

Act Now! Get This Special Offer

One Man Pulls Stumps Alone

Pay for your KIRSTIN by showing it to others on your own land. We want one owner in each locality who will let us send other people to his farm to see the KIRSTIN work. You don't *sell* or canvass—just *show* the KIRSTIN.

Kirstin One-Man Stump Puller

Weighs less, costs less—yet has greater speed, power, strength. Guaranteed for three year. 80 days' trial.

We Pay You Cash! The KIRSTIN Demonstrators earn cash commissions.

SEND NO MONEY!

Write Today! Act quick! Only one demonstrator appointed in each locality.

A. J. KIRSTIN COMPANY 4254 Lud St. Escanaba, Mich.

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For Your CATTLE, HOGS and SHEEP when sold on the open competitive market. We handle consignments for you on a commission basis only. Community shipments our specialty. Put your name on our mailing list for weekly quotations.

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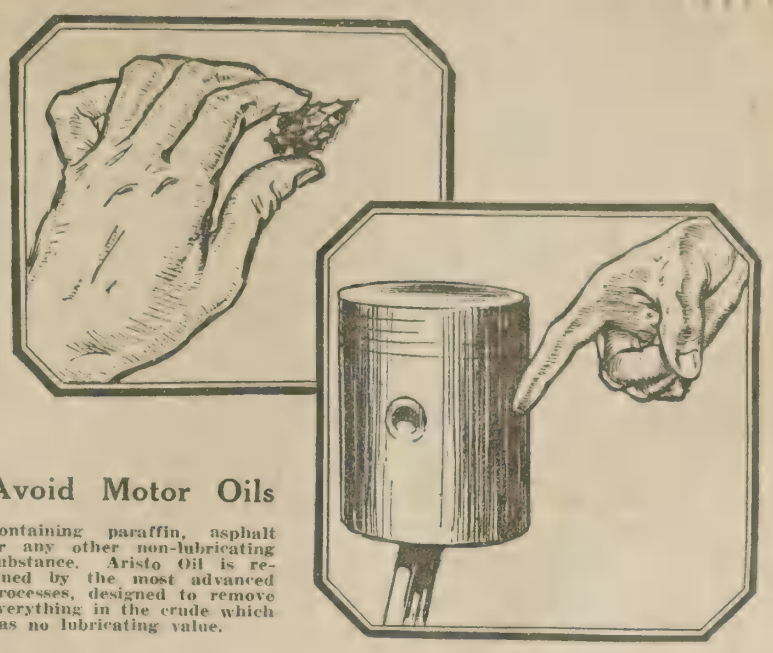
Live Stock Commission DEP'T T Spokane, Washington

The department editors of this paper are anxious to be of service to you. Do not fail to write to us if they can be of help to you.



Avoid Motor Oils

containing paraffin, asphalt or any other non-lubricating substance. Aristo Oil is refined by the most advanced processes, designed to remove everything in the crude which has no lubricating value.

A "Gritty" Carbon

That Scores Cylinders and Rings

There's a Softer, Fluffy Kind

Some carbonaceous residue is deposited by all motor oils. Every manufacturer of motor oil knows that.

But there are **two kinds of "carbon."** One is hard, flint-like and gritty. It clings to the pistons, cylinders, valves and rings.

Cylinders can be scored by it. And chisels or acetylene torches are required to remove it.

Causes "Knocking"

Being hard and gritty, it acts as an abrasive, causing pistons, cylinders and rings to wear.

Small pieces become incandescent, causing pre-ignition so the motor "knocks."

Spark plugs become coated. So the spark is short-circuited and your motor misses.

Particles attach to valve heads and seats, preventing proper seating and resulting in loss of compression and weak power.

And this "carbon" of flint-like hardness collects in quantities two to three times as great as the other kind.

Can Not Wear

The small residue which **Aristo Motor Oil** deposits is of a different kind. It is soft and fluffy. Most of it blows out with the exhaust. What is left is softer than the metal of cylinders, pistons and rings so can not score or wear them.

Motors so lubricated run thousands of miles farther and tractors months longer without the necessity of cleaning.

Your motor retains tight compression and full power, and you save repairs.

Aristo is made by the lubrication specialists of the **Union Oil Company,** equipped with every accepted facility for producing perfect motor oil. A durable, fine film penetrates to and protects each working part in any weather and at all motor heats. Tested by famous drivers under conditions far more severe than any you will ever cause your motor to encounter.

If you would operate a smoother, well-protected, longer-lasting motor, always use an oil like this. For sale at all first-class garages and service stations.

ARISTO MOTOR OIL

Union Oil Company of California

ARISTO Motor Oil

FAMILY CIRCLE

ALICE W. BARLAND
EDITORIAL CONTRIBUTOR

The world wants men—large-hearted, manly men;
Men who shall join its chorus and prolong
The psalm of labor and the psalm of love.
The times wants scholars—scholars who shall shape
The doubtful destinies of dubious years,
And land the ark that bears our country's good
Safe on some peaceful Ararat at last.
The age wants heroes—heroes who shall dare
To struggle in the solid ranks of truth;
To clutch the monster Error by the throat;
To bear opinion to a loftier seat;
To blot the era of oppression out;
To lead a universal freedom on.
—Selected.

Experience Letters

Dear Mrs. Barland: Of late the home page of THE FARMER has been very interesting, especially the discussion among the young people.

These are questions I have had a vital interest in for years and no doubt will have for years to come .

I have always rebelled at a double standard for young men and women. Why should a young man ask a young woman to do something that he disapproves of himself? "Just another boy," of Washington, says "it is natural to take when no resistance is put up." And also says, "They don't hesitate to take what opportunity offers." This makes my blood boil! Why should it be left to the girl to do all the refusing? According to the Golden Rule he shouldn't only refuse to offer what he doesn't want her to accept but also it is his business to refuse anything that a girl might seem to favor, providing it is not in accord with what he considers right. Men are very inconsistent, most of them. I will make an exception of the one I married. He is as good and clean as any girl.

Concerning the use of tobacco, it is a fact which is well known that women are of a much higher strung nervous organization than men and therefore more susceptible to injury from the use of any stimulant than men and future generations will naturally suffer because of the use of tobacco by women as well as men.

I married 10 years ago and now have six children and am much interested in everything that will affect their future. I have always considered smoking a very filthy habit.

I have found many valuable recipes on this page and the latest is for rhubarb conserve. I didn't think anything so good could be made from rhubarb.

You may be sure I have quite a time making ends meet with my growing family, and another valuable help I got was the suggestion of making rompers from men's pants.

I help with the outside work quite a good deal, with the milking and raising poultry. This summer my husband and I hauled in 25 tons of hay. One of my rewards for work is $5 in premiums at the county fair. I took four blue ribbons and two red ones for poultry.

I hope to see more suggestions in the paper for school lunches, as I have three to put up. We don't care for meat and it is a problem to fix up food so the children will have the proper amount and yet be economical.

JUST ANOTHER READER.

Family Circle Girls

Dear Mrs. Barland: One of the most beautiful things in the world is a pure, comrade sort of friendship between a man and a woman, but such friendships are very rare. After all that has been said we must agree that the plan of things is the right one. If one would but spiritualize his thinking the quest of man for his mate and vice versa would always become a supremely beautiful thing.

It may be some of you will question the "vice versa," but I have no patience with the common idea that women should have nothing to say or do about the choice of a husband. We don't acknowledge it, but I believe nine-tenths of the matches are made by the women. The mother instinct in a normal woman is very strong; why shouldn't she have the privilege of selecting the man who is to be the father of her children? As things stand now, convention denies woman this right.

In order to attract the man of her choice, she must "doll up" and paint her lips and cheeks and often she stoops to things that are unworthy of her, thinking the men like that sort of thing. They really seem to, but if they would be honest with themselves and the girls the false would disappear and fewer mistakes would be made.

Women will do about anything for the men they love and stand by them through trouble and disgrace. Men seldom do that.

Women are often disloyal to each other because there is so much competition between them. Love is as necessary to a woman as sunshine is to a flower. There are, it is true, some fine, strong women who seem happy independent of any man's love, but they are in the minority.

I think if men could be led to feel some responsibility where girls' morals are concerned everybody would be the happier for it. At the present time it seems they are trying to find out how big a fool they can make out of a girl and are succeeding better than they know.

Boys need to be taught more reverence for womanhood and shown the divine side of it. It is true some women make the whole sex blush for their shame, but it is unjust to hold such as representatives of womanhood.

I am an old maid and so far my life has been spent in caring for those I love. I have experienced much trouble and my hair is quite gray.

If you would live your life to the fullest, learn to live generously, but remember you must first be true to yourself and then you are sure to be of service to others.

AN OREGONIAN.

Dear Mrs. Barland: You asked us to tell what we are doing. I live on a 1320-acre stock farm and wheat ranch 14 miles from the nearest town. We have a car and I don't mind the distance much, as it doesn't seem far.

I help in the house and do all the riding in the spring and summer and most of it in the fall, too, but I like to ride and I don't mind it.

We have four saddle horses, so when I get tired riding one I catch another and ride it a while. I also like to read and dance and listen to music. My favorite authors are Zane Grey and Peter B. Kyne. I like to read ancient history, too.

We have beautiful scenery here. From the house we can see Mount Hood, Mount Adams and most of the southern range of the Klickitat hill and if we go on the top of a hill near the house we can see Mount Rainier, the Goat rocks, the Simcoes, Mount St. Helen, the top of Mount Jefferson and a number of other smaller peaks.

We live 23 miles from Goldendale, but we can see the lights of the city every night and from the other side of the prairie we can see miles and miles down the Columbia valley.

We have the most gorgeous sunsets, but it gets very dry, and oh, how the wind blows! We have a canyon on our place and I like to go down there and explore it. The Goldendale flyer goes through the canyon.

We have a car, but we can't go anywhere without traveling on hills and I am afraid if I learn to run the car I shall break my neck on some of the grades. I am a girl of 17 and in high school.

Washington. M. M'C.

HOLIDAY REDUCTIONS IN KODAK ENLARGEMENT PRICES

Write for price list of
ART PROOFS
OLD MASTERS
OLD MASTER ART PROOFS
from your own favorite negatives.

Northwestern Photo Supply Co.
Eastman Kodak Company
KODAK
1415 Fourth Ave.
Seattle Wash.

Read the "Want Ad" page this week for good offers of all kinds.

A COTTAGE PUDDING that is anything but humble

"Eat more wheat"

A cottage pudding, topped off with chocolate sauce, can be glorified into an uncommon dessert—if it's made uncommonly well. And that means Sperry Drifted Snow Flour. Pure, smooth, uniform and always sure to work out. For example:

1 egg
½ cup sugar
1 cup Sperry Drifted Snow Flour
1 teaspoon baking powder
¼ cup milk or water
2 tablespoons melted shortening
½ teaspoon vanilla
½ teaspoon lemon

[*Note:* All measurements are level and flour is sifted once before measuring. One-half pint measuring cup is used.] Sift dry ingredients, except sugar, beat eggs until very light, add sugar gradually, beating with egg beater. When creamy, add dry ingredients alternately with liquid, mixing well. Add flavoring and melted shortening. Bake in a shallow well-greased pan about 15 minutes. Cut into squares and serve with chocolate sauce.

How to make chocolate sauce: Use one-half cup sugar; one tablespoon Sperry Drifted Snow Flour; one-fourth cup ground chocolate; one tablespoon butter; one cup boiling water; one teaspoon vanilla or one-fourth teaspoon cinnamon. Mix all the dry ingredients, add boiling water and cook until thick; then add butter and vanilla.

You'll want this Cook Book—free! The Sperry Cook Book will show how to make many new, as well as many time-tried, dishes. The coupon below will bring your copy—write today!

SPERRY DRIFTED SNOW FLOUR to be sure

Mail this coupon to Sperry Flour Co., Dept. T Sperry Bldg., San Francisco.
Please send me, without cost,, the Sperry Cook Book.
Name ..... Address .....

Just Folks

Does devotion clear your mind or does it confuse you?

To be taken advantage of is no better than to take advantage of another.

Wife and two children complete the family of a young man with whom I was talking. He is getting into the prime of his business career. Knowing that his location calls him into daily contact with many city men of large affairs, I judged that the probabilities all pointed more or less to his following his patrons onto the golf links. Hence my surprise when speaking of Saturday afternoons and Sundays he said:

"No, I do not play golf. I have my own ideas about that. I believe that when a man marries and children come into his home, his time, outside of his business, belongs to his family. I do not believe in going off after I am through with my work and leaving wife and kiddies to themselves. I have a summer place, less than three hours by automobile from my own home. The week-end finds me bundling the family into the car and spending it with them in fishing, boating, as well as in fixing up things about the place. The family enjoys it hugely. So do I. No golf for me."

I know something about this man's work and I do not see that he loses anything in the way of business by not associating with his patrons on the golf links. I know him to be remarkably successful in his line of work.

When a man divides his time between his work and his family, whether he is a city man or a farmer, he is on pretty sure footing in life. EAS

GAME OF WELL-KNOWN SONGS.

One night the family whom we read about in "Home Play," and who hold a weekly party just for the family, were given by mother a list of very well-known songs, the name of each song being part of a question. For instance, we were asked, "Who wrote 'Home, Sweet Home'?" "Who wrote 'America'?" "Believe Me, if All Those Endearing Young Charms"? "Home to Our Mountains"? "Battle Hymn of the Republic"? etc. If we could give the name of the writer of either words or music we were forfeit-free, but if we could not, we were required to sing or whistle a stanza of the song which came, in its proper turn, to any of us as the list was handed round.—From "Home Play."

Latest High Class Patterns for the Home

Please order the patterns you desire at least two or three weeks before you wish to ve them. Desiring to obtain the latest high-class patterns for its readers, THE FARMER as made arrangements to have them sent direct from the east, and under present ailing conditions it takes about that time for them to reach you.

4521. Ladies' Dress. Cut in sizes: 34, 36, 38, 40, 42 and inches bust measure. A 38 ch size requires 5 3-8 yards 40 inch material. The width the foot is 2 yards. Price c.

4535. Girls' Dress. Cut in 4 zes: 8, 10, 12 and 14 years. 12 year size requires 4 yards 32 inch material. Price 10c.

4520. Misses' Dress. Cut in sizes.: 16, 18 and 20 years. 18 year size requires 5 1-8 rds of 40 inch material. The idth of the skirt at the foot 1 3-4 yards. Price 10c.

4248. Boys' Coat. Cut in 4 zes: 4, 6, 8 and 10 years. 6 year size requires 2 1-8 rds of 54 inch material. rice 10c.

4524. An Attractive Costme. Cut in 4 sizes: Small, -36; medium, 38-40; large, -44; extra large, 46-48 inches ist measure. A medium size quires 11 1-8 yards 36 inches ide. For drapery and fichu contrasting material 4 1-2 rds 36 inches wide is reuired. Hat alone requires 5-8 rd. Without long sleeves 5-8 rd less is required. Price cents.

4536. Girls' Dress. Cut in 4 zes: 8, 10, 12 and 14 years. 12 year size requires 3 5-8 rds of 40 inch material. ice 10c.

4301. Ladies' Work Dress. t in 7 sizes: 36, 38, 40, 42, , 46 and 48 inches bust meas- e. A 38 inch size requires 1-4 yards of 36 inch material. e width of the skirt at the ot is 2 1-2 yards. Price 10c.

4528. Girls' Dress. Cut in 4 zes: 2, 4, 6 and 8 years. A year size requires 1 3-4 yard 36 inch material. Price 10c.

4162. Ladies' House Dress. t in 7 sizes: 36, 38, 40, 42, , 46 and 48 inches bust easure. A 38-inch size reuires 6 1-8 yards of 32-inch aterial. The width at the ot is 2 3-8 yards. Price 10c.

4517. A New Apron. Cut in e size—medium. To make illustrated requires 1 5-8- rd of plain, and the same ount of figured material. ice 10c.

4134. Child's Cape. Cut in 4 sizes: 2, 4, and 8 years. A 6-year size requires 2 1-4 rds of 44-inch material. Price 10 cents.

4190. Ladies' Night Dress. Cut in 7 zes: 36, 38, 40, 42, 44, 46 and 48 inches bust measure. A 38-inch size requires 4 3-4 yards of 36-inch material. Price 10c.

Send 12c in silver or stamps for our up-to-date fall and winter 1923-1924 Book of Fashions.

Please fill in this order and mail with remittance to:

PATTERN DEPT., PACIFIC NORTHWEST FARM TRIO, Spokane, Wash.

Enclosed find ..... cents for which send me the following:

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F. D..... Box No..... St. No. .....

Be sure to give the pattern number and the correct size.

20 MULE TEAM BORAX

To make white goods even whiter, to protect the finest fabrics from injury and to prevent the most delicate colors from fading, always use 20 Mule Team Borax. It is a mild, sure solvent and the greatest natural water softener. 20 Mule Team Borax cleans laces and the most delicate materials perfectly without injury. 20 Mule Team Borax is *always* necessary in washing any fabric, no matter what kind of soap is used. It will protect woolens from shrinking, and all colors from fading. It is the greatest cleansing agent known. Make this week's wash clean and safe. 20 Mule Team Borax is in all clean farm kitchens and bathrooms. Is it in yours? At all grocers and druggists. Send for the Magic Crystal Booklet.

PACIFIC COAST BORAX COMPANY

NEW YORK CHICAGO SAN FRANCISCO

NATURES GREATEST CLEANSER

Color Your Butter

"Dandelion Butter Color" Gives That Golden June Shade and Costs Really Nothing. Read!

Before churning add one-half teaspoonful to each gallon of cream and out of your churn comes butter of Golden June shade to bring you top prices. "Dandelion Butter Color" costs nothing because each ounce used adds ounce of weight to butter. Large bottles cost only 35 cents at drug or grocery stores. Purely vegetable, harmless, meets all state and national food laws. Used for 50 years by all large creameries. Doesn't color buttermilk. Absolutely tasteless.
Wells & Richardson Co., Burlington, Vt.

Free to the Ruptured

Reduced Fac-Simile Gold Medal

STUART'S PLAPAO-PADS are different from the truss, being mechanico-chemico applicators, self-adhesive purposely to hold the distended muscles securely in place. No straps, buckles or spring attached—cannot slip, cannot chafe or press against the pubic bone. Thousands have successfully treated themselves at home without hindrance from work—most obstinate cases conquered.

Reduced Fac-Simile Grand Prix

Soft as velvet—easy to apply—Inexpensive—awarded Gold Medal and Grand Prix. Process of recovery is natural, so afterwards no further use for trusses. We prove it by sending trial of Plapao absolutely **FREE**. Write name on coupon and send today.
Plapao Co., 991 Stuart Bldg., St. Louis, Mo.
Name .....
Address .....
Return mail will bring Free Trial Plapao.

Glance over the bargains on the "Want Ad" page.

If you want something not offered among our classified ads this week,

High Points in News of the Week

The action of President Coolidge in sending personal and official representatives to the wheat growing districts to investigate the condition of the wheat farmer and to urge and assist in the development of the cooperative grain marketing is considered by many leaders to be little if any short of official indorsement of the idea of cooperative marketing. The president has virtually gone on record as in favor of the extension of the cooperative marketing of grain throughout the entire country, and this indorsement in the face of the fact that cooperators are just now launching a movement for the signing up of 65 per cent of the total yield of next year's crop is significant.

Three representatives of the government are now touring the wheat growing districts consulting with leaders in agricultural work. The delegation is headed by Eugene Meyer, director of the war finance corporation. This delegation entered the Pacific northwest this week, where it will spend a few days, the first hearing being held at Spokane Wednesday of this week.

President Coolidge last week in a telegram to the international farm congress which was in session last week in Kansas City, said:

"I shall note your proceedings with the utmost interest.

"An international consideration of agricultural problems is particularly appropriate now," the message declares, "for the agricultural crisis is, in truth, of international as well as domestic character. It seems that in almost every country which has a considerable variety of international problems, agriculture in particular confronts a difficult and in many cases a menacing situation.

"Of all the productive activities it seems most universally to have suffered by reason of the war."

* * *

News dispatches indicate little progress in negotiations between Germany and France for a settlement of the reparations question. While Germany has to considerable extent ceased her passive resistance in the Ruhr district the indications are that she is seeking special benefit from the resumption of activities in this section rather than taking steps to bring about agreement on the entire reparations issue. France has declined to enter into any negotiations regarding such special benefit until the entire reparations matter is settled.

There has been some rioting in the Ruhr district and other sections of Germany during the last week, though in the main order has been easily restored. Shortage of food and fuel supplies as a result of the chaotic conditions that have existed for several months is the immediate cause of the disturbances.

* * *

The American Federation of Labor closed its convention at Portland last week by the reelection of President Samuel Gompers, together with the reelection of most of the other officers. El Paso, Texas, will be the scene of the 1924 convention. The Portland convention adopted, among others, the following resolutions:

Favoring the modification of the Volstead prohibition law so as to permit the manufacture and sale of light wine and beer; opposing the Ku Klux Klan; favoring the direct election of federal judges; favoring a congressional veto power over the decisions of the United States supreme court; opposing recognition of the Russian government as now organized by the United States; denouncing communism as an enemy not only of democracy but of organized labor; authorizing a continuation of the federation's nonpartizan political campaign committee; opposing the submission of any question concerning wages and working conditions to any government commission; favoring the principle of old-age pension; favoring conscription of property as well as persons in national emergencies; favoring the pardon of Thomas W. Mooney and Warren K. Billings who are now in federal prison as the result of bombing operations in California during the war; abolition of the government railway board.

* * *

Prohibition Commissioner Haynes in a recent address declared that the Coolidge administration is four-square for strict enforcement of the prohibition law. "We all know how valiantly President Harding supported and sponsored it," said Mr. Haynes. "No less wholehearted is President Coolidge's position on law enforcement."

* * *

A Southern Pacific passenger train was held up south of Ashland, Ore., last Thursday, the bandits killing the engineer, the fireman, a brakeman and a mail clerk. At this writing the bandits have not been arrested.

* * *

Following a long controversy between the members of the legislature and Governor Walton of Oklahoma, the legislature convened last week at the call of the governor. The governor asked that a measure be passed prohibiting the secrecy of the Ku Klux Klan. Up to this time the legislature has ignored this request, but has started instead the investigation looking toward the proposed impeachment of the governor and other public officials.

* * *

Declaration is made by those in charge of prohibition laws throughout the United States that there is a regrettable indifference being manifested by prohibition organizations, churches, etc., toward the liquor question at the present time in view of the nation-wide movement that is being conducted by the liquor forces for modification, if not destruction, of the Volstead act and of the national prohibition amendment. Prohibition forces are urged to be on the alert.

* * *

A report that the name of Henry Ford was being placed on the presidential preferential primary ballot in Nebraska has caused his personal secretary to issue a statement saying that Mr. Ford did not desire to answer at this time the question of whether or not he would be a candidate for president for next year.

* * *

Former Premier Lloyd George of England is now visiting in Canada. He will swing back across the American line and visit several points in the United States closing his tour of the American continent early in November.

* * *

Owing to a reported shortage in last year's corn supplies and to damages to the present crop from frost, corn was quoted exceptionally high last week. At New York it reached $1.22 1-2 per bushel, or about 6 cents per bushel higher than the highest priced wheat on that market. Corn normally sells for about 25 cents per bushel below wheat.

* * *

The interstate commerce commission has refused to grant changes in transportation, refrigeration and car heater charges on apple shipments from the Wenatchee and Yakima districts of Washington in accordance with petitions filed by growers of those districts.

Farm Business and Markets Outlook

(Continued from page five.)

LATEST QUOTATIONS

The Livestock Market.

PORTLAND, Ore., Oct. 13.—Cattle—Beef steers, good grade, $7@7.50; medium grade, $5.75@7; common, $4.50@5.75; beef cows and heifers, good grade, $4.75@5.50; medium, $4@4.75; common, $3.50@4; canners and cutters, $1.50@3.50. Bologna and butcher bulls, $3@4.25. Feeder steers, $5@5.50. Medium to choice calves 190-lb. down, $9.50@11.75; 190 to 260-lb., $7.50@9.50; 260-lb. up, $6@7.50; cull and common $4@6.

Hogs—160 to 200-lb. medium good and choice $8.90@9.50; 200 to 250-lbs., $7.85@9; 250 lbs. up, $7@7.85; packing hogs, smooth, $6.50@7.50; packing hogs, rough, $5@6.50; slaughter pigs, $8.50@9.25; feeder pigs, $8.25@8.75.

Sheep and lambs—Lambs, 84 lb. down, medium, good and choice, $9.50@10.75; cull and common, $7@9.50; yearling wethers, medium to choice, all weights, $6@9; wethers, $5.50@7.50; ewes, medium to choice, $3.50@6.50.

SPOKANE, Oct. 13.—Cattle—Prime steers $6.75@7.25; good to choice steers, $6.25@6.75; medium to good steers, $5.50@6.25; fair to medium steers, $5@5.50; common to fair steers, $4.25@5; choice cows and heifers, $4.75@5.25; good to choice cows, heifers, $4@4.75; medium to good cows, heifers, $3.50@4; fair to medium cows, heifers $3@3.50; canners, $1.50@2.25; bulls $3.25@4; light veal calves, $8@9; heavy veal calves $6.50@8; stockers and feeders, $4@5.25.

Hogs—Prime mixed, $8.75@9.10; medium, $8.50@8.75; heavies $5.75@8; fat pigs, $8.50@8.75; stockers and feeders 7.25@7.75.

Sheep—Prime lambs, $10@10.35; fair to medium, $8.50@10; yearlings, $7@8; wethers, $5.50@7; mutton ewes, $3@5.

The Grain Market.

PORTLAND, Ore., Oct. 13.—Wheat—Hard white, Bluestem, Bart, $1.06; soft white and western white, $1.05; hard winter and western red, $1.02; northern spring, $1.03.

Oats—No. 2 white feed, October, $32.50; November $33; No. 2 gray, October, November, $31.

Barley—No. 2, 46 pounds minimum, October, November, $31.50; 44 pounds, October, November, $31.

Corn—No. 2 eastern yellow shipment, October, $43; November, $38; No. 3 do, November, $37.50.

Hay and Feed Grain.

PORTLAND, Ore., Oct. 13.—Millfeed—City delivery prices: Millrun, $31 per ton; middlings $43; scratch feed, $48; rolled barley, $41@43; cracked corn, $51; rolled oats, $41.

Hay—Buying prices f. o. b. Portland: Alfalfa, $16.50@17 ton; cheat, $12@13; valley timothy, $18@19; eastern Oregon timothy, $20@22; clover, $13@14; oat, $14@15; oat and vetch, $15@16; straw, $8 per ton.

General Produce.

PORTLAND, Ore., Oct. 13.—Butter—Cubes, extra, 46@47c lb.; prices, parchment wrapped box lots, 51c; cartons, 52c. Butterfat, 51@54c, delivered Portland.

Eggs—Buying prices: White hennery standards, 45@48c; mixed color standards, 40@42c dozen. Selling prices: Front street selects, 52c; candled ranch, 46@48c. Association selling prices, cash at store; extras, 51c; pullets, 40c.

Cheese—Price to jobbers, f. o. b. Tillamook. Triplets, 30c; longhorns, 31c; loaf, 32c per lb.

Poultry—Hens, 14@22c; springs, 21@22c; ducks, large Pekin, 20c; geese, young 15c; turkeys, live, young, 30@33c.

Dressed meats.—Veal, fancy, 15c; pork, fancy, 13c per pound.

SEATTLE, Oct. 13.—Eggs—Select local ranch, white shells, cases included, 53c per dozen f. o. b. Seattle; mixed colors, 50c per doz; pullets, 37c per doz; checks 26c per doz; cases returned to shippers, 1c less; do to country stores f. o. b., 50c per doz. loss off; Eastern Washington, case count, 50c per doz f. o. b. Seattle.

Butterfat—F. o. b. Seattle. A grade, 52c per lb; raw milk, $2.35 per cwt.

Poultry—Hens, 4½ lbs and up, 24c per lb; do 3½ and under 4½ lbs, 16c per lb; springs, 2 lbs and heavier, 23c per lb; do 1 to 2 lbs, 23c per lb; hens, 3 to 3½ lbs, 12c per lb; do dry picked, 3c above live; capons, live, fat, 6 to 10 lbs, 32c per lb; do dry picked, fancy, dressed, 35c per lb; do old roosters, 11c per lb; Belgian hares, 3½ lbs and heavier, 12c per lb; geese, fat, live, 15c per lb; ducklings, live, 3½ lbs and up, 18c per lb; ducks, old, over 3 lbs, 15c, per lb; turkeys, fat dry picked, 12 lbs and heavier, 36c per lb; do 6 to 12 lbs, 35c; do live, 28c per lb; squabs, large, dressed, $4 per doz; pigeons, $2; guineas, $6 per doz.

SPOKANE, Oct. 13.—Poultry, Live Weight—Hens, 4 lbs and over, 18c; light hens, under 4 lbs, 14c; springs, 20@22c; old roosters, 8c.

Fresh Ranch Eggs—$8.50 to $9.50 case; fancy poultry farm, $9.50@10.

Butterfat, 49c.

Range of Live Stock Prices for Week Ending October 10

	Omaha.	Chicago.	Kansas City.
CATTLE.			
Choice and prime heavy steers (1100 lb. up)	10.50@12.50	11.35@13.00	10.50@12.25
Good heavy steers	9.00@11.00	10.35@12.00	9.25@10.50
Medium heavy steers	7.50@ 9.50	8.40@10.90	7.50@ 9.25
Common heavy steers	6.00@ 7.50	5.85@ 8.75	6.00@ 7.50
Choice and prime light steers (1100 lb. down)	10.25@12.25	11.50@12.75	10.25@12.00
Good light steers	8.75@10.75	10.50@11.85	9.00@10.25
Medium light steers	7.25@ 9.25	8.40@10.75	7.35@ 9.00
Common light steers	5.00@ 7.25	5.50@ 8.50	5.00@ 7.35
Common to choice butcher heifers	4.00@ 9.50	4.50@11.25	4.00@ 9.00
Common to choice butcher cows	3.50@ 8.00	3.50@ 8.75	3.50@ 7.50
Bologna and beef bulls	3.00@ 7.00	3.00@ 7.00	2.50@ 6.00
Canners and cutters, cows and heifers	2.25@ 3.75	2.50@ 3.50	2.15@ 3.50
Canner steers	3.00@ 5.00	3.25@ 5.50	3.00@ 5.00
Medium to choice light veals	7.00@10.00	7.75@12.50	6.50@10.00
Common to choice heavy veals	3.25@ 8.50	3.00@12.25	3.00@ 9.50
Common to choice feeders (750 lb. up)	5.00@ 9.00	5.25@ 8.65	4.75@ 9.00
Common to choice feeders (750 lb. down)	4.25@ 8.00	4.40@ 8.00	4.25@ 8.00
Common to choice stocker calves	4.25@ 8.00	.....	4.00@ 7.50
Common to choice stocker cows and heifers	3.25@ 6.00	3.25@ 5.25	2.75@ 6.00
HOGS.			
Top of market	7.85	8.55	8.00
Bulk of sales	6.75@ 7.75	7.00@ 8.30	7.00@ 7.95
Heavy (250 lb. up)	7.00@ 7.80	7.50@ 8.55	7.45@ 8.00
Medium (200-250 lb.)	7.10@ 7.85	7.55@ 8.50	7.45@ 8.00
Light (150-200 lb.)	6.75@ 7.75	7.20@ 8.35	6.50@ 7.90
Light lights (130-150 lb.)	.....	6.65@ 7.90	6.35@ 7.40
Smooth packing sows (250 lb. up)	6.75@ 7.25	6.90@ 7.45	6.25@ 6.75
Rough packing sows (200 lb. up)	6.60@ 7.00	6.50@ 7.20	5.85@ 6.40
Medium to choice pigs (130 lb. down)	.....	6.00@ 7.50	.....
Stock pigs	5.25@ 7.00	.....	5.25@ 6.75
SHEEP AND LAMBS.			
Medium to prime lambs (84 lb. down)	11.00@13.25	11.50@14.00	10.60@13.25
Culls and common lambs	8.50@11.75	8.50@11.75	7.00@10.75
Medium to prime yearling wethers	8.00@10.50	8.50@11.25	7.25@11.00
Medium to prime wethers	6.00@ 8.00	5.25@ 8.25	5.25@ 8.25
Medium to choice ewes	3.25@ 6.25	3.75@ 6.75	3.50@ 6.50
Culls and common ewes	1.00@ 3.25	1.00@ 3.75	1.00@ 3.50
Feeder lambs	11.25@13.00	11.50@13.25	.....

Our Dutch Bulbs *From* Holland

Are Now Here

Direct importation from the best growers of Holland, consisting of

Hyacinths, Tulips, Crocus, Narcissi, Daffodils

for indoor forcing and outdoor growing.

All of our bulbs are the No. 1 grade and are much superior to the No. 2 ordinary grades because they produce more and larger blooms.

Our fall catalog of Bulbs, Nursery Stock, Etc., is now ready and will be mailed to you **FREE** on request.

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THE INLAND SEED CO.

913 First Ave. Spokane, Washington

We Have No Secrets

There is nothing mysterious or unusual in the conduct and operation of a public utility like a light and power company. It functions just as any other corporation except that it is regulated by the state and its profits limited by the state to a reasonable return upon its investment.

A public utility has to meet the same problems and is affected by the same conditions as the manufacturer, the merchant and the farmer.

A public utility can only prosper as the district in which it operates prospers. It occupies the same position in your neighborhood as any other form of business endeavor. It desires to cooperate with you in building up your community and the state.

NORTHWEST ELECTRIC LIGHT AND POWER ASSOCIATION

One little girl hopes the cousins and Aunt Nellie are happy and well. She says she is. Her home is in Lincoln county, Wash., and her name is Dorothy Timm.

Loretta Santo is the owner of three goats and a pony named Cricket. She also has two cats and a dog, but the dog is an old dog and she is going to trade him for a puppy and then train the puppy to look after Rose and Blossom, two cows on the Santo farm. The Santos live in Stevens County, Wash.

Birthday Greetings

THURSDAY, October 18—Margaret Anderson, 9 years old; Keith Weston, 10.

Friday, October 19—Frances Zumwalt, 11 years old; Dorris Eddings, 11; Alma Tarter, 9.

SATURDAY, October 20—Vera Louise Linsey, 11 years old; Emma Miller, 11; Cynthia Harlow, 11.

SUNDAY, October 21—Walter Colley, 9 years old; Florence Waugh, 11.

MONDAY, October 22—Doris Groff, 9 years old.

TUESDAY, October 23—Thordis Fjerlie, 9 years old; Agnes T. Johnson, 9; Raymond Larsen, 6; Vera O'Neil, 11; Evelyn Aleen, 11.

BEDTIME STORIES

By THORNTON W. BURGESS.

FARMER BROWN'S BOY REPAYS.

A little kind and good deed
Is like a tiny little seed;
It grows and grows and grows and grows,
And where 'twill stop nobody knows.

The little friends of Farmer Brown's boy who were trying to help him by killing all the bugs and worms in the old orchard, the garden and the berry patch were doing it to repay him for his kindness to them. They did not expect any further reward. No, indeed! Such a thought had not once entered their heads. They didn't even know if Farmer Brown's boy would know what they were doing, and they didn't have the least idea that he would know why they were doing it.

But Farmer Brown's boy did know what they were doing. He listened to the chattering of the birds in the old orchard and when they didn't know it he watched them. Then he called Farmer Brown to listen and watch. "There are the best friends we've got," he whispered. "I guess we'll have plenty of apples this year, for those birds won't leave a bug or a worm on the trees if they keep on. It's the same way down in the garden. Old Mr. Toad is working his head off down there, and I found a lot of places where Jimmy Skunk has dug up grubs. Of course, I don't suppose they know that they are helping us, but they are just the same, and I'd like to do something for them."

When they had drunk their fill and bathed to their hearts' content, they sang with all their might.

"Why don't you?" asked Farmer Brown with a twinkle in his kindly eyes.

"What?" demanded Farmer Brown's boy.

"Well, it seems to me that those little folks must get dreadfully thirsty these hot, dry days, and they must have to go a long way for a drink and a bath."

"The very thing!" cried Farmer Brown's boy delightedly. "I wonder I didn't think of it before."

With this he strode off toward the barn and there for a time he was very busy, and while he worked he whistled. By and by he came out to the Old Orchard and began to dig a hole just where the sun broke through the branches of one of the apple trees. The birds stopped their work and their singing to watch. What could he be doing?

When the hole was deep enough to suit him he brought a post and put in it. Then he pounded the earth down all around it so that it would stand solidly. On top of the post he fastened a shallow pan. Then he brought a pail of sparkling fresh water and filled the pan, after which he went away and hid where he could watch. At first the birds looked at the post and pan a wee, wee bit suspiciously. Was it a scarecrow or a kind of trap? Then Tommy Tit the chickadee came along and right away he guessed what it was.

"Dee, dee, dee! See me! See me!" he cried joyously, and flitted down to the edge of the pan and began to drink, for he was very thirsty. Then he hopped right in and took a bath. How he did make the water fly! It was so cool and refreshing. "Dee, dee, dee! See me! See me!" he sang joyously.

Then one after another the other birds did the same thing, and when they had drunk their fill and bathed to their hearts' content they sang with all their might and main to let everybody know how happy they were, especially Farmer Brown's boy, for they knew then that he had done this to repay them for their work in the old orchard.

Farmer Brown's boy chuckled. Then he put a pan of water in the berry patch and another in the garden, only these he put on the ground for the little people who like the ground best. Every day he saw to it that each pan was filled with fresh, clean water, and so he won his way still farther into the hearts of the little people of the old orchard and the green meadows. They knew then that he was indeed their friend.

(Copyright.)

LETTERS WELCOMED BY AUNT NELLIE.

Among recent letters received by Aunt Nellie are those from cousins whose names follow. A few of these will be published each week in the regular edition of THE FARMER and others will appear from time to time in The Junior Farmer:

Ople Allen, Vesta Rogers, Anna Mae Tarter, Nellie Hall, Otto Slotemaker, Mary Lautenschlager, Bonnie Branton, John Branton, Emma Lautenschlager, Ruby Bailey, Esther Bolnet, Helen Wise, Alice Lavina Halsted, Ruth Wallin.

Auto Men Wanted!

Everywhere in California auto men are wanted. Trained mechanics, chauffeurs, battery experts, machine shop foremen, garage managers; all draw big pay. Learn the business quickly and easily in our big training shops. No previous experience necessary. Any man, of any age can learn. Tools and equipment FREE. Work guaranteed to earn room and board while learning. Only expense is for low tuition. Write for FREE 72-page illustrated book of facts. Explains everything.

NATIONAL AUTOMOTIVE SCHOOL
"Oldest and Best in America."
Dept. 30, 4004 S.Figueroa, Los Angeles, Cal.

IRRIGATE

Rife Rams provide a continuous supply of water night and day, winter or summer, without fuel, labor or repairs. A stream with 3-foot fall and 3-gallon per minute flow will operate it. Over 20,000 in use.

Tell us about your water conditions and we'll send you a quotation or an expert to talk things over. Write today.

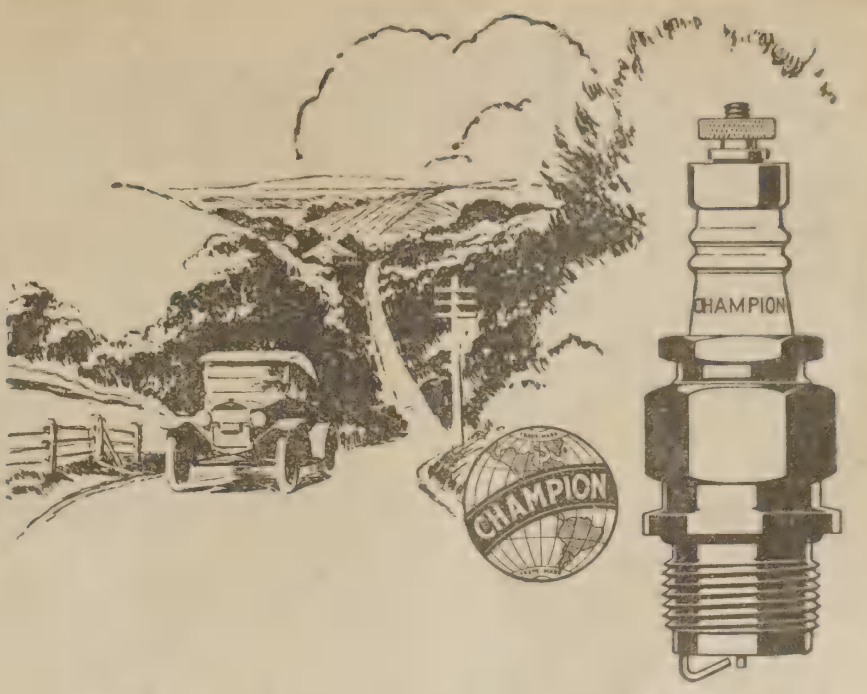
H. W. TRUSCOTT PUMP WORKS
295 Hawthorne Ave. Portland, Ore.

with a RIFE RAM

IS BABY UNDER WEIGHT?

Try DENNOS and watch him grow. DENNOS often agrees when all else has failed. Sample free. Sold by druggists. Endorsed by doctors.

DENNOS
The Milk Modifier
Dennos Food Co. Portland, Ore.



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Because more than 65 per cent of all spark plugs produced are Champions the price of the Blue Box Line is but 75 cents and Champion X 60 cents.

The savings made possible by Champion's tremendous production are passed on directly to the car owner through these lower prices.

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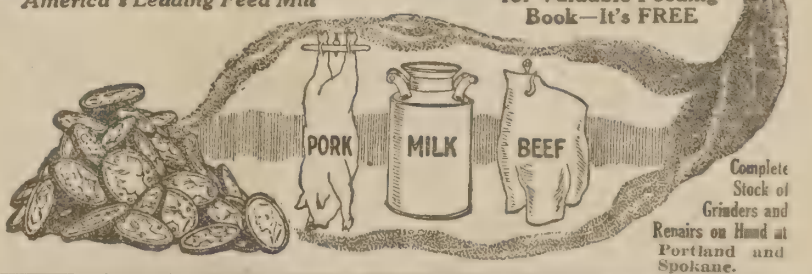

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Than Cuticura

Sample each (Soap, Ointment, Talcum) free of Cuticura Laboratories, Dept. U, Malden, Mass.

WOOL CARDING

Your wool scoured and carded for batt and mattresses.

Old wool bedding made new. Write for catalogue and shipping tags.

CRESCENT BATT & BEDDING CO.
Stayton, Oregon.

The department editors of this paper are anxious to be of service to you. Do not fail to write to us if they can be of help to you.

Three Winter Wheats

Eastern Washington farmers grow many varieties of wheat, but the State College of Washington believes there should be but three varieties grown. Based upon the experiments conducted at Pullman, Waterville and Lind, it is shown that Triplet, Hybrid 128 and Turkey Red are the three winter wheats recommended for eastern Washington farmers.

Figuring yields upon a price basis for two years in every case, the three wheats recommended exceed the value of Red Russian, Jones Fife and Fortyfold, the latter varieties being used on many of the farms at the present time.

An exhibit of these three wheats and what they have done in the past years has been shown at many of the fairs in Washington this year. Leonard Hagnauer prepared the exhibit which shows that the three recommended varieties will yield higher than what is being used, making a difference of $8 per acre to the farmer in the Palouse country, $2 to $3 in the Waterville country and $1 to $2 in the Big Bend district around Lind.

Turkey Red is recommended for the central and southern part of Okanogan, all of Douglas, Grant, Franklin and most of Adams, and the drier portions of Whitman, Benton and Walla Walla counties.

Hybrid 128 is recommended as the winter variety for the eastern portion of Okanogan, all of Ferry, Stevens and Pend Oreille counties growing wheat, the northeastern portion of Lincoln, most of Spokane, and a strip through Whitman, Garfield, Columbia and Walla Walla.

Triplet grows best in the southern part of Spokane, eastern Whitman, a large part of Garfield and some of Walla Walla and Asotin counties.

Turkey Red is also recommended as the winter wheat for the dry sections of the irrigated counties of Chelan, Kittitas and the extreme eastern part of Yakima counties.

Lacey Holds Local Fair

The boys and girls played an important part in the recent fair held in the schoolhouse at Lacey, Thurston county. The potato club displayed many varieties of potatoes that had excellent size, were well graded and the quality was very good. The girls displayed a large assortment of canned goods and sewing.

The general display of fruits and vegetables showed that the farmers in this district are raising as good products as many other parts of the state. The women had a complete exhibit of baking and canned goods. The flower show brought out some well-selected cut flowers of the season and the potted plants added to the display.

The curio display was varied and interesting. This collection was under the supervision of Mrs. Jennie Bagley, and included pewter plates, some of which were over 150 years old. The Fleetwood family contributed an old muzzle-loading rifle that was brought to Washington in 1862 over the old Oregon trail. There were Indian arrowhead, idols and many yother interesting things. Mrs. Bagley showed a pair of pillow shams made from linen woven on a hand loom by her great-great-grandmother.

The manual training department of the Lacey school showed several articles that had been produced in the school shop.

Industrial exhibits were also displayed. Miss A. Belle Shelton, home demonstration agent, displayed several good charts on diets. Lunch was served in the basement of the schoolhouse by the ladies.

The officers of the fair are: M. W. Tobin, president; Andy Chors, vice president, and Lawrence Huntamer, secretary-treasurer.

NEW JERSEY RECORD.

Lulu Mary of Ashburn, a Jersey cow owned by J. M. Dickson & Son of Shedd, Ore., has recently completed a new world record in the 305-day division, under the rules of the American Jersey Cattle club, by producing 844.27 pounds of butterfat in the 305 days and dropping a calf well within the time prescribed for class AAA. By so doing she displaced St. Mawes Pretty Lady, with 827 pounds, and, besides this, is the fifth Oregon cow to raise that record since last November, when another Jersey owned by the Dickson farm brought the record to the state. Mary is richly bred along producing lines, having St. Mawes, Rosaire's Olga Lad and Golden Glow's Chief close up in her pedigree. Her dam is by the senior herd sire at the farm and is closely related to the ex-world record senior yearling, Lulu Alphea of Ashburn, that was also bred on the farm.

NO STUMP TOO BIG FOR THE
HAND POWER
K Stump Puller

One man with a K can rip out any stump that can be pulled with the best inch steel cable. No Digging—No Expense for Teams or Power

Works by leverage—same principle as a jack.

Made of the finest steel—guaranteed against breakage. Endorsed by U. S. Government experts.

Write today for free booklet on Land Clearing.

The Fitzpatrick Products Corporation
50 Pine St., New York
952 Mission Street, Box 32
San Francisco, Cal.

Snohomish County Fair

The seventh annual Snohomish county fair at Granite Falls, September 27-30, was a real success this year. Ever increasing interest in the fair has crowded the exhibit buildings to their full capacity and keen competition was felt in nearly all departments. The superintendents in all the various departments are satisfied that this year's fair was the best so far and that the quality and number of the exhibits have not been equaled in the past.

Parley Twogood, a well-known pioneer in the community, and superintendent of the live stock show, displayed his string of high-grade Percherons and made a clean sweep of the prize money in all the classes in which he exhibited. One lonesome little saddle pony, owned by Mrs. George Pinkston, composed the entire light horse class and displayed a blue ribbon after the judges had passed, which it might well have earned in the presence of many other entries.

The leading display of purebred cattle was the string of Guernseys from the Valley Gem Farms, owned by W. A. Wrage and C. H. Crewe of Arlington. They have 45 head and are breeding only purebred stock. The herd bull, Lishman's Son, which was on exhibit, is an animal of fine type and a descendant of Governor of the Shene, the daughters of which are claimed to have made more A. R. records than those of any other bull of any other breed.

The live stock exhibit contained other breeds in both grade and purebred stock.

The poultry exhibit was not large, but the birds on display were all good types and what little competition there was was sharp.

The boys and girls' clubs and school exhibits were of high quality and extensive and showed well the tendency of the younger folk to do things.

The various sections of the county worked well together in supporting the fair and there were large numbers of out of town visitors. The fair attracted great numbers of children who found only too much to keep them busy during their visit.

BEES NEED WINTER FOOD.

Make sure your bees have between 40 and 50 pounds of stores for the winter.

PESSIMIST AND OPTIMIST.

The wise man from the city was watching the farmer boy hoe corn. "Looks like you have got only half a crop there, Sonny," he said.

"Yep," said the boy, cheerily, "landlord gets the other half."

"Corn looks kind of yellow, doesn't it?" inquired the wise man.

"Yep, that's the kind we planted," said the farmer boy.

ABSORBINE

will reduce inflamed, swollen Joints, Sprains, Bruises, Soft Bunches; Heals Boils, Poll Evil, Quittor, Fistula and infected sores quickly as it is a positive antiseptic and germicide. Pleasant to use; does not blister or remove the hair, and you can work the horse. $2.50 per bottle, delivered. Book 7 R free.

ABSORBINE, JR., the antiseptic liniment for mankind, reduces Painful, Swollen Veins, Wens, Strains, Bruises; stops pain and inflammation. Price $1.25 per bottle at dealers or delivered. Will tell you more if you write. Liberal Trial Bottle for 10c in stamps.

W. F. YOUNG, Inc., 571 Lyman St., Springfield, Mass.

Market Quotations by Wire
One Valuable Feature of
Your State Farm Paper

Like any other business man, the producer of grain, fruit, live stock and other farm products must watch market conditions closely. If he does not do so, he is sure to lose by selling when he ought to hold, or by holding when he ought to sell.

Appreciating this fact, The Washington Farmer gives its readers each week a complete, reliable summary of prices in the principal market centers. Quotations are flashed to this paper by wire; then put into type and printed by means of speedy modern machinery; thus reaching our readers at the earliest possible moment.

In addition, The Washington Farmer presents a weekly survey of crop and weather conditions; reports yields; gives data upon price tendencies; prints the details of cooperative marketing movements; in fact, assembles information of every kind which will enable Washington farmers to market their products more intelligently and profitably.

This market service is just one of the many ways in which this magazine is striving to help you week in and week out. The price of $1 for five years, which we ask in payment, is surely small payment for such service. Cooperation from you and other loyal readers will help us improve our service still further without increasing our subscription rate.

"Cooperation" means renewing your subscription at least 60 days in advance of the expiration date on the wrapper, and including the orders of friends and neighbors with your own.

We say to our friends: "Send your subscription orders direct. Get your neighbor to do the same. We will give you and your neighbor the benefit of every penny which would ordinarily go to the agent handling the subscription."

If you believe in cooperation, help us make our plan an even greater success than it has been in the past. Send in your order if you haven't already done so, and let as many neighbors as possible know about our money-saving plan.

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50c for 3 Years
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Must Treat Show Hogs

W. H. Lytle, state veterinarian of Oregon, has issued a ruling that all hogs exhibited at the Pacific International Live Stock exposition at Portland in November must have been given the standard treatment to protect them against hog cholera. In part, the notice sent out by Dr. Lytle reads as follows:

"If what is known as the serum alone treatment is used it must not have been given earlier than 30 days before exhibition. If what is known as the serum simultaneous or the virus treatment has been given it should not have been given within five days before date of exhibition. All hogs given the serum simultaneous or vaccination treatment for hog cholera must have their bodies dipped or sprayed in some of the standard disinfectant solutions before being shipped.

"It will be necessary that all owners have a certificate of immunization, describing in a general way their animals that are to be exhibited, so evidence will be at hand showing this immunization to have been given."

GRAND CHAMPION.

The typical milking Shorthorn heifer here shown was junior and grand champion at the Grays Harbor fair at Elma, Wash. She is owned by E. C. Truesdell & Son of Centralia. She had only the Truesdale herd to compete with at Elma, but defeated a mature cow that had beaten her at one other place.

GUERNSEY BREEDERS BANQUET.

The Guernsey breeders held a banquet on Wednesday night during the Western Washington fair at Puyallup and elected the following officers for the coming year: J. E. Grew, Arlington, president; J. H. Taylor of Chehalis, secretary, and Miss Katherine Gile of Chinook, assistant secretary. Joe Vance of Yakima and Dr. J. W. Keyes of Spokane were reelected to the board of directors.

The speakers at the banquet were E. L. Westover of Portland, Dr. Park Weed Willis of Seattle and Senator William Bishop of Chimacum, who talked on the butter substitute referendum. There were about 40 who attended and George Gue acted as toastmaster.

HOGS IN THE MOVIES.

The National Duroc Jersey association is again this year making moving pictures of representative herds and individuals and their breeders for use throughout the country as breed advertising. Of especial interest is a new film soon to be completed showing a litter of Duroc Jersey pigs as they were at the end of each 30-day period in their lives. The last pictures of the film will show them dressed in the packing house, with one cut up into hams, bacon, spareribs, etc., to show the way they dress out.

CONSISTENT BREEDERS.

There are no subjects that S. L. Banks of Tekoa and A. G. Woodward of Fairbanks like to discuss better than dairy cattle and hogs. That each is consistent in his ideals of live stock characteristics is realized when it is known that Mr. Banks is a breeder of big-type Duroc Jersey hogs and rugged Holstein cattle, while Mr. Woodward thinks that no other hog can equal the Berkshire and no other cow the Jersey.

BUYS PERCHERON STALLION

Announcement is made of the purchase by Adolph Johnson of Yakima, from Herbert Kruger of Colville, of the aged Percheron stallion, Pickett. The reported price is $2000. Pickett was shown on the fair circuit this season, winning wherever shown, including the Spokane Interstate fair and the state fair at Yakima.

RESERVE HOLSTEIN NAMES.

"Laurelhurst," "Millerdale" and "Limberlocks" are three prefixes or herd names recently reserved by the Holstein-Friesian association for the exclusive use of three Washington breeders. They are, respectively, the property of N. P. Sorenson, Bellingham; Albert Miller, Chehalis, and O. A. Seward, Yakima.

STATE ASSOCIATION TO HOLD SALE.

The Holstein-Friesian association of Washington state will hold a two-day consignment sale of from 150 to 200 head, December 3 and 4. The sale will in all probability be held at the Skagit county fair grounds at Burlington.

Hardiness!

Every man who milks cows for a living knows that *Hardiness* is a necessary characteristic of a good dairy cow.

HARDINESS IN HOLSTEINS MEANS:

The ability to do well for the general farmer, as well as for the commercial dairyman.

The ability to readily adapt themselves to any climate and to profitably turn available farm feed into milk and butter-fat.

Let us tell you about Holsteins

EXTENSION SERVICE,
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230 East Ohio Street, Chicago, Ill.

HOLSTEINS

Prevent
Blackleg
by using
Blacklegoids

Scientifically Prepared and Tested
Blackleg Vaccine in Pill Form

Consult your veterinarian or druggist.
Write for free booklet on blackleg. No. 351.

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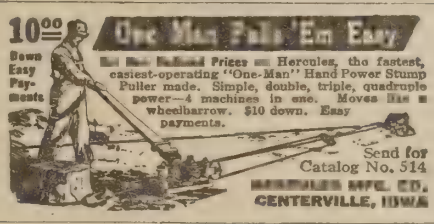
DETROIT, MICH.



Breeders' Dept.

Shropshires, Oxfords and Dorsets
Fitted show rams for good registered flock headers; range rams in lots to suit. 20 Shropshire ewes, sired by imp. Brewin 92; 20 Oxford breeding ewes. 40 Dorset breeding ewes and ewe lambs. All priced according to value.
FLOYD T. FOX, Silverton, Ore.

Pure Bred Lincoln Bucks
Eligible to registry; two and three years, $30 to $40.
W. P. DECKER, Entiat, Wash.

Oxford Downs I have 21 registered yearling rams for sale, well kept and large for their age. Can also spare a few choice ewes.
DAVID H. LOONEY, Jefferson, Ore.

Entermille's Polands
Sired by Giant Liberator and out of a Big Buster sow, win first and third junior sow pigs at state fair in class of 42. Have a few choice spring pigs and some wonderful fall stock for sale.
FRED D. ENTERMILLE, Baker, Ore.

Polands 100 fine Clansman bred fall pigs must go at a bargain. My pigs and prices please from California to Alaska.
H. J. STILLINGS, Hermiston, Ore.

Pioneer Herd Hampshire Swine
10 head choice boars; 10 head of sows and gilts, backed by show records.
J. M. FRUITTS, Cambridge, Idaho.

Weanling Hampshire Pigs
and service boars. Most popular blood lines, good individuals, reasonable prices.
J. W. PARKER, Yamhill, Ore.

Mt. Vernon Accredited Holsteins
especially. Buy purebred baby bulls and heifers from the most productive dairy district in entire northwest.
R. E. WAUGH, Burlington, Wash.

Brown Swiss Stock Farm
Breeders of Brown Swiss cattle, the farmers' dairy cow. Young stock for sale.
THEO BRUGGER, Route 3, Gresham, Ore.

Herefords--At Auction
The Best the West Affords
PORTLAND, OREGON
Friday, November 9, 1923
Annual Pacific International Hereford Sale Event

60 HEAD of registered breeding females—herd sire prospects and range bulls.

Saturday, November 10, 1923
SECOND ANNUAL SALE—THIESSEN HEREFORDS.
35 HEAD selected yearlings and 2-year-old heifers.
10 HEAD of bulls sired by Bonnie Lad Jr. and King Meadow Glade.
For information or catalog address
R. P. Banks, Sales Manager, Spokane Hotel, Spokane, Wash., or
Henry Thiessen, Owner, Sweetwater, Idaho.

Fifty Guernseys at Auction
North Portland, Oregon, November 7, 1923
Western Guernsey Breeders. Pacific International Guernsey Sale

The Pacific International Guernsey sale contains an exceptionally choice lot of cattle, A. R. and show cows, bred heifers, herd bulls and young calves, both sexes, selected from the leading herds in the northwest. Many of them will finish the show circuit here and will be sold. The sale will include such Guernseys as:

LILY OF CHICONA, A. R. record 517 lbs. fat, class C, a show cow and from the same dam as Daisy of Chicona, 748 lbs. fat, class EE, world's champion in class.

Janis of Sequoia, A. R. record, 846 lbs. fat, Pacific coast record when made. She is a show cow as well as a champion producer.

A yearling bull that is a double grandson Langwater Traveler, the sire of the world's class champion Daisy of Chicona.

And others. Some of them have excellent show and production records, others are of desirable conformation but young and untested. If you want an outstanding show cow and producer, a bred heifer that promises to develop into a noted cow, a foundation cow or a profitable cow or bull for the dairy herd it can be found in this lot.

Remember the day, WEDNESDAY. The management of the Pacific International Livestock show has promised to have the judging completed by that date so plan on being there. The catalog gives details regarding the offering. Send name to sales manager and one will be forwarded as soon as published.

Sale Committee:
C. L. HAWLEY, Portland, Oregon.
H. R. TAYLOR, Chehalis, Washington.
MRS. WINNIE MILLER, Wendell, Idaho.
E. A. RHOTEN, Sale Manager.
Salem, Oregon.

The Shorthorn Show and Sale
Will Be Leading Features of the 1923
PACIFIC INTERNATIONAL LIVESTOCK SHOW
PORTLAND, OREGON

The Shorthorn show promises to be the largest and best that has ever been held at this show. You should see it.

Attend the Sale--Nov. 8, 1 P. M.
60 Head--25 Bulls--35 Females

A selection of well bred and well grown cattle from the leading herds of the western country. For a catalogue write:
A. E. LAWSON, Salesmanager.
Spokane Union Stockyards, Spokane, Wash.
Auctioneers:
THOMPSON & KEITH.

60-COMBINATION DUROC JERSEY SALE-60
PACIFIC INTERNATIONAL LIVE STOCK SHOW
Wednesday, Nov. 7, 1923, 1 P. M.

Service boars, bred and open gilts. Most popular and profitable Duroc blood lines. These offerings are from the herds that have made the greatest winnings at their own county fairs and the Oregon state fair this year and last. They are well grown and ready to go out and furnish the best of foundation stock for old or new breeders.

Field men who will attend and through whom bids may be made:
B. R. EVANS, Editor Duroc Bulletin, Des Moines, Iowa.
COL. J. W. HUGHES, AUCTIONEER, Forest Grove, Ore.

Send for Catalogue to
L. S. BERRY, Troutdale, Ore.
W. F. BARTLETT, Camas, Wash.
H. C. COMPTON, Boring, Ore.

FOR SALE

A choice lot of Holstein calves, both sexes, finest Hollywood breeding, excellent individuals. Several are out of yearly record dams. Have no room for them and they must be sold. Breeding and individuality considered, they are the very best bargain on the market. Write for prices and descriptions. Excellent heifers for calf clubs, fine bulls for bull associations.

A CALF OR A CARLOAD.

HOLLYWOOD FARM, Hollywood, Wash.

Imported and American Bred Jerseys
Blood lines of phenomenal production and most perfect Jersey type.
CRANDALL & LINN, Salem, Ore.

Richly Bred Young Jersey Bulls
Sired by Gertie's St. Mawes and out of tested dams with good records.
C. F. BATES, Rt. 5, Salem, Ore.

Gold and Silver Medal Jersey Breeding
Heifers and bulls, offspring of the great gold and silver medal bull, Silver Chimes of S. B.
DEL PERKINS, Carlton, Ore.

Seely's Jerseys
Young service bull of fine type, priced right. Dam's record 504 lbs. fat.
R. B. SEELY, Sherwood, Ore.

Graymere Jersey Heifers Bred and open, from 6 to 18 months old. Myra's Missionary, Plymouth Lad and Oxford Majesty breeding.
WARREN GRAY, Box T, Jefferson, Ore

Midway Farm Jerseys Herd headed by St. Mawes Lad o' Midway, son of St. Mawes Lad and Lad's Little Pauline, 941 lbs. fat.
W. H. McCONNEL, Shedd, Ore.

Read the "Want Ad" page this week for good offers of all kinds.

COMP G O
EXPERIMENT STATION
URBANA ILL

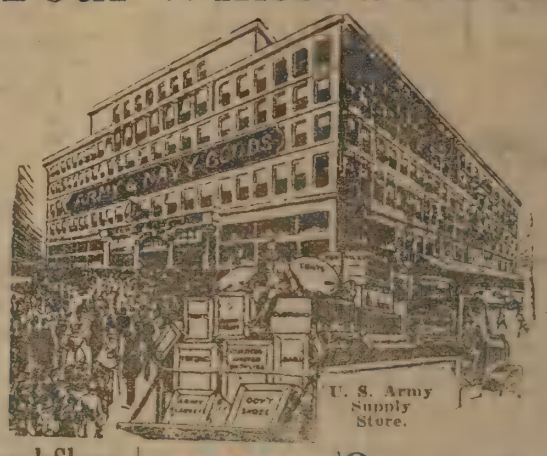
BIG SALE OF Army Goods

An Opportunity to Save 25% to 50% on Your Winter's Needs

This is the biggest sale we have ever attempted. Many thousands of dollars' worth of brand new army goods have been thrown on the market and must be sold at sacrifice prices. The government's loss is your gain. Take advantage of it. Fill your needs for this winter and many winters to come, while you can, at these ridiculously low prices.

DELIVERED TO YOUR DOOR AT THESE PRICES

For additional goods, send for large illustrated price list FREE



U. S. Army Supply Store.

ORDER BY MAIL

We have thousands of satisfied mail order customers.

Select what you want from this announcement and carefully address your orders: U. S. ARMY SUPPLY STORE, 1310 Pacific Ave., Tacoma, Wash. Make money orders payable to J. B. Robinson.

Important—We prepay all postage. Send enough to cover for merchandise. Reference—National Bank of Tacoma. Satisfaction guaranteed on every item.

SHEEP LINED COATS

Special $11.95

U. S. government sheep lined coats, ¾ length, or 48 inches long. Genuine moleskin top, lined with an extra heavy sheep pelt. Cost the government, we believe, about $35. All sizes. Reclaimed. Sale price **$11.95**

U. S. Army Black Slicker Coats, Waterproof, three-fourths length. Sale price ..... **$ 3.45**

Underwear

Mixed wool 2-piece underwear, all sizes, gray or striped; a big seller. Special, per garment.

98c

U. S. Army pure wool underwear; 2-piece suits, slip-over style shirts, all sizes. Sale price, per garment—

$1.19

U. S. Army Breeches

Slightly used khaki breeches reclaimed, sizes 27 to 36.

98¢

U. S. Army khaki new breeches; all sizes; best weight. Sale price—

$2.25

O. D. pure wool government issue breeches reclaimed; 27 to 36; price—

$1.95

SOCKS

Heavy weight wool sox, in O. D. or white; now on sale at

49¢

Sweaters

Genuine U. S. navy pure wool. Sale price

$2.39

O. D. heavy jumbo knit pure wool sweater, roll collar, no buttons; all sizes, at—

$4.95

Jersey gloves in brown or O. D. colors; fine for driving. Price

23c

Blankets

O. D. government pure wool blankets, reclaimed—now priced at

$2.75

O. D. government pure wool blankets—weight about 3½ or 4 lbs. Sale price

$3.45

No. 110, commercial double blankets; wool; size 66 x80; weigh over 4 lbs.; not camp or outing blankets, but home and bed blankets; dark gray.

$4.95

Heavy weight 100 per cent wool double blankets in plaids of all colors. Size 60x80 inches. Sale price.

$7.39

Union Suits

Heavy cotton union suits, in silver gray color.

$1.49

Gray wool union suits, in all sizes. Sale price, suit—

$2.29

Gray, 100 per cent wool union suits in all sizes. Special—

$3.95

Buckskin or gray color union suits, 50 per cent wool. Medium heavy weight. A wonderful buy. Sale price, suit

$3.45

O. D. Wool COATS

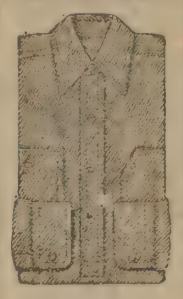
O. D. all wool serge lined coat—Brand new. Worth up to $12. Sizes from 38 to 42 only. Sale price

$2.45

U. S. Navy Underwear

U. S. navy pure wool underwear made with sweater neck and the shirts are made double front and back. Price per garment

$1.49



Shirts

These are regulation army O. D. wool shirts, made of finest wool serge material, O. D. color; reenforced elbow; lined chest; two large breast pockets and flaps. Best shirt made. Would commercially cost at least $7. Sizes 14½ to 18. Extra special price.

$3.45

Flannel shirts. O. D. flannel shirts, made for hard wear. Won't show dirt.

$2.45

Genuine broadcloth C. P. O. shirts, used by U. S. navy; pure wool.

$5.45

Leather Suits

Motor transport suits, consisting of coat and pants, made of all pliable leatherette, moleskin lined, waterproof and wind proof. These suits cost the government, we believe, about $23. Special price

$6.45

Pure Wool O. D.

Sweaters

Pure wood O. D. sleeveless sweaters, made of very best wool yarn. All sizes, at—

98c

Extra heavy pure wool O. D. double sleeveless sweater, reversible; sale price—

$1.79

Officer's Moleskin Coat $11.95

Genuine moleskin top coat. Made of finest grade army moleskin; absolutely waterproof. This was the classiest and most popular garment among A. E. F. officers. Last a life time. Carefully tailored, military cut; double-breasted with two slash pockets. Belt all around. Sleeves fasten tight for winter driving; regular arm pit ventilation. Lined with pure tweed mixtures. Both rain and wind proof. Three-quarter length, cut to give ample freedom for legs. A large, direct purchase saves you half. Give us size and order today.

$11.95

Trench Shoes

Hob nailed trench shoes. All solid leather, finest quality for a heavy work shoe. Smooth side of leather on inside of shoe. Cost the government, we believe, about $8.65 a pair. Sale price

$3.95

Corduroy Pants

Dark color corduroy pants; wonderful wearing material. Special at—

$3.45

Leather Vests

Brand new. An excellent vest for wear. Special sale price

$5.95

Brand new leather vest. All calfskin leather. Dark color. Leather sleeves. Jersey knit wool collar. Makes a practical outdoor vest. Sizes to 46. Sale price

$7.95

Leather vests. Sheepskin lined. Calfskin leather sleeves. Jersey collar and cuffs. Very warm. Price

$9.95

All leather vest, Made of the highest quality glove leather, all wool blanket lined. All sizes. Price

$9.95

U. S. Bags

Made with straps to tie around, and ties like small trunk. A handy article to store things away. Made of heavy canvas. NOW—

98c

Socks

Genuine worsted, all-wool "goat hair" sox, the famous army long-wearing sox. Per pair,

39c

Cotton sox, O. D color; the strongest sox made for hard wear. Price,

19¢

Six pairs for $1.00
Doz. prs. for $1.75

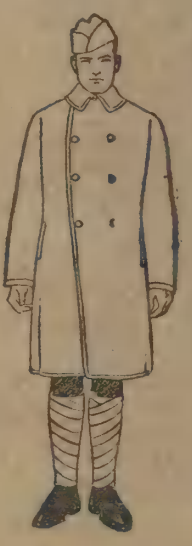
Overcoats

Fine calfskin on one side; all wool tweeds on reverse side; wear either way; full length; all sizes and colors. Special at

$21.95

U. S. army web belts 19c
U. S. army overseas caps ..19c

Overcoats



Brand new O. D. wool overcoats; medium length; for coldest weather; large collar to keep out wind. Special at

$5.95

U.S. Navy Pea Coat

Made of pure wool navy blue melton and broadcloth. Sold to the sailors on board of warships for about $21. All sizes. Sale price.

$9.85

Wool Pants

Full length, winter weight government trousers of genuine virgin wool. Best stuff Uncle Sam could buy for durability and comfort. Olive drab color; belt straps and plenty of pockets; extra stout seams. Ordinary stores can't sell trousers of this quality for less than $9 a pair. By purchasing in large quantities, direct from the war dept. we can offer these brand new wool trousers (sizes up to 36 waist) at, pair **$3.45**

ORDER AT ONCE—DON'T WAIT. This advertisement will bring thousands of inquiries. Write name and address plainly. State size and color desired. If not sure of size, give your weight and height. Make all orders payable to J. B. Robinson.

IMPORTANT--We Prepay All Postage

Send Enough to Cover for Merchandise. Reference—National Bank of Tacoma.

Order what you need from this list; also send for complete price list.

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THE WASHINGTON FARMER

ESTABLISHED 1894

SPOKANE. SEATTLE.

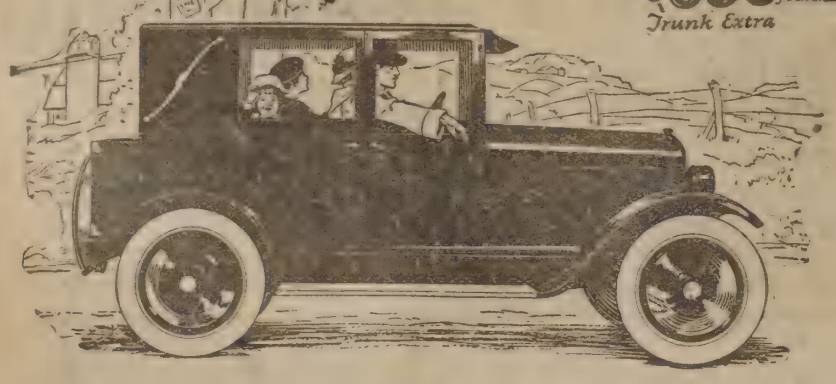
The Head of the Herd

Farming Without Livestock Is Like Building Without a Foundation

Another Innovation

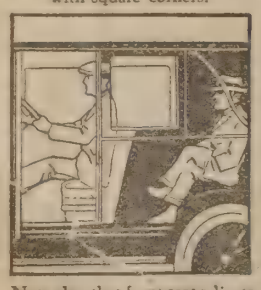
THE Overland CHAMPION

$695 f.o.b. Toledo
Trunk Extra



America's Only Versatile Car

Observe the generous loading space back of the front seat—50 cubic feet of clear space with square corners.



Note also that front seat adjusts backward to make tall people comfortable without crowding people in rear seat.

Front seat adjusts forward to put foot pedals in easy reach of short people. Adjustable to three positions.

Here at last is restful sleep on camping trips, with seats and upholstery made into full length, full width bed on floor.

See the large, comfortable seating capacity and the wide doors both front and rear—no seat climbing.

Willys-Overland now presents the first real all-purpose car—the new Overland Champion! Exclusive features, utilities and economies! Benefits never before offered the farmer, the dairyman, the stockman, the business-man and the American family!

The new Overland Champion fits itself to you. Both front and rear seats are adjustable forward and backward to accommodate short people and tall people—no stretching for pedals—no leg cramping!

Both front and rear seats and upholstery are entirely removable. Take out the rear seat and upholstery and you have 50 cubic feet of clear space for farm tools, truck, groceries, milk cans, luggage, camping duffle—anything!

For camping, front and rear seats and upholstery make up into a wide restful bed the full length of the body!

Doors both front and rear—like the famous Willys-Knight Coupe-Sedan! Real ease, without seat tilting or climbing, when getting in or leaving the car—for loading and unloading bags, boxes, tools and cans.

A handsome family car with body of steel, and washable blue Spanish long grain upholstery. A sturdy work car of unmatched utility, cradled on Triplex springs (Patented).

An all-year car. And above all, *Overland quality and reliability, with astonishing economy!*

See the new Overland Champion quickly!

Touring $495, Roadster $495, Red Bird $695, Coupe $750, Sedan $795; f. o. b. Toledo. We reserve the right to change prices and specifications without notice.

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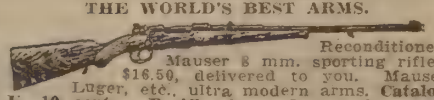
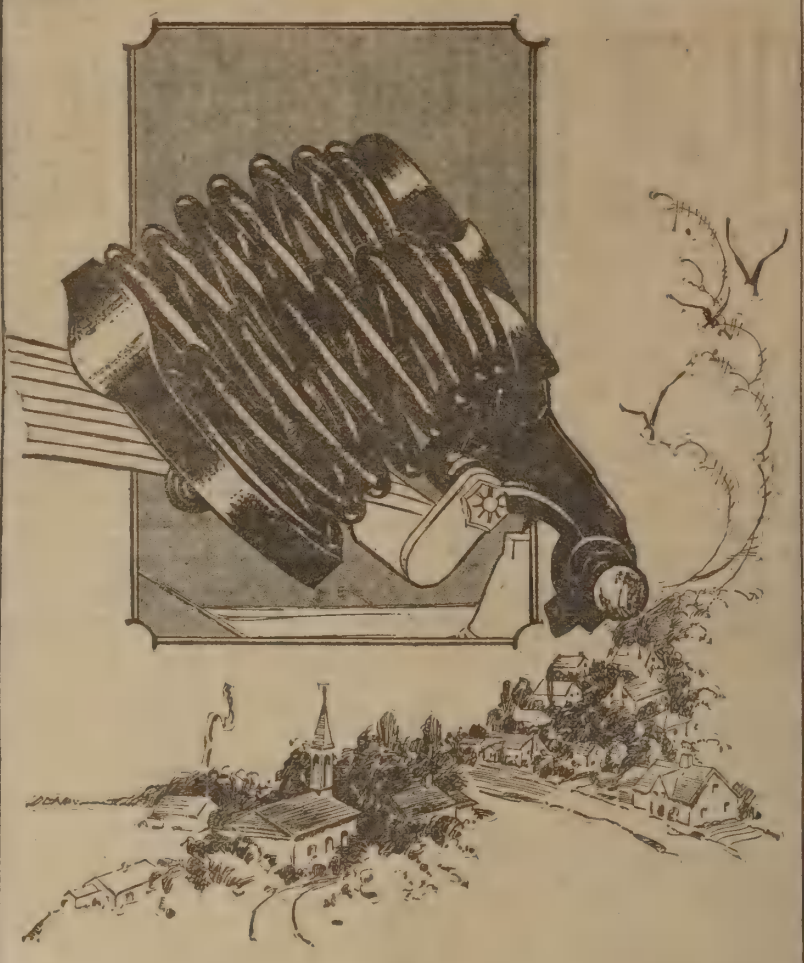


Reconditioned Mauser 8 mm. sporting rifles, $16.50, delivered to you. Mauser, Luger, etc., ultra modern arms. Catalog U, 10 cents. Pacific Arms Corporation, Liberty Bank Bldg., San Francisco.

Glance over the bargains on the "Want Ad" page.



Every Bump Costs You Money

There can be no real argument against anything that *saves a farmer money*—particularly right now.

The keen, business-headed farmers of America have made the Hassler shock absorber the world's leading automobile accessory.

Because they know, from their check stubs, that Hasslers DO save them money on their Fords.

And their wives and daughters have come to appreciate the superior COMFORT of riding on Hassler shock absorbers.

Incidentally, passenger comfort means that you're saving money on gasoline, tires and upkeep.

Write for "An Auto Biography." This new Hassler booklet, sent free on request, will grip you with its human interest, no matter what car you drive

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Ride on Hasslers

HASSLER
TRADE MARK REGISTERED
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"One car out of every ten in use today is Hassler equipped."

The Firm Foundation

Many a worn-out farm has been rejuvenated and made productive through the introduction of live stock into the system of farming. Cattle, horses, hogs or sheep are the greatest tonic for sick farming that medicine man ever prescribed, and as for keeping the medicine man away from a well farm they have the proverbial apple-a-day for a well man beaten to a finish.

Take a look about you. Which farmers have best weathered the storms of the past few years? The ones who have devoted their entire time to the production of a single crop from the soil, wheat, for instance? We heard a man say the other day that he believed he had made more clear money this season from his 80 diversified acres than any of his strictly wheat growing neighbors from their 500 to 1000 acres. Live stock is the balance wheel of his system of balanced farming. We know another farmer who has one square quarter section. His neighbors have from twice that much to 10 times a quarter. Live stock makes it possible for this farmer to be one of the most prosperous men of his entire county.

Balanced farming is growing into greater and greater favor in the state of Washington, and live stock is a basic essential in this system. While animals convert great quantities of farm waste into products of value, they also lead to the production of other crops than the one which inevitably dominates where live stock is not grown. With rarely an exception, these crops mean a better type of farming. For example, the wheat farmer puts in a few head of dairy cows and a few hogs. His next logical step is the seeding of a portion of the farm to alfalfa, clover, peas, corn or other feed crop. The wastefulness of the summer-fallow system is reduced and the fertility of the soil increased. The cattle and the hogs yield incomes at seasons when otherwise little or nothing is coming in. They provide profitable employment all the months of the year. They afford a great measure of insurance against failure, which, in the case of the one-crop farm, is total failure.

Washington, already on the road to permanent agricultural success through the aid of live stock, has a great possibility before it. As it develops more farm flocks of sheep, more well-cared for dairy cattle, more horses, beef cattle and brood sows will be found playing their fundamental part in the upbuilding of the commonwealth.

THE WASHINGTON FARMER

Successor to
THE RANCH, PACIFIC DAIRYMAN, HORN AND HOOF.
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Surplus Milk Problem

The surplus milk problem comes sooner or later to the dairymen who are organized to market their own product. The Inland Empire Dairy Producers' association, having its headquarters in Spokane, is now vigorously attacking that problem.

At the various district meetings of the dairy producers, held recently, the proposition of a new building and equipment for a powdered skim milk plant to cost $65,000 has been fully discussed and the sentiment is reported to have been generally favorable.

"We are convinced that the addition of the plant for powdering milk will solve the question of our surplus milk supply for all time," said G. D. Railsback, secretary of the association. "The proposed plant will have a capacity of handling 50,000 pounds of skim milk a day. The greatest amount of surplus skim milk we had in one day last spring was 30,000 pounds. Butterfat is now worth 49 cents a pound and sweet cream 61 cents. The country has a shortage of dairy products and all indications point to a good market in this field for several years to come."

It is of interest to note that the Inland Empire Dairy Producers' association in September handled milk worth from $45,000 to $50,000. The total amount handled was 1,405,000 pounds, for which the farmer was paid at the rate of $2.50 for 100 pounds of milk testing 4 per cent butterfat.

The Medicine of Good Cheer

If we became aware that one of our neighbors was going about his business in our community, though sick with smallpox or other contagious ailment, we would notify the health officer and urge that he be placed under strict quarantine. If we discovered him entering our gate, we would in all probability request him, more or less politely, to remain away.

There are many persons going about spreading contagion as harmful as smallpox. Sometimes we keep away from them; sometimes we seem actually to cultivate their comradeship. They are the people with diseased dispositions and diseased minds. They are those who spread discontent and gloom by the looks upon their faces and the words that they utter. They discourage us in our ambitions to go forward and upward in our various undertakings. They make us dissatisfied with our lots. Some of them take another tack and gossip about our neighbors. They make us suspicious of the people of our locality. They make us dislike somebody that is worthy of our admiration and cooperation. They use irreverent and sometimes indecent language, filling our minds with uncleanness to whatever extent we listen and absorb.

A man has no more right to poison the mind of a neighbor than he has to poison his live stock or to expose his family to a contagious disease. It is a part of the moral duty of every person to radiate good cheer, to manifest reverence, to speak the truth, to refrain from maligning his neighbors. He gains nothing by his discontent or uncleanness, but on the other hand loses much personally and does these with whom he comes into contact much injury. But he who radiates good cheer, wholesomeness, courage, friendliness, reverence and confidence in the goodness of mankind and the world in which he lives does much for himself and for those whom he influences.

Develop the Home Market

Cutting of food costs to consumers and increasing the returns to producers by encouraging farmers to meet better the demands of local markets is seen as a possibility by the United States department of agriculture. Much of the food consumed in cities comes from distant producing sections. Some of this food could be produced in near-by farm sections, thus shortening the route from producers to consumers and effecting savings in marketing costs that might well be shared by both producers and consumers, the department says.

Many instances are known where a city's supply of a commodity is brought from distant sections when the same commodity is being grown in the immediate territory and shipped to cities hundreds of miles away. The savings on transportation alone would go far toward reducing distribution costs, the department says. Railroads would also welcome the more efficient use of cars resulting from a better development of home markets.

More Rapid Shipment of Apples

F. G. Robb, specialist in inspection of fruits and vegetables of the United States department of agriculture, told the Wenatchee fruit growers the other day that in his opinion the one thing that the apple shippers of that district should provide is more rapid shipment of the fruit after it is taken off the trees.

To prevent deterioration fruit should be at once placed in storage at low temperatures or loaded on cars within a very short time after it is plucked.

If this were done no dealer would complain as to the condition of the apples when they arrived at an eastern market, and this would be a real factor in improving marketing conditions.

The total shipment of apples out of the Wenatchee district to October 10 for the season was 3574 cars, or a decrease of 833 from the corresponding date of last year. This is an increase of nearly 700 cars over the 1922 shipment.

The Virtues in Orcharding

One can readily imagine that pretty nearly all the virtues—patience, perseverance, punctuality, industry, faithfulness, and a good brand of hope—entered into the production from 63 Grimes Golden apple trees in the J. P. Taggard orchard in Waitsburg, Walla Walla county, this year.

The reports from the orchard relate that these trees, planted 27 years ago, averaged 51 loose boxes, or 39 packed boxes. The highest yielding trees producing 70 boxes. All these averaged 75 per cent extra fancy; 13 per cent fancy, and 12 per cent C grade, under federal inspection.

Seek the Right Training

The basic factor in success is the individual. A man must have it in him to succeed. Must have what in him? There has been some divergence of opinion as to the details, but in any list would occur the following: Honestry, initiative, judgment, knowledge, industry, vigor, personality, health. There must be the spark of these virtues in the individual, but they may be fanned into flame by training of the right sort, just as training of the wrong sort may all but extinguish the native spark.

Washington State Gleanings

Having practically completed his investigations with respect to the mildew and the apple scald, Plant Pathologist D. F. Fisher of the United States department of agriculture, with headquarters at Wenatchee, is now devoting time to the study of the cause and cure of water core in apples, under the direction of Charles Brooks, chief of the division, who is spending some time in the Pacific northwest.

BUYS TWO PAIRS OF SILVER FOX.

Two pairs of silver fox valued at $2000 a pair are in pens owned by D. D. Phillips of Lower Naches, following their arrival from Wisconsin. Mr. Phillips intends to use the fox for commercial purposes. They are the first registered fox to be brought to the Yakima valley, according to Mr. Phillips. He also has a pair of raccoons and a pedigreed German police dog which he recently purchased in California.

SET SPELLING BEE DATES.

Superintendent H. A. Ellis has mailed his circular of instructions to all school principals in Whitman county relative to the series of spelling contests, which are to be held this year. The grades included in the contests are from the third to the eighth. Fifty words for each grade will be mailed from the county superintendent's office to each graded school in the county so that the tests may be given on the following dates: November 9, January 4, March 7 and April 25. Results of each contest will be tabulated and sent to all the schools entering the contests and at the end of the series the schools making the highest and second highest scores will be awarded a pennant.

GRANGER WATER SYSTEM READY.

The Granger irrigation district's system is completed and will be ready to deliver water early next season, says a Yakima report. It has been constructed under the federal reclamation service at cost of about $250,000 and will irrigate 1600 acres of fine fruit land on Snipes mountain. The cost an acre was $160 and is considered low when the original price of land is placed at $10 an acre. Water is being turned into the main canal and laterals to harden them and prevent possible damage to cement when frost comes. This leaves only one more project, possible of construction under the Sunnyside canal, the Mabton irrigation district, containing 1800 acres, and this will be undertaken soon. Charges on these projects are spread over 20 years, according to J. L. Lytel, project manager.

WHEAT YIELDS AT WILBUR.

The general average yield of wheat around Wilbur, in Lincoln county, according to Roland Short, clerk of the Grain Growers' Warehouse company, is 25 bushels an acre.

Robert Sheffel, northwest of Wilbur, harvested more than 1700 acres that averaged 30 bushels; John Kunz, Sherman, harvested 30 bushels an acre from 1200 acres and Henry Krause, near Wilbur, averaged 30 bushels from 1000 acres. Two miles north from Wilbur Victor Laurentzen's yield averaged 30 bushels on 240 acres. One quarter yielded 42 bushels an acre. Holgar Jurgensen in the same district got 30 bushels an acre from 130 acres. Mr. Jurgensen experimented with hard Federation wheat on 40 acres and harvested 34 bushels an acre. The Samuel Mar 900 acres on the Kenneway yielded 24 bushels an acre.

STEVENS COUNTY APPLE CROP.

Shipping apples from the Columbia river valley will begin soon. Apples are being hauled to the stations. Meyers Falls is the largest shipping point, as it receives all apples raised in the upper Columbia river valley consisting of Kettle Falls, Rice, Daisy and Gifford. Springdale receives apples from Hunters and Fruitland, while Marcus and Marble are large shipping points, the upper Columbia river company, which has one of the largest fruit orchards in Stevens county, being located at Marble.

It is expected that more than 200 cars of apples will be shipped from Meyers Falls, and about 100 from Springdale. There are two large warehouses at Meyers Falls, and a large unit of the Skookum Packers' association was formerly located there. The shipping will be handled by several concerns, although the Kettle Falls Growers, which comprises many of the large growers of Kettle Falls, is handling its crop cooperatively.

ENGLISH LIKE RED APPLES.

Yellow Newtown apples are no longer the favorite fruit of people in the United Kingdom, according to A. L. Ryan, who has been purchasing apples in the Yakima valley for export to England and her colonies. After reigning for years as the most tasteful apple marketed, in the estimation of people across the water, the Newtown has been supplanted by the small red apple, according to Mr. Ryan. Buyers in England are calling for Rome Beauties, Jonathans and Winesaps, the exporting agent declared. And above all the importers explicitly state in their orders that they want small apples. "Five tier Jonathans are the ideal apples for export to the United Kingdom this year," Mr. Ryan answered upon question. "Demand is also heavy for Romes and Winesaps, two of the best shippers. Although demand for Newtowns is still heavy in England, the greater demand is for the small, red varieties.

SOIL SURVEY COMPLETED.

Completion of field work on soils surveys, the first and basic phase of the federal investigation of the Columbia basin project, was announced October 8 by Homer J. Gault, chief engineer of the federal investigation. Seven experts, headed by A. T. Strahorn, were engaged in the soils surveys which have been under way all summer.

The data will now be assembled for the soils report, which Mr. Gault said would require five or six weeks of office work. It will be the first report of the investigation, being the basis of the whole calculation, inasmuch as the soils report will indicate the quantity of water required by the project.

Field work on Priest lake, which is being considered as a substitute for Flathead lake as the main source of water supply, was practically finished on October 6.

Mr. Gault intimated that Priest lake was gaining favor as the water source, saying that the preliminary estimates indicated that "the overflow damages will not be extremely heavy; nothing like the damages at Flathead lake."

Violate the Constitution

Travel Road of Lawlessness and Sow Seeds of Destruction

Senator Borah of Idaho told the law enforcement conference at Washington recently that wealthy Americans who violate the 18th amendment and "reds" who denounce the constitutional provisions designed to protect property "are both traveling the road of lawlessness, sowing the seeds of destruction and undermining the whole fabric of law and order."

Plain and stinging words, these. But are they the language of exaggeration? If citizens of wealth choose to violate one provision of the Constitution, by what right, consistently, can they deny the right of another group to repudiate other provisions of the Constitution? If they choose to violate the prohibition law and thereby give profit, aid and encouragement to the criminal elements that are carrying on the illicit liquor traffic, on what basis of reason can they point the finger of indictment at criminals who choose to break other laws?

The right of an individual or any group of individuals to advance repeal of the prohibition amendment is not denied. That is not the point at issue. The evil is disregard of the Constitution, attempted nullification of that great charter of the people's rights and liberties and violation of laws passed to enforce the Constitution.

One of the glorious principles of this government is equal rights to all and special privilege to none. The Constitution and the laws are to be obeyed by all citizens, regardless of class, wealth or social status. No element of American citizenship can afford to go against that principle, least of all citizens who have property at stake, who owe everything to the protection of the Constitution and the enforcement of the laws. They are playing with two-edged swords and tampering with dynamite when they go against the Constitution and dealings with the criminal element that violates the Volstead law.

CAN THEY MAKE A TRADE?

Wallace's Farmer: The general farm organization has service departments in such fields as law, publicity and transportation. It has a strong system of local units. It needs better financial support and more concrete benefits to show to its members.

The commodity marketing association has a big overhead expense on service departments that duplicate those of the general farm organization. It needs a better local contact with producers. It has fairly strong financial support, as a rule, and holds its membership by virtue of the dollars it saves for them in handling their business.

Is it feasible for the general farm organization and the commodity marketing association to work together to their mutual benefit? Can the marketing concern save money and gain strength by turning part of its service and field work over to the general farm organization? Can the general farm organization secure a better financial backing and a more interested membership by giving the marketing concerns representation on its governing board and employing local field agents to care for the interests of both groups. In return for this service in the local field and in the maintenance of special departments, the general farm organization would, of course, be entitled to a fixed service charge from the marketing association, to be paid from association profits.

Plans along these lines are being tried out in a number of places at the present time.

World Farming--British India

Agriculture is the chief industry of British India. Out of a population of 313,000,000 nearly 225,000,000 are supported by agriculture. In 1921 rice was grown on 78,000,000 acres, producing 28,000,000 tons; wheat on 26,000,000 acres, producing 6,500,000 tons; cotton on 21,000,000 acres, producing 3,500,000 bales; sesamum on 4,333,000 acres, producing 368,000 tons; rape and mustard on 5,000,000 acres, producing 848,000 tons; sugar cane on 26,000,000 acres, producing 2,500,000 tons, and tea on 700,000 acres, producing 345,000,000 pounds.

The total area cropped in British India in 1919-20 was 255,000,000 acres, and the net area (deducting areas sown more than once) was 223,000,000 acres.

Of the 49,000,000 acres irrigated 23,000,000 acres were irrigated by canals, seven and one-third millions by tanks and 13,000,000 by wells.

There are 250,000 square miles of forests, the net revenue from state forests being about $10,000,000.

Live stock in British India, census 1919-20: Oxen, 117,428,000; buffaloes, 28,493,000; sheep, 21,984,000; goats, 24,134,000; horses and ponies, 1,699,000; mules, 75,000; donkeys, 1,372,000; camels, 408,000.

India has a population of 319,000,000.

BREAD A STAPLE IN CHILE.

Bread constitutes a staple of diet for the great mass of the people in Chile and is consumed in large quantities. The American white bread loaf is practically unknown to the Chileans, the bread eaten by them being of a coarser grade and very similar to the American "hard rolls." The sizes of the loaves vary greatly, some of them being as small as the ordinary breakfast roll, while others would probably weigh about one and one-half pounds. Bread-making machinery is not extensively used, most of the work being done by hand.

The Day of Small Things

From a Single Grain of Wheat Huge Crops Are Grown

For who hath despised the day of small things?—Zachariah, iv., 10.

This article is an account of the marvelous things that came from a grain of wheat—the discovery and development of a new variety, Marquis, which has profoundly affected wheat growing in North America, tremendously increased Canadian production and made possible the building of new lines of railroad, the quick settlement of wild prairie regions and the rise of towns and cities.

And, moreover, a discovery and a development that have injected a terrific question into the minds of the wheat growers of the northern part of the United States—the uncertainty of profitable wheat growing in regions like the Palouse country, the Big Bend, the wheat counties of northern Idaho, of eastern Oregon and Montana.

There was recently published in London and New York a new science encyclopedia, under the title "The Outline of Science." Professor J. Arthur Thompson of the University of Aberdeen, Scotland, contributes these significant paragraphs in that work, pages 189 to 192 of volume 1:

"One of the factors that assisted the allies in overcoming the food crisis in the darkest period of the war was the virtue of Marquis wheat. * * * In 1917 upward of 250,000,000 bushels of this wheat were raised in North America, and in 1918 upward of 300,000,000 bushels, yet the whole originated from a single grain planted in an experimental plan in Ottawa by Dr. Charles E. Saunders so recently as 1903.

"The parent of Marquis wheat on the male side was the Mid-Europe Red Fife—a first-class cereal. The parent on the female side was less promising, a rather nondescript, not purebred, wheat called Red Calcutta, which was imported from Indiana into Canada about 30 years ago. The father was part of a cargo that came from the Baltic to Glasgow and was happily included in a sample sent to David Fife in Ontario about 1842.

"From one kernel of this sample David Fife started his stock of Red Fife, which was crossed by Dr. Saunders with hard Red Calcutta. The result of the cross was a medley of types, nearly 100 varieties altogether, and it was in scrutinizing these that Dr. Saunders hit upon Marquis. He worked steadily through the material, studying head after head of what resulted from sowing, and selected those that gave most promise. Each of the heads selected was propagated, most of the results rejected; the heads were sifted again and again, and finally Marquis wheat emerged, rich in constructive pos-

(Continued on page eighteen.)

FARM BUSINESS AND MARKETS OUTLOOK

THE outlook for industry and trade in the next few months seems to vary with the lookout—with the interpretation he places on the symptoms shown. It is pointed out, on the one hand, that volumes are running large in most lines of production while others see a general downward trend of output and buying even though a moderate increase may occur in the fall months when trade usually is at its best.

Unfilled orders held by the leading steel concern are the smallest since March, 1922, and the rate of operations is smaller than last spring. These are significant trade barometers. On the other hand, reports of steel sales are slightly more optimistic at present, railroad inquiries for new cars last week were said to be the largest of the year and steel mills are running at 75 to 98 per cent of capacity, which is slightly higher than last month.

Ups and Downs in Cattle Trade.

Cattle prices have been working up and down rapidly in the last three weeks, but at present are practically back to the low point of the fall on mature steers and not far above that level on handyweights and yearlings. Receipts have been heavy, as a host of short-fed and warmed-up steers is attracted by every upturn in prices and the range states are sending large delegations. The beef market was higher, but slaughterers and eastern shippers were less active buyers. Veal calves were slightly lower.

Less than 10 per cent of the steers placed on Kansas and Oklahoma pastures are still to come forward and these will be distributed over the next 30 days, but the northwest has much of its beef harvest to complete, while most of the fleshy steers which went into the corn belt from Kansas City and adjacent markets during the late summer will be returned in the next 60 days. The high price of corn and the failure of prime and choice grades of steers to advance in the last few weeks leaves many feeders anxious to liquidate.

Hog Market Dragging Lower.

The hog market advanced early last week, but has declined again and is lower than a week ago. Receipts are gradually expanding and are maintaining a big lead over the corresponding period of last year. The percentage of discarded brood sows remain high, probably reflecting some tendency to reduce breeding stock.

It is doubtful if prices have reached bottom as yet, even though the market is fluctuating less violently than a few weeks ago.

Lamb Market Lower.

The advance in lamb prices attracted an increase in receipts, with a possibility that the current seven-day period will exceed any preceding week for the year. Prices declined sharply under the avalanche which was accompanied by a slump in the dressed lamb market. Most of the range lambs arriving are in feeder flesh.

The department of agriculture reports that developments to October 1 indicate that at least as many sheep and lambs will be fed in the corn belt and western irrigated regions this fall and winter as were fed last year. Shipments from 12 leading markets during July, August and September were 38.3 per cent larger than in 1922. Most of these went into the corn-belt states, where the increase was 33 per cent. It is stated that in the western irrigated feeding sections the number fed probably will not be greater than last year, owing to the higher prices for both foodstuffs and feeder lambs and the small profits obtained on last winter's operations.

Demand for wool was more active last week for practically all grades. Low wools were stronger than medium wools, as domestic mills were in the market for them and further buying of such wools held in bond to be reshipped to Europe occurred. Fine wools also were picked up by buyers who anticipated shortage of such wools later. Total exports since the middle of April are said to be about 15,000,000 pounds. Imports at present are quite small and foreign markets are firm. The domestic goods market is fairly healthy.

Wheat Market Weakens.

The undertone in the wheat market has weakened in the last few days and prices have swung moderately lower.

Primary receipts for several weeks have been running below normal for this time of year, but the visible supply was extremely heavy a month ago and small additions to it have been made since that time. While deliveries of wheat by Canadian farmers at country points this far do not bear out the estimates of a larger crop than in 1922, yet the total is large, the Canadian visible has been gaining about 5,000,000 bushels weekly and it is now the largest on record at this season with the exception of last year.

Flour mills are buying quietly and the amount of wheat ground since July 1 is slightly smaller than a year ago, but the apparent disappearance of wheat in the form of flour has gained about 10 per cent over the same period of 1922. Furthermore, exports are at a sufficient rate to exhaust our surplus if continued to the end of the year. But there is no urgency to foreign buying, while there is a great deal of Canadian wheat trying to find a market, the Argentine and Australian surpluses are lasting longer than expected and the Balkan regions and Russia are putting moderate quantities afloat. Furthermore, deliveries from this year's European crop are still fairly heavy.

It is significant that the amount of wheat apparently disappearing into consumption from international trade channels since July 1 has been about 171,000,000 bushels, compared with 177,000,00 bushels in the same period of last year. A larger decline might have been expected in view of heavier crops in Europe than last year.

Rains have helped to give the winter wheat crop an excellent start, a fact which may offset much of the decrease in acreage compared with last year, when winter killing as a result of dry weather in the southwest was unusually severe. The first estimate of the new Argentine crop, which will be ready for harvest in a month to six weeks, is 250,490,000 bushels. This is 45,000,000 bushels more than last year and the largest crop on record. The new Australian crop promises about 10,000,000 bushels more than in 1922.

Corn Still in High Ground.

Cash corn prices remain high, although recipts have begun to increase in the last 10 days and feeding demand is less keen, so that the market is quite certain to work lower as more new corn becomes fit to market. Fancy figures are being paid for the small amounts received at terminals thus far. While the amount of live stock is greater than last year apparently, feeders will undoubtedly economize, as feeding ratios are unfavorable in many cases.

Oats prices are not especially strong in spite of the discount below corn. Primary receipts are holding up better than usual and the visible supply is gaining, although it is only half the size of last year and about one-fourth that of two years ago.

Clover and Mill Feed.

The clover seed market has lost some of its gains, but is developing a firmer undertone again. Receipts of new crop seed have increased recently and dealers are uncertain as to the extent to which higher prices will curtail the demand for seed next spring.

Millfeed markets are said to be inactive, as buyers are indifferent at the prevailing scale of prices. Flour mills are increasing operations and stocks of wheat feeds in storage are accumulating. Cottonseed meal and linseed meal are offered freely at lower prices. Heavy feeding of home-grown grains is reducing the interior demand for purchased feeds, but at the same time the strength in the grain markets causes a firm undertone in by-product feeds.

Prices per ton (100-pound bags) in carlots: Chicago—Bran, $33; standard middlings, $33.50; flour middlings, $35; cottonseed meal, 36 per cent, $45; 43 per cent, $50; hominy feed, $40; gluten feed, $40; old process oil meal, $52; tankage, $60.

Hay Crop Estimate.

The hay crop estimate was increased about 4 per cent in the October returns, but the total is about 10 per cent less than in 1922. Timothy hay prices are firm as a result of light receipts and good demand, but the prairie hay market is slightly lower.

Prices per ton in carlots: Chicago—No. 1 timothy, $26@27; No. 2, $22@25; No. 1 light clover mixed, $23@25; No. 1 clover, $21@23; No. 2 clover, $17@19; No. 1 alfalfa, $18@20; rye straw, $13@14; oat and wheat straw, $11@12.

Eggs, Butter and Cheese.

Receipts of eggs at the leading markets are exceptionally heavy for this season of the year. Thus far in October they have been nearly 30 per cent greater than last year, when they were of normal volume. Arrivals of good,

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The President Backs Cooperative Marketing

His Personal Representatives Visit Wheat Growers and Promise National Aid in Forward Movement

The principle of cooperative marketing of grain and other farm products has received the official indorsement of the administration of President Coolidge. As a result, the movement already under way for the immediate signing up of two-thirds of the entire wheat crop of the United States for cooperative marketing next year will probably be rushed with a view to influencing the marketing of that portion of the wheat of the 1923 crop which is still in the hands of the farmers.

At a recent meeting in Chicago attended by representatives of the grain-growing sections of the entire United States and by Managing Director Eugene Meyer Jr. and Director Frank W. Mondell of the War Finance corporation a committee was appointed to have general charge of coordinating the cooperative grain marketing movements in various parts of the country. The growers of the Pacific northwest are represented on that committee by George C. Jewett, formerly manager of the Northwest Wheat Growers, Associated, but now manager of the American Wheat Growers, Associated, which combines the pooling organizations of the northwestern states and several middle western states that have such organizations. Former Governor Frank O. Lowden of Illinois, Robert Bingham of Kentucky, W. H. Settle of Indiana, Carl Williams of Oklahoma, Dan Wallace of Minnesota, and Senator Arthur Capper of Kansas are the other members of the committee. A special committee, consisting of Carl Williams, C. V. Gregory of Illinois and Walton Peteet of Illinois, was appointed to work out the relationships of the nationwide movement to the various state marketing organizations.

On October 30 there will be held in Denver a meeting of the American Wheat Growers, Associated, and others interested in the marketing movement to take up this nationwide question and other questions involved.

Series of Meetings Held.

The Chicago meeting was the first of a series attended by Directors Meyer and Mondell of the War Finance corporation, who were sent west by President Coolidge to confer with growers on wheat marketing problems and to help stimulate the movement for cooperative control of the crop. At the Chicago meeting Director Meyer pledged the support of the finance corporation to the farmers who join cooperative associations. Director Mondell declared unequivocally that the movement being undertaken had the whole-hearted approval of President Coolidge and those associated with him in the national administration.

Northwestern Meetings.

Three public meetings have been held in the Pacific northwest by Directors Meyer and Mondell: One in Helena, Mont.; one at Spokane, Wash., and one in Portland, Ore. At each of these meetings these representatives of the government urged the wheat growers to extend their cooperative marketing program as rapidly as possible. These meetings were all largely attended by bona fide producers, farm organization officials, bankers and public officials. Following the meeting in Portland, steps were taken by the Oregon Bankers' association for the immediate appointment of a committee of bankers to consider the cooperative marketing problem and assist in bringing bankers, business men and farmers into harmonious relationships for the perfecting of marketing organizations.

At the Spokane meeting J. K. McCornack, a banker as well as an owner of wheat lands, presided. When speakers from time to time had made direct or indirect charges that bankers were not friendly to the cooperative movement, Mr. McCornack declared that every well-informed banker in an agricultural state knew that his own financial welfare and that of the bank which he represents depends largely, if not entirely, upon the financial success of the farmers and their industry. His remark that sometimes farmers did not desire even financial advice from their bankers and frequently resented what they sometimes felt to be undue activities on the part of bankers in considering the farmers' problems caused W. J. Robinson, manager of the Washington Wheat Growers' association, to invite Mr. McCornack to make a personal investigation of the principles and policies of the Washington Wheat Growers' association, with a view to condemning it if he found it unworthy or unsound and of lending its assistance if he deemed it worthy of such.

"If, after a thorough investigation you consider our organization worthy of your support, I invite you to make such report to other bankers in your jurisdiction and invite them to join you in supporting it. If you find it deserving of further development you and your fellow-bankers can assist in that development by saying to the wheat growers that do business with you, 'Join the cooperative association and we will provide you with all the money that you need. Stay out of the association and we can not help you.'"

Accepts Invitation.

Mr. McCornack replied by stating that he would be glad to meet with Mr. Robinson at any time and go thoroughly into the matter. He then introduced Mr. Meyer, who indorsed the position taken by Manager Robinson, declaring that with the bankers lay much of the responsibility for the success or failure of the cooperative movement.

Mr. Meyer said that he had spent three months studying wheat conditions in Europe and that everywhere he found a condition not greatly unlike that existing in this country today. He said that while so many European countries are operating upon a paper money basis the United States, operating on a gold basis, must finance the carrying of stocks of foods. He declared that the limitations placed upon dealings in grain futures had made it impossible for the speculative buyer to finance this carrying of grain, and that for this reason, in addition to others, cooperative associations of producers should be formed to carry their own wheat and place it upon the market in an orderly fashion. Director Meyer was more enthusiastic than any other speaker at the meeting over the possibilities of cooperative marketing, declaring that it was not necessary that the cooperatives have a sign-up of even 50 per cent of the nation's crop in order to be a very material factor in regulating the market. He declared that there was no other means by which satisfactory results could be so quickly obtained as through immediate extension of the cooperative marketing associations and urged the necessity of speed in signing up growers who still hold a large portion of this year's crop.

One of the speakers, urging that the United States department of commerce should be made the clearing house for all cooperative marketing endeavors, declared that such organizations as those of the northwest had little or no stable basis upon which to operate. This brought emphatic denial from Director Meyer, who said: "The war finance corporation has loaned over $200,000,000 to 32 cooperative marketing associations and it has not yet lost a dollar of these loans. If your organizations are not founded upon sound principles and a stable basis, how do you account for these facts?"

At the meeting in Montana, Director Meyer criticized the grain dealers of the country severely, declaring that "not one constructive suggestion has been made by the grain trade or by grain dealers, nor has one solitary effort been made by them to our knowledge to help the producers of grain from whom they have always made their living." He declared that, while the grain dealers may be justified in their opposition to a fixed price for wheat, they oppose every suggestion that seems sound and helpful to the wheat growers. They are against cooperative marketing, against government assistance and against self-help on the part of the growers, he said, adding that they had nothing constructive to bring forward and that their attitude generally is that the grain trade should stand pat and the growers go on in an unorganized, demoralized condition.

At the various meetings held, other proposals than cooperative marketing were made, notably the fixing of a guaranteed price for the 1923 crop by the government and erection of a high tariff wall with the appointment of a federal commission to handle all the exportable surplus. The bill introduced in the last congress by Senator Gooding of Idaho for a guaranteed price of $1.75 per bushel was urged by some of the speakers.

The tariff-export commission plan, as recommended by the bankers and farmers of Minnesota and North Dakota and which is called to the attention of the northwest by H. C. Taylor of the markets bureau of the department of agriculture, who is on a tour of the west also as a representative of the Coolidge administration, received some consideration. Under this plan a tariff would be placed on wheat at an amount per bushel which, when added to the world price in the open market, would make a reasonable price for the producers in this country. The export commission would then sell abroad at the foreign price all surplus wheat above American home needs. The losses thereby sustained would be pro-rated against all wheat sold in the home market. Thus, if a loss of 40 cents per bushel were experienced on one-fifth of the total American production, the remaining four-fifths, sold for domestic consumption, would bear one-fourth of this 40 cents, or a 10-cents-a-bushel charge against the home price, which, friends of the plan believe, would be the world price plus the tariff.

Several representatives of northwestern wheat growers' associations will attend the meeting of the American Wheat Growers in Denver October 30. Immediately upon their return it is expected that steps will be taken for putting on a speedy campaign for the signing up of a large percentage of the 1923 crop and succeeding crops in the associations for these states for marketing through the nation-wide agency.

As a result of the meetings that have been held, a movement is under way at this writing for a massmeeting of Washington farmers, bankers, business men and heads of farm organizations at Colfax, Whitman county, Wednesday of this week. This meeting was suggested by Congressman Summers in telegrams to the president of the state bankers' association, leaders of farm organizations and others. Congressman Summers takes the position that definite action of some kind should be taken immediately to carry out the recommendation of the war finance corporation directors.

E. L. French, director of the Washington state department of agriculture, has issued an appeal to wheat growers to hold their wheat for a higher price than is now quoted. He says that the country will not have more than 120,000,000 bushels for export and that 34,000,000 bushels have already been exported. He takes the position also that, if cooperative marketing is to be made effective for the marketing of considerable of the remaining portion of the 1913 crop, every farmer who can do so should hold his wheat until the movement now under way enables the cooperatives to exercise resultant influence on the market.

The Cost of a Bushel of Wheat

The cost of wheat production has become an item of vital interest to the farmers of the wheat growing sections of the northwest. All manner of figures, estimates and guesses are available on the subject. Herewith is given a table of detailed figures, as presented at a growers' meeting by W. F. McCauley of Dayton, Wash., a grower of wheat. As will be noted, Mr. McCauley's figures indicate that a 30-bushel crop costs an average of $1.12 per bushel and that a 17-bushel crop (the Washington state average for 10 years) would cost $2.20 per bushel. Mr. McCauley's detailed figures follow:

Actual Cost to Produce One Acre of Wheat on 1000-Acre Farm.

	Per Day.	
Summer Fallow—		
One man, wages and board	$ 3.00	
Feed for eight-horse team	6.00	
Repairs for plow	.25	
Five acres plowed	9.25	
Cost for plowing		$ 1.85
Harrowing—		
Man and board	3.00	
Feed for eight-horse team	6.00	
Harrowed 30 acres per day	9.00	
Three harrowings at 30 cents per day		.90
Disking—		
One man and board	3.00	
Feed eight-horse team	6.00	
Disked 15 acres	9.00	
One disking per acre		.60
Weed Skinning—(Same as disking) 15 acres per day		.60
Drilling—		
Man and board	3.00	
Feed six horses	4.50	
Drilled 18 acres	7.50	.42
Seed Wheat—Cleaned and treated and delivered to the field		1.90
Total cost per acre in the ground		6.27
Threshing—		
Threshing and delivering in bulk in warehouse	187.00	
Horse feed for 92 head	69.00	
Horse hire, 40 head	30.00	
Thresh 45 acres per day	286.00	
Total cost per acre		6.35
Taxes—		
$2 per acre for two years on land		4.00
Interest on Land—		
6 per cent on $100 land, two years		12.00
Depreciation—		
10 per cent depreciation on $10,000 plant, per acre		1.00
Interest on Plant—		
Interest on $10,000 plant at 6 per cent		.60
Repairs and Upkeep—		
On machinery, $100		.70
Taxes on personal property		.14
Salary—		
Foreman salary at $125 per month, $1500		1.50
Horse Keep—		
Pasture 40 head horses for six months at $2.50, $600		.60
Incidental expenses		.50
Total cost per acre		$33.66
Wheat at present value with a 30-bushel average at 90 cents		$27.00
Wheat at 10-year average for the state, 17 bushels, 90 cents		15.30
Net loss on 30-bushel crop	$ 6.66	
Net loss on state 10-year average of 17 bushels per acre	18.36	
Actual cost on 30-bushel crop		1.12
Actual cost per acre on state 10-year average		2.20
Insurance not tabulated		

Use Old Wheat for Seed

"When seeding fall wheat it is best to use seed from some previous year's growth, since it has shown a higher percentage of germination than newly harvested grain," says E. G. Schafer, head of the farm crops department of the State College of Washington.

"The seed of the new crop seems to be somewhat dormant, particularly at the higher temperatures that prevailed at that time. The germination of new seed is slow, but improves rapidly with a few weeks' aging and the lower temperatures that occur as the season advances.

"A test recently made in the seed laboratories of the state college showed that both new and old seed of Fortyfold and hybrid 128 gave a high percentage of germination, but that new seed of Turkey gave a much lower percentage of germination than old seed.

"If the crop is seeded early in the fall old seed is to be preferred to new, as in certain cases the new seed will have a tendency to remain dormant. The old seed will germinate more rapidly and the plants will become established more quickly. If planting is delayed until the latter part of September, or October, the new crop can in most cases be used safely for seed."

FORAGE POISONING REPORTED.

Several cases of forage poisoning have been reported in the Yakima valley and the local veterinarians have advised growers to exercise care in feeding first cutting alfalfa which may have been spoiled. Usually such poisoning is not reported until in winter, but this season it is present earlier. Much of the first cutting was damaged in the field or in the stack and hay that is moldy or rusty may cause the poisoning, which is said to be botulism, but commonly known as forage poisoning.

Balanced Farming Replaces One-Crop Plan

By J. E. NESSLY

Slowly but surely the farmers of the wheat sections of the Pacific northwest are coming to realize that a change must be made from the old one-crop system, and that other crops than wheat must be grown if a profit is to be made. No one expects that wheat will cease to be the "major" crop in the Palouse, Big Bend, Walla Walla, Nez Perce, Camas prairie, Umatilla and Union county (Oregon) districts for many years, if it ever ceases to be the principal one. But each year the conviction that wheat alone can not be depended upon to produce wealth is growing stronger.

It is a slow and difficult process to change from a condition that has existed so long and proved so profitable as wheat growing in many of the districts mentioned. It is simpler to grow wheat and other small grains than to raise a number of different crops. The big farmer who has been in the habit of working hard and farming extensively for several months in the spring and fall and spending the winters in California, as some wheat growers have done, is loath to engage in a kind of farming that will require his presence on the farm 12 months in the year, but most of them are coming to realize that they can not farm their land profitably if only half of it produces a crop each year and the other half has to be farmed at an expense much greater than a decade or two ago, but produces nothing. It seems the wasteful system of "summer fallowing" half of the land each year is doomed to be dropped.

One can not think of wheat farming in the Palouse country and neighboring districts without thinking of that "grand old man of Whitman county," the late Senator R. C. McCroskey of Garfield, who won the reputation (officially) of being the "best farmer in the United States" when he was awarded a medal by the federal department of agriculture for producing the largest number of bushels of wheat on 1000 acres in a single season. No one who knew Senator McCroskey will deny that he was a good farmer and a very successful farmer, yet he raised nothing but wheat. Senator McCroskey kept no live stock except that needed to operate his constantly growing wheat farm, and he raised wheat, just wheat, and he sold it direct from the thresher as soon as harvest was over. He made it a practice to sell his wheat as soon as it was threshed and after all expenses of the season had been paid usually invested the profit in additional lands.

I have before me a letter I received from the late Senator McCroskey about two years ago, in which he wrote: "During the first 16 years that I farmed in Whitman county I bought and paid for $90,000 worth of farm lands, and I made every dollar that I invested in this land by raising wheat, and I never sold a bushel of wheat for $1 and only twice did I receive as much as 75 cents a bushel."

I remember many years ago, when I was discussing wheat prices with Senator McCroskey, he said: "If I could be assured of 60 cents a bushel for wheat every year I would own Whitman county in 15 years." I believe he could have done that, too, for Senator McCroskey was not given to boasting nor to making wild statements. He had figured out the cost of producing a bushel of wheat under conditions then prevailing and he "knew whereof he spake."

But who, of the farmers of the Palouse or of any other wheat-growing sections of the northwest, would undertake to grow wheat now at a guaranteed price of 60 cents a bushel? The fact that it is generally admitted that it can not be done is proof sufficient that there have been radical changes in conditions and new systems must be adopted.

This is shown by the fact that Senator McCroskey's sons, R. C. Jr. and J. Houston, probably equally as good farmers as their illustrious father, for they were trained by him, and they are farming the same land their father farmed when they were boys, have given up the system that made their father's fortune and are raising not one, but several crops, and both are enthusiastic and successful breeders of live stock and purebred live stock at that. The McCroskey brothers are among the first to realize that the methods so successful two decades ago, when Palouse country farms could be bought for $20 to $40 per acre, with $50 per acre an extremely high price, can not succeed on land values at $75 to $150 per acre. They can not afford to let half of this land lie unproductive each year and raise one crop on the other half. Not only have land values increased, but the cost of production has increased and, while the prices received for wheat seem high, as compared with the prices (ranging from 18 cents in 1893 to 40, 50 and occasionally 60 cents during the next 10 years) the cost of production has increased more than has the price of wheat.

One who has seen the Palouse, Big Bend, Walla Walla, Eureka flat, Potlatch, Camas prairie and other wheat sections gradually changing for a third of a century (I "landed" in Whitman county, Washington territory, June 29, 1889) can realize by comparison how great are those changes. If everything else has changed, why should not farming methods change, too? Instead of a Palouse farmer being able to own his county in 15 years with a guarantee of 60 cents a bushel for wheat, he would probably land in the county poor house in less than 15 years if he tried it under conditions now existing.

The changes which have convinced Senator McCroskey's sons that good live stock, legume crops, corn, root crops and other products must be grown on the wheat farm are sufficient to convince the observing that more than one crop must be produced on an Inland Empire farm if profits are to be made.

What is the answer? What must be produced to take the place of so much wheat? Hundreds of farmers are trying to solve this problem and find the answer. Some of them are succeeding. There seems to be no diversity of thought that something must be done to make the wheat farms produce more dollars than they have been producing, and there seems no diversity of the thought that wheat and small grains can not do this. During 1922 I traveled more than 9000 miles by automobile through the farming sections of Idaho, eastern Oregon and eastern Washington. I visited every county in Idaho where farming is the principal industry and inspected the farms and the methods employed in Idaho, in five counties of eastern Oregon and in six counties of eastern Washington and I found that the most prosperous farmers are those that produce not one or two, but several crops, whether they be grain, potatoes, vegetables or live stock, poultry or dairy products.

Dairy Short Course

The winter short course in dairying at the state college at Pullman will begin January 7 and will continue four weeks. This is a course that has been prepared especially for practical dairy farmers who wish to improve their methods of handling their herds. Emphasis is placed on herd management, feeding, housing, breeds and breeding, pedigrees, records, testing and judging. This course has been popular in the past and a good enrollment is expected again this year. If interested write to the dean of agriculture, college station, Pullman.

PEARSON COMMUNITY FAIR.

The Pearson community of the north central part of Kitsap county, held its third annual community fair September 21. There was a neat display of seasonable fruits, vegetables and garden plants, and the competition was keen in many of the classes. The garden club had a special display of vegetables and canned fruit; while the sewing club girls put on a demonstration in addition to their well arranged display of dresses and fancy work. A delegation from Bremerton attended the fair in the evening and had a general good time.

The Wade One Man Drag Saw

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Backed by a Half Century in the Farm Implement Field

Compare the WADE point for point with any saw on the market. Comparison will unfailingly bring you to the WADE

Note its many features: Multiple Disc Clutch; V-Type Frame with wheel and handles; simple, positive Log Dogs; quick, detachable Saw Holder, and the sturdy, reliable Wade

Engine Develops Full 4 Horse Power

—Makes easier operation —Gives better control and efficiency.

What One User Says:

"I am in timber which runs from two to seven feet through. I fall and cut about 20 to 25 cords per day. I find time to split some myself * * * It is a one-man saw [redacted] in timber and is satisfactory in every detail. I would consider no other. C. J. Shipman, Milwaukie, Ore.

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These high points of tractor value lead you directly to the "Caterpillar" Two-Ton Tractor. Its advanced features of design and construction mean simplicity, accessibility, dependability and better field performance — as hundreds of owners attest.

The Two-Ton is notable not only for its wide range of usefulness but also for its exceptional endurance, which insures long life and minimum upkeep cost.

The quality of the Two-Ton is typical of the entire "Caterpillar" line. There is a "Caterpillar" Tractor to meet every power need from the little Two-Ton (15-25 h. p.) to the 40 h. p., 60 h. p., and big power "75." Let us send you full information.

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LIVESTOCK AND DAIRY

The Silo and Silage

By R. C. Hanson.

One urgent need of the farmer today, as every day, is economical production. He must cut down his production costs to meet present-day conditions. We must use all our land and get maximum yield from it. All the byproducts must be utilized. Waste and spoilage can not be tolerated.

Silage has been proved to be one of the important factors in reducing feeding costs, and silage crops can often be profitably grown on land that will not produce a good grain or hay crop.

Where corn can be grown it is perhaps the most profitable crop to grow for fall feeding, as it will produce much food value at minimum cost of production. The silo is the best place to store the corn crop, for an acre of corn can be placed in the silo at a cost little exceeding that of shocking, husking and grinding, and it will preserve more feed nutrients and produce more milk per acre than any other system of handling. It saves value of the corn crop that is otherwise largely wasted. Farmers selling corn by the bushel will market only 55 or 60 per cent of the entire crop, while the man who is feeding corn silage to his stock is saving 90 to 95 per cent of his crop.

Vetch makes excellent silage. As it does not require any cultivation after planting, it can be produced cheaper than corn, for the tonage per acre is practically the same. Several prominent feeders claim that a larger tonnage per acre can be grown where the different grains are mixed.

The value of sunflowers has been proven as a silage crop, ranking only a little below corn.

In California thousands of tons of bean straw are burned each year, yet it has been demonstrated that a silo will earn a high net return when filled with bean straw. This is because the silo salvaged what would otherwise be wasted. Bean straw silage is high in protein and corn silage is high in carbohydrates, therefore when mixed they make an almost balanced ration. If the corn is ripe the mixed silage can be fed as an entire ration for fattening.

In rainy regions the silo is the greatest crop-saving device ever known. In the northwest the farmer always takes a big risk in growing all very early or very late forage crops, which must be dried in the field. Rain can not hurt hay when it is to be stored in a silo, and everything valuable for stock fodder can be saved and utilized.

Silage provides feed during slack periods and when grain is very high. It is not necessary to feed silage as soon as it is put up; in fact, it should stand at least three weeks. The use of summer silage is especially valuable to provide food immediately following the depletion of pastures and before the corn products are sufficiently mature.

Not only do silos reduce feeding costs, but silage-fed stock are more vigorous and healthy. Silage also brings stock into condition quicker and produces greater milk yields.

To Tell Cow's Age

By F. W. ATKESON.

Is there any way to tell the exact age of a cow? Are the horn rings correct and do they come at different ages on different breeds of cattle? If so, please state the difference.
Priest River, Idaho. J. H. K.

The three general methods of determining the age of cattle are the horns, the teeth and general appearance. The wrinkles on the horns are only general indication, of age, since there is no absolute uniformity in the time at which the first wrinkle appears. Each wrinkle is supposed to represent a year after the first two years, but the wrinkles may not develop with regularity after the cow becomes old. Another thing to bear in mind is the fact that in the case of purebred cattle that have been fitted for the show ring or sale the horn rings have been removed by filling and polishing The horn rings are a general, rather than a specific, indication of age.

The approximate age of cattle can be determined by the teeth, although this is relied upon more generally with horses than with cattle. Cattle have 20 temporary and 32 permanent teeth. They have eight incisors in the lower jaw, with no incisors in the upper jaw. The age is estimated by the permanent incisors. At about 1 month of age the full mouth of temporary incisors is shown. At 2 years of age the center pair are replaced by the larger permanent incisors. At 3 years the two incisors, one on each side of the first permanent pair, appear fully developed. At 4 years of age another pair becomes fully developed, one on each side of the permanent teeth. At 5 years of age a full mouth of permanent incisors is exhibited. At from 5 to 6 the center pair are leveled, at 7 years leveling of next outer pair, at 8 years leveling of another outer pair, at 9 years leveling of corner teeth. Beyond 9 years the indications are less graduated, but the teeth continue to wear, becoming more rounded and tending to separate from each other and showing a greater dental star.

The age of cattle can be judged to some extent by the general appearance of the animal if the person is experienced. Normal dvelopment indicates age up to about 7 or 8. Beyond this age sunken eyes, shrunken cartilages at tail head, gray hairs in case of black animals and general action indicate advanced age, but some animals are better preserved at advanced ages than are others.

Purebred Cattle Prices

Sale prices of purebred dairy cattle were relatively higher in 1922 than those of any other kind of purebred animals, according to a recent survey made by the United States department of agriculture.

Although prices were not high compared with the peak reached in 1920, the averages indicate that cattle have apparently been produced at a profit to the dairymen. Reports were received on a total of 7597 dairy animals representing five breeds, as follows: Holstein 2796, Guernsey 2160, Jersey 1975, Ayrshire 509, Brown Swiss 157.

Average prices received by breeds, including all ages and both sexes, at both private and auction sales were: Ayrshires, $181.73; Brown Swiss, $123.53; Guernseys, $273.36; Holsteins, $187.15, and Jerseys, $186.50. All of the Brown Swiss reported were disposed of at prvate sales. Comparing the private and auction sale prices of the breeds, these data show that the difference in the prices received by the two methods is so small that in 1922 a heavy auction sale expense was not justified.

The highest prices by breeds indicated by the reports were: Ayrshire, $3000; Brown Swiss, $500; Guernsey, $7500; Holstein, $5000, and Jersey, $5000.

Of the 7597 animals reported, 3187, or nearly one-half, sold at a price above $150. This number was divided by breeds as follows: Ayrshire, 185; Brown Swiss, 35; Guernsey, 979; Holstein, 1068, and Jersey, 920.

It has been sufficiently demonstrated to the department of agriculture officials in almost every community in the United States that it pays well to use good type purebred sires.

This report indicates that purebred sires may be had at reasonable prices.

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give more milk and butter fat. They are cleaner, healthier—feel better, feed better. Filth and lice cannot accumulate—bigger returns are positively assured.

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Chester White dams are a good investment whenever profitable swine breeding is desired. They have good dispositions, are prolific breeders and excellent sucklers.

The records made by Chester White pigs in boys' and girls' club contests throughout the United States are to be envied. The easy-feeding qualities and rapid growth enable the boys and girls to win, even when showing against all other breeds of swine.

Remember this—The ultimate end of all pork is family use. Your family deserves the best when it costs no more.

Write for circular and other information.

CHESTER WHITE SWINE RECORD ASS'N.
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Rochester, Indiana.

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"SILVER STEEL" SEGMENT GROUND
CROSS CUT SAWS

No. 51

$394,000,000 This Year

GOVERNMENT figures place the value of timber cut on farms this year close to four hundred million dollars. Why not get YOUR share?

Your hardware dealer has genuine ATKINS Cross Cut Saws, with two or four cutting teeth to each raker—the only saws made of "Silver Steel" and "Segment Ground," GUARANTEED to cut faster, to hold their edge better, to last longer. You can save time, money and timber with a good saw.

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"Atkins Saws on the Farm" gives valuable facts about timber and the care of a saw, tells how to make useful farm appliances, gives tables of weights and measures and shows ATKINS Saws for metal and wood cutting, circular saws, buck saws, hand saws and better saws for every use. Get your copy of this free book today. Just send your name and address to—

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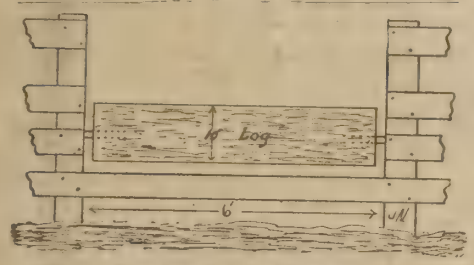
Have you glanced over the farm bargains on the "Want Ad" page?

Stop the Hog

But Let the Other Animals Pass

At times the lot arrangements are such about some farmsteads that it becomes almost essential to pass the cattle or horses through hog lots to get them to and from their pastures, or even to get them to the watering place. Ordinarily gates will have to be opened and an attendant will have to be present to perform the work. Or it may be accomplished by lowering the fence sufficiently to permit the cattle and horses to pass over and still retain the hogs. Often the hogs, however, get accustomed to jumping the gap so that it must be raised uncomfortably high to stop them and by so doing cause trouble for the other stock to the extent that injuries may result. Legs may be bruised or skinned, cows may injure the udder, or any one of a large number of troubles may arise.

A comparatively simple yet effective device may be made by pivoting a log in the gap between the two posts that form the opening. It is better to make this gap about six feet wide or even wider, so as to avoid crowding when the animals attempt to rush through. Below the log the fence should be solid, so that the stock do not get their feet caught in crossing.



Log pivoted in the gap.

The log should be from 6 to 10 inches in diameter and be swung in between the posts on iron pegs that are about an inch in diameter. For this purpose gas pipes will do. They should extend into the log at least 10 to 12 inches and almost through the posts on the one post where it may be swung first and in the other post the hole must be drilled through so as to make it possible to pivot the log in position without removing the post. The end play of the log need be just sufficient to afford easy play and enough freedom so the log turns or revolves with ease when weight is placed on it.

The posts into which the log is pivoted should be set substantially, so they will not yield to quite a bit of pressure, as it is apparent that they must serve as brace posts in a broken line. In the diagram board fencing is indicated on either side of the gap. This is not essential, but advisable, inasmuch as the horses can more easily see the gap when they approach it in a rush.

When the hog places his fore feet on this log in an attempt to jump over he is surprised to find that it rolls his way and affords him no foot hold whatsoever. A few trials soon convinces him that his efforts are futile.

The Neuwaukum Fair

If the Neuwaukum fair, held in the southeastern part of King county, continues to make rapid advances as it has made in the last three years, it may become the county fair, which is the ambition of the directors. This is the third annual event held by the association, which was first started by the Neuwaukum grange in a district by the name just east of Auburn and west of Enumclaw. It was too large a fair to be housed in the grange hall, so the second year it was moved to the farmers' picnic grounds, near Enumclaw, at which place it was held this year.

The old pavilion building was used for the main exhibits and the different departments were lined out by four long tables on which the entries were arranged. The agricultural and fruit entries occupied two of the tables, while the women's department and the flowers made use of the other two.

There was an unusually fine exhibit of apples which were well colored and had good size. The pears were high class but were not so numerous. The prunes, peaches, and soft fruits were exceptional, considering that it was past their season. It was a surprise to see such a large showing of squash, pumpkins and mangles. In fact, the latter display showed that the people believed in providing root feeds for their dairy cattle, which are kept in large numbers in this community. Other vegetables which should be mentioned are the carrots, potatoes and corn, while there were many good showings of such plants as kale, grasses, sunflowers and corn.

The display of baking and canned goods was very complete and the honey exhibit was attractive. The flower show consisted of cut flowers and house plants all of which went to make up a beautiful department.

The livestock department was at one side of the baseball field. There were dairy cattle, both Jersey and Holstein, and the poultry section had White Leghorns and some of the heavier breeds. The center of the field was used for an auto show which would have been a credit to any fair.

In Class by Itself

What is filled milk and what part is it playing in the dairy industry? Probably not one person out of 10,00 has ever heard of filled milk and yet its manufacture is now on an immense scale.

The manufacturers of filled milk are modifying the product of the dairy cow. They skim the cream from the milk, then replace it with a like amount of coconut or other vegetable oil. This is then evaporated or condensed, canned and sold as a substitute for evaporated or condensed whole milk. When this product is put on the market it is placed on the same shelves in the stores and in more or less direct competition with condensed or evaporated milk.

Dairymen throughout the entire country are protesting against this imitation product. These dairymen realize that children who are being fed on filled milk can not develop as do children who get whole milk because when the cream is removed it takes practically 90 per cent of the fat soluble vitamines.

Growing children should have some source of vitamine A. If the vitamine known as fat soluble A is not present in food the child will not continue to grow. This vitamine is found in milk, butter, livers of animals, leafy part of plants, yellow corn and in the yolk of eggs. How much of this vitamine is needed is not definitely known. For infants the preferable supply is whole milk. Skim milk is low in vitamine A and vegetable oils do not contain any vitamines. So it is easy to understand why filled milk can not compare with whole milk as a food.

It has been proved by Dr. E. V. McCollum, professor of chemical hygiene of John Hopkins university, that sore eyes and rickets result largely from the diet which contained no milk. In an experiment he found that the absence of butterfat caused rats to die as of starvation, even when fed on a large amount of vegetable fats. He proved that men fed on a normal diet of vegetables and fat pork with milk left out developed pellagra and were cured of pellagra by adding milk to their diet.

In another experiment two dogs—twin brothers—were used. When one month old one was taken to a home in town, where he got no milk at all, while the other was taken to a farm and was fed whole milk. Four months later the dog in town was found to be stunted and had made very little growth. His brother on the farm was a fine big fellow. Then the dog in town was brought out to the farm and they were both fed milk and four months later the stunted dog had gained in size and weight until he was almost as large as the other one.

Fat soluble A can be obtained in other ways, but they are not as available for feeding to growing children as in milk. Mothers woud not make much headway in feeding large quantities of kidneys, liver fats, carrots and yolk of eggs to babies in order to obtain fat soluble vitamines. These vitamines are easily supplied in milk.

In the nutrition of the young, whole milk stands in a class by itself as a great food.

Prevent Smut Fires

Threshing machine fires can be prevented if proper precautions are taken when smutty grain is being threshed. is the opinion of Doneen, Oakesdale, Whitman county, Wash. "In fact, I have had no threshing machine fires for the last five years," he said. "Many threshing machines could have been saved this year from smut explosions, if they had been equipped with smut fans.

"Five years ago a demonstration was started on my threshing machine by George L. Zundel, extension specialist in plant disease. The machine was equipped with a smut fan, aspirator and wiring system. When the wiring system was installed the state college made tests which showed that 2200 volts of static electricity were being grounded."

Mr. Doneen is firmly convinced that fires are unnecessary when machines are equipped in this manner. The aspirator has been improved since it was first put on the separator and Mr. Doneen is convinced that it has saved him as high as 5 cents in cleaning costs.

SAVE ALL the CREAM

The Anker-Holth Cream Separator

meets with the approval of the most critical users. Why? Because of its self-balancing bowl and interchangeable disks. Place the disks in the machine any old way and they will be automatically thrown into place by centrifugal force.

PERFECTION MILKING MACHINE.

It has a gentle suction, spiral downward squeeze and a period of complete release.

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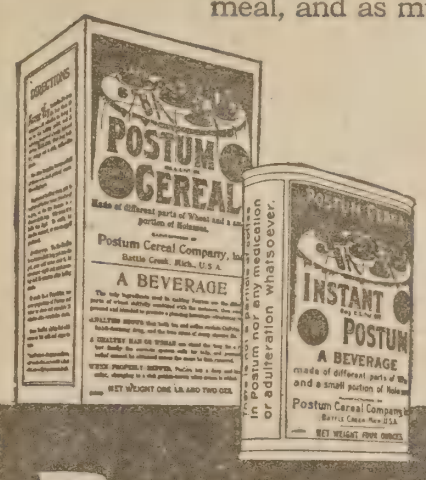
If you find that coffee harms you, change to the pure cereal beverage, Postum. You'll find it delicious and satisfying. And it is absolutely free from caffeine or any other harmful drug, so you can drink Postum at any meal, and as much as you want.



Your grocer sells Postum in two forms: Instant Postum (in tins) prepared instantly in the cup by the addition of boiling water. Postum Cereal (in packages) for those who prefer the flavor brought out by boiling fully 20 minutes. The cost of either form is about one-half cent a cup.

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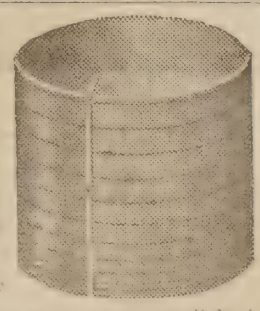

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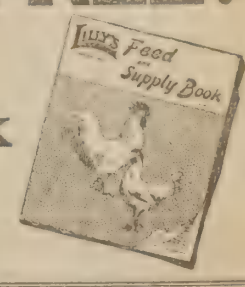

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POULTRY AND RABBITS

The Early Molter

Ability to choose between the laying hen and the nonlayer is easily developed by poultry owners and should be put into practice in culling the flock if the best returns in both eggs and meat are to be had. In any flock some hens will be found which are such poor producers that they are unprofitable, and these are the ones to eat.

All hens molt in the fall or early winter. This molting characteristic is easily observed and, when it starts to take place, means that the hen has about finished her laying season and is turning her attention to growing a new crop of feathers for a vacation before she starts her next year's work. If it is desirable to use a part of the flock for meat, says the United States department of agriculture, the early molters are the ones to select for eating first because they are laying very few or no eggs during this molting season which usually lasts about three months. The hens in the flock which have not yet started to molt should be retained for egg production. They should not be killed until they begin to molt and their combs begin to lose size, color and flexibility, for if these changes have not taken place the hens will probably still be laying when eggs are especially valuable.

The early molt is not, however, an infallible evidence of unprofitableness, for many conditions tend to hasten or delay the molt.

As a rule hens of the general purpose breeds are not profitable layers after they are 2 years old, and Leghorn hens rarely lay profitably after three laying years. Many of the hens should be culled before they reach these ages and replaced by well matured pullets in the fall.

Fattening Turkeys

By R. T. PARKHURST.

What is the best method of fattening 100 turkeys? I have both corn and soft wheat available. Would you recommend either? How much would you begin feeding and when would you increase and in what amounts?
Salmon, Idaho. J. F. C.

As soon as the weather begins to turn cold and insect food becomes scarce and increased grain diet must be provided for the young turkeys. A ration of wheat and corn is the best. Do not feed them too much at first, but gradually increase the supply until they are having all they can eat.

Those who succeed best in having the turkeys ready and in fine condition for the early market are those who allow them their freedom and feed them all they can eat of fattening and wholesome grains. Even when finishing them it is not well to confine them. If they are fed each day at regular hours and at the same place, it will be an easy matter to have them come there three times a day for their feed.

Old corn is better than new for heavy feeding, as the latter is very apt to cause looseness of the bowels. If necessary to use new corn, it should be introduced into the ration gradually. If the poults have gained a strong, well-developed physique by early fall, they will be in fine condition for heavy feeding. As soon as they have become accustomed to grain feeding, they may be fed once or even twice a day on ground oats and corn meal mixed with milk. This should be given in addition to an abundance of wheat and corn. They should be fed each time just what they will clean up with relish. Feed the grain morning an devenings and the mixture at noon or twice between morning and evening as best suits your convenience. See that plenty of sharp grit is always at hand for their use and provide a constant supply of fresh water where they may help themselves.

Poultry Breeding

It is obvious that when one is breeding for standard points and egg production at the same time progress must be relatively slower than where only a single objective is sought, says Dr. Morley A. Jull of the United States department of agriculture. That perhaps is the crux of the whole breeding situation; some breeders are wont to develop one line to the total exclusion of the other. In this connection, two important things must always be kept in mind. First, since separate breeds and varieties long since have received official recognition, all poultry breeders should exercise reasonable efforts to maintain breed and variety characteristics. Second, since the continued expansion of the poultry industry depends in a very large measure upon the productive capacity of the birds kept, standard-bred breeders naturally should be expected to give some consideration to economic qualities.

The chief difference between the practice of some standard-bred breeders and most utility breeders is largely a matter of degree. The object in view should determine the method of procedure in breeding operations. If the breeder wishes to develop Silkies, Frizzles or certain varieties of Games, for instance, to the highest possible state of perfection in respect to body type and feathering characteristics, he is certainly justified in adopting as standard points whatever may please his fancy. In fact, breeding for fancy points has done much to stimulate interest in the science and art of breeding. On the other hand, if the strictly commercial poultryman is interested exclusively in egg production he may be justified in running his plant more or less on the factory plan. The keeping of birds that are just "chickens" in order to make a living is justifiable, as long as a living can be made.

Backyard Poultry

By R. N. MILLER, Extension Division, State College of Washington.

That many owners of good-sized back yards are making considerable income from well-bred hens is shown by several yearly records kept by back yard poultrymen. A well-bred hen is a very economical user of feed, eats practically any palatable food, is interesting to work with and requires no great amount of time or money for equipment. The returns from back yard flocks may or may not make them worth while, according to the skill of the owner.

The record of E. E. Hupp, Newport, Wash., who keeps from 150 to 200 hens in his large back yard, shows an average labor income of $25 per month. This is an exceptional record, but records of from $1 to $2 per bird are not exceptional. To make good records the owner must be ready to give the birds the feed and careful attention they require.

The proper size for a money-making flock, or the minimum number which a person should keep depends entirely upon the size of the lot and the ability to manage. Many people are content with the eggs of a few pets, while others keep 100 or 200 with all the ardor of a large poultryman.

Keeping a few birds differs greatly from keeping a sufficient number to make a living from them. On a small number the labor is merely a recreation, but as the number of chickens increases, labor costs become a consideration. On a fairly large scale the average labor income can be figured at $1 per bird per year, but this income depends upon many bactors.

W. H. Pitrie of Ellensburg, with about 400 layers, averages 220 eggs per hen, and the labor income per hen is above $3.

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Read what Mr. H. J. Schuette, Box 47, Evansport, Ohio, says: "SMOKE 'EM" is a wonderful roup cure. It certainly does the work. Dealers, we have a good proposition.

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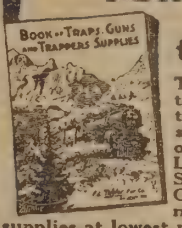

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Garfield Stock Show

That farmers in the Garfield district realize the value of good draft horses was indicated at the live stock show held there October 12 and 13, when over 50 head of purebred and high-grade horses competed for honors in the class of grade mares. 18 head were shown, while 17 head of draft geldings competed in one class.

The outstanding feature of the horse show was the string of purebred Clydesdales shown by R. C. McCroskey. These Clydesdales have completed the show circuit of the leading fairs and are now awaiting shipment to the Pacific International to complete the season. Several head of purebred Percherons were shown by Dr. W. N. Divine and Sam Ransier. A number of good Shires were exhibited by Nye & Boyd.

Beef cattle probably ranked second in general interest, with a strong showing of Shorthorns, for which the Garfield section is well known. N. Williamson, J. Houston McCroskey, J. E. Trimble, George Imler and Howard Burgess are among the principal breeders of that region and McCroskey, Trimble and Burgess made up the show with over 40 animals. Mr. Trimble's white 2-year-old bull, Hercules Snowstorm, sired by Village Sultan and out of Hercules Matchless, won first in the two-years-and-over class, but McCroskey's red yearling, Perfection's Star, sired by Knight's Perfection, defeated him for the grand championship. The competition throughout was largely between the McCroskey and Trimble herds, with the honors fairly well divided, though McCroskey won the cup for best showing of beef cattle. All but one of his winners were of his own breeding. Mr. Burgess won first in the milking Shorthorn cow class, McCroskey taking second and Trimble third.

In the dairy cattle division, 38 head were shown, mostly grades. Peringer & Salzman won the silver cup offered for the best dairy herd, with their herd of purebred Brown Swiss.

There were about 100 head of hogs shown, with Chester Whites predominating, though all breeds were well represented. C. L. Patton won the cup offered for the best sow and litter, with a Duroc Jersey sow and 11 good pigs.

On the first evening of the show, a well attended banquet was given, among the leading speakers being Dean E. C. Johnson of the College of Agriculture at Pullman, and Senator Wilmer of Rosalia. Several stockmen also spoke.

Steps are already being taken looking toward a repetition of this year's success in the show next fall. Several cattle breeders who did not show this year have already agreed to exhibit their herds at the next show.

S. W. Shoemaker is president of the show, with W. Duling, vice president, and Dr. A. R. Galbraith, secretary-manager.

Will Market Eggs

Announcement is made that, beginning November 1, the Farmers' Union Egg and Poultry association will begin handling the product of its members through a selling office in Spokane. For the present the business office will be in the farmers' union headquarters in the New Madison hotel building, but other quarters will be selected later. Aa a meeting of members held in Spokane October 20 D. F. Mitchell of Spokane, a producer and member of the association, was elected secretary-treasurer. Members of the board of directors include O. O. Groh of Clarkston, A. W. Anderson of Spokane, C. H. Cross of Greenacres and Fred Boyd of Garfield. J. Q. Adams, president of the farmers' union, is a member of the board of directors, representing the public, having been appointed by Director E. L. French of the state department of agriculture, the law requiring the commissioner of agriculture to appoint one member of the board.

All officers and members of the board are temporary only, the state marketing cooperative law requiring that the membership in a cooperative association shall elect its own officers. All directors, other than the one appointed to represent the public, must be members of the organization and all members must be producers of the commodity to be marketed.

It is announced that about 35,000 hens are owned by the present members of the association. Contracts of the present members were entered into on the basis of a 50,000-hen sign up.

FARMS SERVED BY RADIO.

Reports to the United States department of agriculture from county agricultural agents estimate that there are approximately 40,000 radio receiving sets on farms in 780 counties. This is an average of 51 sets per county for those reporting. The county agents' estimates cover every state. These farmers are receiving federal weather forecasts, crop reports and market quotations, together with agricultural news in the form of "agriograms" and talks on various phases of work in the department of agriculture, broadcast from cooperating commercial stations.

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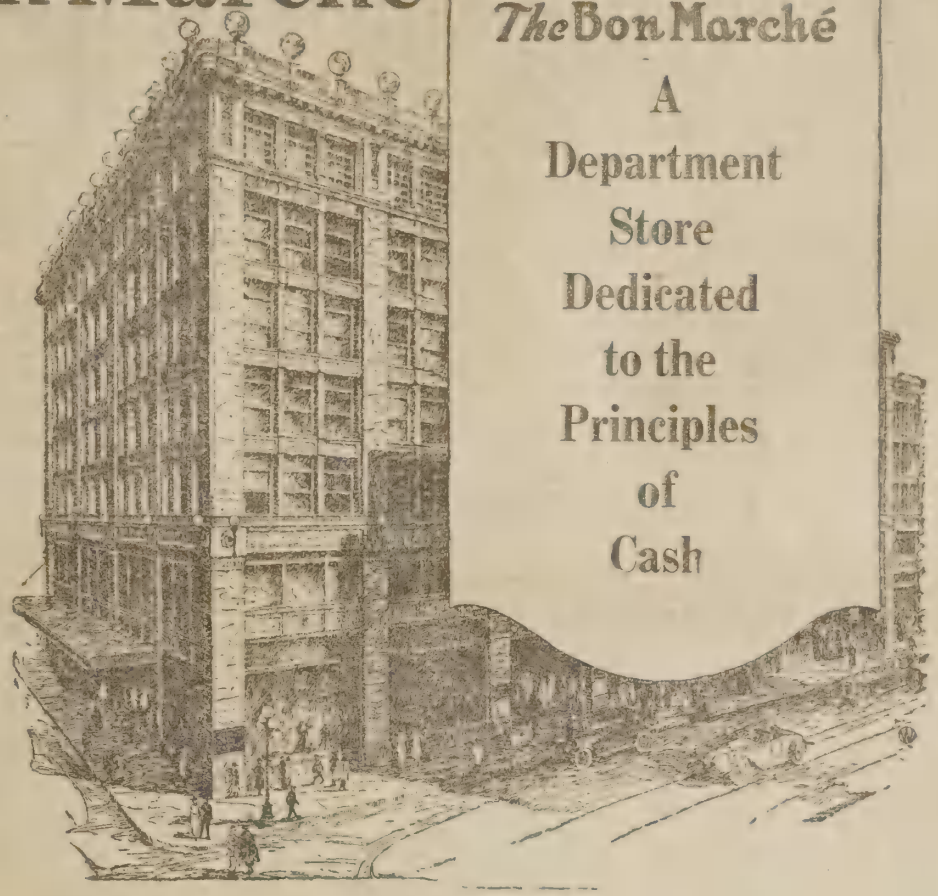

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A Stupendous Livestock Show

By HORACE ADDIS.

Every week since August county fairs have been held and the best of the live stock exhibited has been awarded blue and purple ribbons. All fall the battle for supremacy at the home fair has been going on. Some owners have not been satisfied with defeat and, being prepared, have exhibited at two or three district or county fairs. The winners have gone on to these larger fairs and the battle has been renewed. As the season wore on some of the stock has been eliminated, owing to failure to win. And all the time the winners have been looking forward to the date of the Pacific International Live Stock exposition, for they know that there winners not only from the state and larger fairs of the northwest will compete, but that California, British Columbia and the east will send their best representatives, in the hope of winning the laurels that go to the grand champions in the live stock department. To one interested or versed in the breeding of purebred live stock the prospect is thrilling. It is the test of sporting blood, just as really as in the case of the long distance race or the prize fight or any other test of skill or endurance and quality. Quality—that is the word in the live stock show ring. And in the Pacific International it is a "battle of giants," so far as fine live stock is concerned. There is education in the study of these awards, and there is a satisfaction in watching the placing of the ribbons and viewing the prize stock in the stalls that quickens the pulse and the heart beat.

The East Is Coming.

Ten carloads of stock, including horses, beef and dairy cattle and sheep, are coming in a special train from the east, most of them being dairy cattle from the National Dairy show. The best in the east is coming to "measure swords" with the greatest of the west. What live stock man, whether a breeder of purebred or only grade stock, will not want to attend?

The importance of the Pacific International has grown from year to year, and its scope has widened. For two years now the Land Products show has been held under its sheltering wing. In this the best in the way of fruit, especially apples, and vegetables, especially potatoes, have greeted the eye of the visitor. And if that visitor was a stranger, the exhibits have usually been an "eye opener." For the beauty and quality and uniformity there seen are almost beyond belief.

Hay and Grain Show.

And this year that department is to have such an addition as to almost dwarf the original show. For the Northwest Grain and Hay show, after two successful years at Pendleton, goes down to swell the interest and importance of the Pacific International. A premium list of $2500 is offered, and the total of the Land Products and Grain and Hay show is over $6000. O. M. Plummer, manager of the Pacific International, confidently expects over 2500 entries in the one bushel of wheat class. And this is only one of the many departments in which there will be great competition.

A dairy products show will again depict the value and life giving qualities of milk and milk products. It will show the right and wrong way of caring for them. It will be informative in every part of its interesting eight days.

The horse show is the society event of the organization. Still, it is composed of draft as well as fancy horses and is visited by more people than any other one department of the show. Good judges declare it actually outstrips Madison Square Garden this year. There will be more fancy and heavy drivers competing than ever met in one show before. The completeness of this show, with its big premium money, can not be overemphasized.

Poultry is not only one of the great sources of wealth to the people of the northwest, but its importance as an industry is recognized, and the poultry show of the Pacific International is no insignificant part. In fact, it draws many who come chiefly because of their interest in the poultry show. It comes late enough that most of the birds are in good feather and show well. It is one of the important features.

The Washington Farmer has often emphasized the point that all fairs and stock shows should be primarily educational. The Pacific International emphasizes the educational idea above all others. It is not alone in studying and comparing the purebred stock. The stock judging contests are a school feature. The young people who take part and those who stand on the side lines and watch are given a schooling not obtainable in any other way. First of all, and serving the greatest number, are the club boys' and girls' stock judging contests, where those who have qualified by superior work in district and county fairs have won the right to compete here. They run into the hundreds. The Smith-Hughes vocational classes from the various high schools probably come next in numbers. And the college teams probably create the greatest interest, because there is a natural and healthy state rivalry. Added to all this live stock judging this year there is a grain judging contest, as a part of the grain and hay show, with liberal premiums, which is intercollegiate. Six hundred dollars will be distributed to the winners of this contest alone.

As if to add still more to the educational idea of the show, the American Holstein-Friesian association is putting on a "Holstein school." W. S. Moscrip, the noted Holstein judge of Minnesota, will be in charge. There will be lectures and special judging contests. There will be Holstein pictures and the statues used to show the "model Holsteins." Breeders of this popular breed are delighted. For this is the third and last of these "schools" this year, the other two having been at the National Dairy show and the Eastern States exposition.

Sales Will Be Held.

One thing more, of as much interest to live stock breeders as anything else can possibly be, is the sales. At shows of this kind the breeder who wants the best of herd headers or foundation stock is wont to come. This has resulted in the building up of the public sale idea. The Pacific International, like the other great national live stock shows, has one or more sales almost every day of the show. This year a swine sale—Duroc Jerseys—has been definitely added to the others and, it is probable, a Shropshire sheep sale will be held, although it can not be positively announced at this time. The following is a complete list of the sales to be held during the week::

Guernseys, Wednesday afternoon, November 7.

Duroc Jerseys, Wednesday afternoon, November 7.

Fat cattle, hogs and sheep, Thursday morning, November 8.

Jerseys, Thursday afternoon, November 8.

Shropshires (probably), Thursday afternoon, November 8.

Shorthorns, Thursday afternoon, November 8.

Holsteins, Friday, morning and afternoon, November 9.

Hereford consignment sale, Friday, November 9.

Thiessen Hereford sale, Saturday, November 10.

Win National Championships

Not only the state of Washington, but the entire west won distinction when two Washington Holsteins won championships at the recent National Dairy show at Syracuse, N. Y. The senior and grand champion cow of the show was Tillamook Daisy Butter King De Kol and the junior champion heifer was Carnation Matador Adelina Segis, a senior calf. These two

Tillamook Daisy Butter King De Kol.

national championships were in the herd of 22 animals taken on the eastern show circuit by Carnation farms of Seattle. The herd left Washington on August 20 and will finish the show circuit at the Pacific International in Portland November 10. On their eastern trip they showed at the Wisconsin, Indiana, Illinois and Kentucky state fairs and the interstate fair at Trenton, N. J., and the National Dairy show. They won 14 championships and 46 first prizes in competition with the best Holsteins in America.

The winning of such signal honors by Tillamook Daisy is even more noteworthy when it is remembered that last spring she completed a year's official test with a record of 32,472.6 pounds of milk containg 1012.56 pounds of butterfat, which made her second highest milk producer under full age in the world. All ages considered, she is the 12th highest milk producer on record.

As indicated by her name, the grand champion cow was bred in Tillamook county, Ore. Arthur L. Moses of Tillamook was her breeder. Her sire, Sir Bessie Fayne De Kol Fobes, and her dam, Topsy Lola Butter King De Kol, both are in the herd of F. R. Beals of the same county. She is today's leader of the Homestead family, intense Homestead breeding appearing on the side of her sire, a son of Sir Bessie Homestead Johanna Fayne, he by Johanna Bonheur Sir Fayne. The latter is a grandson of Homestead Junior De Kol and Sarcastic Lad, a wonderful show bull, and is out of Jessie Fobes Bessie Homestead, formerly world champion 34-pound 4-year-old and "three times 33-pound cow." Daisy's granddam is a daughter of Fobes Tritonia Mutual De Kol and hence a sister of Mutual Fobes Longfield De Kol, the famous Marks-Davis sire of the Yakima valley.

The Curse of Colin

"Jack——" she hesitated; "do y'u s'pose it could be the red lock that made Ken act like 'e did?"

The question was so at variance with the man's trend of thought that he was a long time considering it.

"It ain't the red lock," he finally answered in his slow way, "it's the drop of blood that come with it. F'r that matter, though, every man gits a bad drop 'r two out of the past. But them bad drops can be overcome, if a man bucks ag'in' 'em. The trouble with Ken was it didn't 'pear like he wanted t' buck ag'in' his."

"The 'curse of Colin'" was the girl's musing comment. "F'r hundreds of years—ever sence the days of 'Red Colin,' the old sea pirate—it's be'n breakin' out in the family every few generations. It alw'ys worried Ken that it broke out on him. I've some times thought it would 'a' be'n better if he'd never 'a' found out the meanin' of that red lock—that it was the 'curse of Colin'——"

"That's it," he commented. "I 'low Ken fig'r'd the curse had 'im anyhow, and so it wasn't wo'th while t' buck ag'in' it."

"The Red Lock," our next serial story, from which the foregoing extract is taken, abounds in blood-stirring situations, villainy that makes us grateful for the good that we find in those about us, heroism of an unusually appealing and inspiring type and, for those who like it—and who does not?—mystery and suspense. This new story begins as soon as Cattle Ranch to College closes.

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Electricity has had a share in making it possible for one man with modern equipment to accomplish as much as a dozen men in the old days.

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We want you to know all about our efforts to serve you and the problems we encounter. When we understand each other better we can be mutually helpful.

NORTHWEST ELECTRIC LIGHT AND POWER ASSOCIATION

F-3

ORCHARD AND GARDEN

Marketing Honey

By George W. York.

How about marketing your honey crop? Do you know just how much it has cost you per pound to produce it? Some very unbusinesslike beekeepers seem to think if they have a few pounds of honey above what they want to use in their families they can afford almost to give it away! Does any one do that when he or she has a few extra dozens of eggs or a surplus of butter? No, of course not! Then why do that way with honey, which has a higher food value than many other things that are sold for food?

You should try to find out from the commercial beekeepers at what price they expect to retail their honey, and then help to keep up the price by asking as much, if not more, per pound for your honey than they do, for you may have only a few pounds to sell and it will soon be gone at a good price. If you don't ask a fair price you surely won't get it?

If you have extracted honey the best way to put it up for the market is in 2 1-2, 5 and 10 pound tin receptacles. Perhaps the two smaller sizes will sell the best. The two and one-half pounds should bring at least 65 cents, the five-pounds $1.15 and the 10-pounds $2.20. These prices are not too high for good table honey. There is never such a vast amount of the best grade of honey produced.

Comb honey, of course, should bring at least 30 cents a pound and possibly 35 to 40 cents in some places.

The sections or frames containing the beautiful comb honey should be carefully scraped of all bee glue or stains of any and all kinds, so that the wood frame holding the comb will be neat and clean.

All tin or glass packages of honey should be neatly labeled and also bear the instructions for reliquifying if the honey should granulate, as practically all pure extracted honey does in cold weather. But such granulating is one sign that it is pure bees' honey. However, some people prefer to eat it in the moist, granulated form, as it can be spread on bread without "running off," as it does when entirely liquid.

If the general public knew the great food value of honey they would use much more than they do. It should also be used more and more in making candies and also in the kitchen, and thus less sugar would be consumed; and the health of the people using more honey would be greatly improved.

"Eat more honey" is a favorite slogan these days in some parts of the country. It is a good one, too, especially for children. Dr. H. W. Wiley's children do not get any candy, and all the "sugar" they have is found in the fruits they eat. But they have all the honey they want. Dr. Wiley was our government chemist some years ago, and so should know the comparative values and effects of the various kinds of foods.

Control of Cabbage Lice

By A. L. LOVETT, Entomologist.

Is there any method of control for cabbage lice? B. H. M.

These insects have a sucking tube through which they obtain their food, therefore poison sprays are of no avail against them. Likewise, their rate of increase is very rapid; they have wings by which they can fly and reinfest gardens, so that frequently where one has applied control practices against them, later on you will again find a heavy infestation. The type of spray we regularly recommend for their control is known as contact spray. One of the best and easiest to apply is nicotine spray. This is the commercial nicotine, such as black leaf 40; use two tablespoonfuls; soap, one-half pound (fish oil or whale oil soap is preferred, if available); water, 12 gallons. As the name indicates, to be effective this spray must actually wet the insects, and on a commercial planting of cabbage with the leaves turned down a good deal and the pocketlike areas in which the aphis feed, to thoroughly wet them with the solution is difficult. Another material which can be prepared at home is the kerosene emulsion. This is one of the best contact sprays we have, but some care must be taken to be sure that a thorough emulsion of the material is sustained. The formula for the preparation of this is as follows: Fish oil soap, one-half pound; water, one gallon; kerosene, two gallons. Dissolve the soap in boiling water, remove from fire and add the kerosene, stirring vigorously. The solution should now be agitated until it assumes a thick creamy consistency and does not separate on cooling. This condition is most readily brought about by the use of a small bucket pump, pouring the solution through the hose and back again into the container. This emulsion so obtained is known as a stock solution. To one gallon of the stock solution add eight gallons of water. This will prove a most efficient contact spray for aphis. During the warmer portion of the year one may use a dust nicotine. The nico-dust, so-called, a commercial material now on the market, is very effective during the summer time, when temperatures are high. It is better, however, to have some of this material on hand and apply it at intervals of about every two weeks, rather than to wait until the aphis are serious on the plants and then attempt a control.

Gooseberry Maggot Control

What is an effective way to fight gooseberry maggots? C. L. A.

The following discussion of the gooseberry maggots and methods of control is taken from the O. A. C. station circular 42, "Insect Pests of Currants and Gooseberries":

Standard sprays are ineffective. A sweetened poison spray consisting of lead arsenate (2 ounces), sirup (1 quart) and water (3 gallons) is attractive to the flies and will kill them where sprayed lightly on the foliage during May while the flies are out. Due, however, to the frequent showers at that season of the year washing off the spray and the consequent necessity of frequent repetition of the application, this treatment has not proved commercially successful in tests made by the experiment station.

Taking into account the fact that for nearly 11 months of the year the insect occurs in a helpless state in the first few inches of surface soil beneath the plants; any practice that will disturb or destroy these resting forms is of value in control. Frequent stirring of the surface soil under and immediately adjacent to the bushes during late summer, fall and early spring will expose many of these pupae to adverse weather conditions, to attacks by birds, etc. In tests at the experiment station better cultural practices alone—i. e., closer and more frequent cultivation—have reduced the infestation to a negligible factor.

Poultry allowed to run in the yards just after harvest will destroy many of the pupae. Their interest should be aroused by raking the surface trash and debris from under the bushes to the center of the row. After they once discover the dainty titbits they will search out a goodly share for themselves.

Early maturing varieties are less heavily infested than are the later berries. Commercial fruit should be picked just as soon as ripe. Often the worms are so small as to escape detection and have no apparent deleterious effect on the fruit.

Removing Apple Trees

The best methods of removing trees from orchards planted too thickly will be shown at a special demonstration given by County Agent Roy Larson early in November. How thickly spaced trees should be thinned out, what varieties can be pruned back to the best advantage and other points in connection with the matter of reducing the number of trees in the older orchards, will be demonstrated by Mr. Larsen and growers who have experience in this work.

That the Jonathan apple will gradually disappear from the north central Washington district is the prediction of many growers and shippers. Already hundreds of Jonathan trees have been removed, others have been grafted over to varieties that yield well and are marketed to better advantage. The Jonathan gets into the market at the wrong time, in the opinion of those who have studied the situation closely, and will give place to other apples that can be grown and sold at a profit.

Apples in Seasou

Here is a bit of advice which is timely again, as to the right time to consume the different varieties of apples. This was compiled by O. M. Morris, head of the department of horticulture, Maud Wilson, state home demonstration leader, and E. G. Wood, extension specialist in horticulture of the State College of Washington.

October and November, Eating—Delicious, Gravenstein, Jonathan, King David, Grimes Golden, Winter Banana. Cooking—Jonathan, Grimes Golden, Gravenstein, King David.

December and January, Eating—Delicious, Spitzenburg, Jonathan, Grimes Golden, Winter Banana, White Pearmain, Stayman Winesap, Wagener, Rome Beauty, Ortley. Cooking—Jonathan, Spitzenburg, Rome, Wagener, Grimes Golden, Red Cheek, Ortley.

February, Eating—Spitzenburg, Stayman Winesap, Rome Beauty, Black Twig. Cooking—Spitzenburg, Rome, Stayman Winesap, Black Twig.

March, Eating—Winesap, Yellow Newtown, Rome Beauty, Black Twig, Arkansas Black. Cooking—Rome, Winesap, Newtown, Black Twig, Arkansas Black, Black Ben.

April, May and June, Eating—Winesap, Black Twig, Arkansas Black, Yellow Newtown. Cooking—Winesap, Newtown, Black Twig, Black Ben, Arkansas Black.

Adopting Boxed Apples

Pacific northwest fruit growers will be interested in two news items, each dated October 5, one from New York and the other from Sturgeon Bay, Wis. The New York City dispatch declares that a fruit firm on that day received the first two cars of Maryland box apples. "These are the apples that are packed in accordance with the style and grade of the northwestern box fruit, and the variety is Jonathan." The Wisconsin item states that "apple growers in this section expect to market nearly 200 cars of boxed apples. The growers for the first time are marketing their crops graded and boxed like products of Oregon and Washington."

HARDPAN A HANDICAP.

"The orchardist in sections where volcanic ash has left a hardpan deposit a foot or more below the surface, need not withhold the planting of trees," says O. M. Morris. "It is a great handicap, however. If this hardpan is a thin stratum of earth, subsoiling or blasting and immediately filling the land with a crop of alfalfa, clover or vetch will obliterate it. If, however, the hardpan is one to two feet thick it will be a very difficult task to overcome it and to grow a successful orchard on the soil. The same is true in regard to berries."

OVER A TON OF GOOSEBERRIES.

J. A. Thompson harvested 2410 pounds of fruit from 510 2-year-old gooseberry bushes on a half acre on his farm in the Dungeness valley in western Washington. The bushes were planted six feet apart each way and Mr. Thompson feels that it will be about the right distance when the plants are larger. In addition, he has seven acres of logans. The canes are trained on two single wires in the fan method. The patch is two years old.

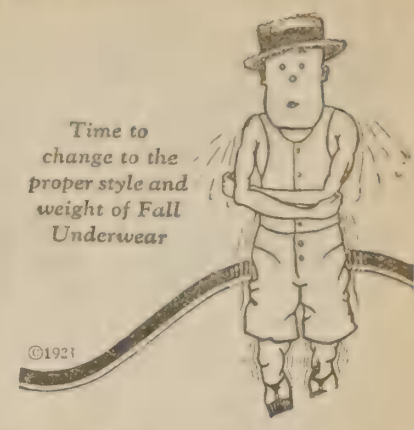
STORE THE FRUIT WELL.

An apple in cold storage is in the best keeping condition for the market. Get your fruit into the best possible storage.

THINNING PAYS.

Thin the apples till it hurts your conscience.

Glance over the bargains on the "Want Ad" page.



Avoid the Chill and Save the Pill

EVERY member of your family should change to heavier weights of underwear NOW. It is essential that you conserve your body heat on cold days.

A Health Talk

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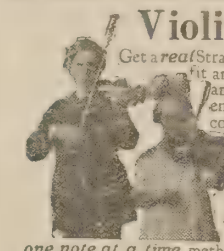

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Never Before
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has such a fine lot of record producers and their offspring of

A. J. C. C. JERSEYS

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St. Mawes Boise Rosaire, 891.54 lbs. fat.

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Gertie's Miss Springtime, 670 lbs. fat, and safely bred for a silver medal.

Choice of bulls from St. Saviour Belle, 746.95 lbs fat in 305 days; or Popalors, 853.06 lbs.

A lot of young stock from gold and silver medal parents.

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At the Sale Pavilion at the PACIFIC INTERNATIONAL, N. Portland.

Thursday November 8, 1923

Write for catalogue to RHOTEN & MINTON, Sale Managers.

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PACIFIC INTERNATIONAL

Portland, Oregon,

HEREFORDS AT AUCTIO

The Best the West Affords

Annual Pacific International Sa

PORTLAND, OREGON

FRIDAY, November 9th, 1923

50 HEAD—Selected individuals. Herd sire prospects, choice breeding matrons young heifers. **RANGE BULLS** by the **CARLOAD.** Sale to be held u the auspices of the Northwest Hereford Cattle Breeders' Association

At a time when the cattle market shows a healthy indication of a l deferred "comeback" and while yet the auction value of registered H fords of the desirable kind is an uncertain quantity, the Northwest H ford breeders, evincing their faith in the future of their industry are signing a few of their best for public appraisal at this sale.

The breding represents the get of Cuba's Panama, the Anxiety Debonair 66th, Bonnie Lad Jr., Prince Rupert 60th, Horatio, Blanchard 57th and other well-known sires.

SECOND ANNUAL SALE

THIESSEN HEREFORDS

Saturday, November 10, 1923

38 HEAD—Twenty-nine bred and open young females—those in calf were se by Bonnie Lad Jr. and King Meadow Glade. Nine strong, rugged yo bulls sired by Bonnie Lad Jr. 694185 and King Meadow Glade 542

The second draft from the Thiessen Stock Farm has been carefully lected and will offer to the discriminating buyer of registered Heref a well bred, well grown lot of good individuals from which to sele breeding herd foundation. The cattle will be offered for sale just in g breeding condition.

For Information and Catalog address

R. P. BANKS, Sale Manager, Spokane Hotel, Spokane, Wash., or HENRY THIESSEN, Owner, Sweetwater, Idaho

Highland Grove Farm Offerin

at the

PACIFIC INTERNATIONAL HOLSTEIN SALE

PORTLAND, OREGON, NOVEMBER 9, 1923

The farm that developed, fitted and showed LADY AGGIE ORMS OF ROCK, the great cow that was Grand Champion at Pacific In national 1921, and has a record of almost 30,000 pounds milk 1100 pounds butter.

We also owned and fitted TILLAMOOK DAISY BUTTER KING DE KOL, grand champio Pacific International, 1922, four-year-old record 32,400 pounds milk and 1267 pounds butter, ing her Pacific coast champion producer in class and second in the world.

This farm also owned and developed the grand champion cow at the Oregon State fair, and the grand champion bull, 1923, and a large list of champions and prize animals not pra to enumerate here.

Highland Grove farm in all has bred, developed or shown seven grand champions at impo fairs and expositions of the northwest within the last two years, of which five are still own our farm.

These achievements are largely due to our herd sire, SIR BESSIE FAYNE DE KOL FC Three-fourths of our animals carry 50 per cent or more common blood with him. He has 20 daughters, and is the sire of the wonderful cow, TILLAMOOK DAISY BUTTER KING DE above referred to, and many other big producers and noted show animals. Five of his pro are at this writing touring far eastern and Mississippi valley show circuits. These animals been at the top in every show ring, having won two firsts in Wisconsin, the greatest Ho state in the Union; two firsts in Illinois, and two firsts and grand champion in Kentucky. notable winnings can be looked for.

It will be remembered that TILLAMOOK DAISY and LADY AGGIE (the latter also havi per cent of the same blood as SIR BESSIE) have been classed by Judge Moscript as two greatest show cows in America. No other two cows up to this time have the distinction of ing won grand championships at a great national exposition with the authenticated produ records these cows have, and we assert without fear of contradiction that they are the gre pair of cows of all time for combined type and production.

We are giving you an opportunity to purchase from these blood lines, as 70 per cent o offerings are close relatives of these cows, many of them blue ribbon winners at the Pacif ternational and the Oregon State fair. This is the most select offering ever made in the n west. Your great opportunity to buy foundation Holsteins combining correct type and production.

F. R. BEALS, Proprietor. **HIGHLAND GROVE FARM** **Tillamook, Or**

$90,000 in Premiums--Night Horse Show--Auction Sales
Reduced Fares on All Railroads

LIVE STOCK EXPOSITION

November 3-10

COMPLETE DISPERSAL

AX ARP HOLSTEINS

IN THE

ific International Holstein Sale Friday, November 9, 1923

average of the 17 yearly records completed by this herd is almost exactly 21,- milk and 700 lbs. fat, or 885 lbs. butter. The 15 on test when fire destroyed nt would have kept up the average.

A FEW OF THE GREAT RECORDS ARE:

FREELA PONTIAC, 26,520 pounds milk, 1036 pounds butter.
ACUM KORNDYKE SENNA, 24,892 pounds milk, 1018 pounds butter.
FREELA PONTIAC II, as junior 2-year-old, 20,232 pounds milk, 808 pounds butter; as -year-old, 21,224 pounds milk, 910 pounds butter.
FREELA PONTIAC III, as senior 2-year-old, 20,230 pounds milk, 911 pounds butter.

ese and other great record cows will be sold. All cows are bred to AAGGIE COLANTHA N, second prize yearling, 1921, and second prize 2-year-old, 1923. Pacific International. t Johanna Lad breeding. He will be sold also.

records were all made in a commercial dairy in stanchions. Complete destruction of the fire forces the sale. Bred heifers, yearlings and calves are included

Send for catalogue to

ORGE GUE, Auctioneer and Sale Mgr., Auburn, Wash, or to
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RIVER BANKS FARMS

ERNSEYS AND BERKSHIRES

WON AT OREGON STATE FAIR

rand Championships, all Championships, and all First Prizes but in the Berkshire classes and Senior Champion bull, Grand Champbull, Senior Champion cow, Grand Champion cow and 75 per nore prizes than our nearest competitor in the Guernsey classes. ur herd at the PACIFIC INTERNATIONAL November 3-10.

RIVER BANKS FARMS
Grants Pass, Oregon

FIRST ANNUAL

ombination Duroc Jersey Sale

Pacific International Stock Show, 1 P. M., Nov. 7

ATHMASTER, SENSATION, ORION CHERRY KING and PATHFINDER BREEDING

ead, all high-class stock, including many prize winners.

rvice boars, the balance bred and open gilts. A great opportunity to buy tion stock.

SEND FOR CATALOGUE TO ANY OF THE FOLLOWING CONSIGNORS:

may be sent to the following fieldmen, l attend the sale:

H. C. COMPTON, Boring, Ore.
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MOUNTCREST HEREFORDS

ok up our entries at the Pacific International. We are selling two sons and two outstanding daughters of Commander, an International winner.

e are also selling ten good Shorthorns of the right kind.

MOUNTCREST RANCH
REGISTERED HEREFORD AND SHORTHORN CATTLE
PUREBRED MORGAN HORSES
HILT, CALIFORNIA

EGINALD H. PARSONS, Owner
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ANNUAL

Shorthorn Cattle Sale

Portland, Oregon
Thursday, November 8, 1923
DURING THE
PACIFIC INTERNATIONAL LIVESTOCK EXPOSITION

65 Head 25 BULLS 40 FEMALES 65 Head

A LARGE CONSIGNMENT OF CHOICE CATTLE

This sale presents a real opportunity for the selection of a bull. They are the well grown, good boned, excellent bred kind.

The female consignment is of outstanding quality and breeding. With prices at the present low levels, these well bred cows and heifers will prove valuable investments.

For information or a catalogue, write to

A. E. LAWSON, Sales Manager
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Auctioneers,
THOMPSON & KEITH.

Sale under auspices of Pacific Northwest Shorthorn Breeders' Association.

Hercules Consignment

to

Pacific International Shorthorn Sale

Portland, Oregon, November 8, 1923

5 Bulls 3 Females

Our consignment to the Pacific International Sale, Nov. 8, will include five sons of Gainford Perfection, all of which are of individuality and breeding which make them desirable herd bulls. Also three heifers, one by Gainford Perfection, one by Doune Radiance and one by Hercules Topsman. Two of these heifers are well along in calf to the service of good bulls.

All of these cattle are of our usual outstanding quality. We will be glad to give more information to any one inquiring.

F. M. ROTHROCK CO. Spokane, Wash.

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Wheat Raising in the Palouse

J. M. Martin Says He Has Found Source of Present Trouble Among Grain Farmers

Martin, was a welcome visitor at The Washington Farmer office the other day. Mr. Martin has practically sold out his wheat farming interests in the Palouse country, but his interest remains in his life work.

For more than a score of years Mr. Martin has been known as one of the best wheat farmers in the Palouse country. He took most excellent care of his summer fallow.

"Ordinarily I plowed as early as I could," said Mr. Martin. "I disked in the spring, then plowed. I harrowed as I went along and when through disking I was through harrowing. I plowed later and harrowed it down. I used to harrow as many as eight times, sometimes using the cultivator, sometimes the harrow, sometimes the weeder and sometimes the disk.

"I came in here to talk about the price fixing question. The price problem is as great as the problems of raising a crop. I was crop reporter for our township for 30 or 40 years and so was familiar with the government statistics. I have been associated with the farmers' union and the wheat growers' association. I put the second hundred dollars that was ever put in the Tri-State warehouse. Three years ago I quit and in the last two years have sold off everything.

"What are we going to do to take care of the wheat raiser? We hear a great deal about the packing trust and the sugar trust, but the greatest trust in the world is the milling trust and nobody ever opens their head about it. It and the board of trade work together—may be one and the same for all I know. At any rate, the results are just the same. They work hand in hand. We might be able to get the right price for wheat if we could get rid of either one.

"Stop and think—what does the miller get on a barrel of flour? The miller has made from 50 to 100 per cent profit in the last four years. Nobody but the miller gets the benefit. He robs it from the consumer and the producer. What took place when the government said $2 would be a good price for a bushel of wheat? The board had to stay down until the government took the price off. Take, for example, 100 men who have 100,000 bushels of wheat apiece. They are able to hold it if they can't get the right price. What do they have to do? What is advocated? Sell wheat for market price and go and buy futures. What is the effect on the market? The market is held down for six months to a year. They could hold off till everybody had an equal chance of getting a price. The board of trade won't let prices go up. It puts it wherever it wants it. What are we going to do? Put a price on wheat and get after the milling trust and board of trade. We will find the price will be different than it is now.

"Did you ever think about the milling trust? I am not like some farmers who have grown up on a little quarter section. For the last 20 years I have had a pretty wide range. How many little mills are there between here and Garfield? There are three running. I saw five standing idle and I saw the ashes of six more. Small A 1 mills are put out of existence. Others sell at less than they can grind at. The big millers squeeze them out on prices. They buy them out or they burn out. Anyhow, they are forced to quit and the milling trust makes the price of wheat and flour.

"In '93 I was back in Iowa visiting. I was surprised to see no corn bread. Price of flour there was no different from what it is here. There was not 25 cents difference on a sack. The millers can afford to ship flour back there and sell at the same price because they have such a margin. The greatest trust in the world today is the milling trust of the United States and there is never a word said against it.

"They are still trading in futures. There was a law passed, but so far they have managed to evade it. It is not in effect. No inducement now to buy futures. They are bidding a little extra for cash wheat in the east.

"The warehouse is merely a branch of the mill. The warehouses are nothing more or less than agencies of the milling company.

"The price of wheat shipped at Portland or Seattle is regulated by the foreign price. Foreign countries naturally buy where they can buy cheapest. They only buy from the United States when they can buy there cheaper than any place else. That is why the board puts the price down. Out of all wheat grown in the United States, at least three out of every four bushels is ground and eaten in the United States. That being the case, the millers have to buy at least three-fourths of this wheat. Make the millers buy independently. Then they couldn't get it unless they paid a fair price. They would still be able to sell at the same price they do now. The government allowed 25 cents a bushel for grinding the flour. For every four and one-half bushels we sell them they have received not less than $7 for a barrel of flour during the last four years and often they have sold for $9, and I would say that $8 was the average. It doesn't even take four bushels to make a barrel. They have made 100 per cent profit.

"We used to raise wheat for 50 to 60 cents a bushel. Our taxes now are 10 times what they were 12 years ago in Whitman county. We are paying there on an average of almost $1.25 an acre taxes a year. Forty-three per cent of taxes are school tax and still they are not enough to make them go right. It isn't the extra rating, but the extra price that is put on the property. I believe in taxing everything—every dollar, no matter in what it is invested. All property belongs to somebody. One dollar is not one bit better than another. Why should one dollar have a privilege over another? There should be no tax-free bonds except such cases as Liberty bonds. State or county road bonds should in most cases be taxed. Each and every dollar should bear its burden of taxation.

"I believe that $1.25 a bushel is the lowest a farmer can raise wheat, unless he raises a great big crop. It can't be grown for less than $1.25. Wilson gave the farmer the worst lick he ever got when he passed the eight-hour day law. I am a democrat, but have never voted a straight ticket. I kept an account of my wage expenses for almost 40 years. For 10 or 12 years labor cost ran from $2700 to $3300 or $4000 a year and the last year it was $7600 and there was a threshing bill on top of that. I kept six head of horses to keep the weeds down and haul wheat. I never got that team in the field all season. It I got an extra man to use the team some of the crew would leave. I couldn't get the work done for love nor money. It used to be that the hired men would put in from 10 to 12 hours a day. But how is it now? They don't get out of bed until 5:30 or 6 o'clock, start to work about 7:30. At 11:30 they are on the way to the house for lunch. At quarter to 6 they are in the barn with the team unharnessed. The weather is pretty, they have everything at hand with which to work, they have nothing in the world to do, the wheat is falling down to the ground, Russian thistles are choking it out, yet they stop at that time. They are being paid $6 a day and I have paid as high as $20 a day for combine men. I had to quit the whole business and it is the best thing I ever did.

"The labor problem is the first problem in production, as the milling trust is the first problem in marketing. It isn't, though, altogether a question of labor, but of short hours. The valuable season goes by and the farmers' profit is all gone in boarding the teams and men when at least two good hours of daylight are wasted every day. Wheat can not be grown for a dollar any more. There is an exception. Take, for an example, a Russian man with two sons and a strong wife. The wife does the housework, takes care of the garden and the cows and chickens. The whole family gets up early and works late without outside help. When they do hire help, they say: 'You get up when we get up and work as late as we do or you leave.' You can hear them up before daylight almost, and long after you have gone to bed you will hear their engines chugging. They can raise wheat for a dollar and have something left. But you can't if you hire help.

"The average farmer is not unreasonable—he only wants a fair price. He will hang on as long as he can, but he can't, if the price is less than it costs him to produce.

"Why is it that the government gets after the packing trust and the sugar trust and allows a far more dangerous trust to exist? The farmers' fences are falling down, their houses go unpainted. I have heard it said that there would be 50 per cent more wheat sowed next year than this. I woul dsay that there will not be 10 to 20 per cent as much. I only saw two decent pieces of summer fallow from here to Rathdrum. Down toward Cheney I saw hundreds of acres unplowed.

"Men who have been on farms for years and who had a good start 40 years ago are now having trouble. One of them told me last spring that it was the first time in his life that he had to mortgage his farm in order to pay expenses and taxes. The last four years have beat the life out of the farmers. There was a young fellow down in our country who had done his own work and had 235 acres of good farming land and owed nobody a dollar on it. He had some horses, his farm was well fenced, he had hot and cold water in his house—it was a swell little place. Ten

(Continued on the following page.)

20 MULE TEAM BORAX

20 Mule Team Borax should be used with soap wherever soap is used. It will soften the hardest water. It makes white goods whiter, saves and brightens colors, keeps woolens from shrinking. It cleans fine laces and linens without damage and it will not injure the finest fabrics. *Borax* is an antiseptic as well as a cleanser and makes all fabrics antiseptically *clean*. 20 Mule Team Borax is good for the skin—it makes hands whiter and softer. 20 Mule Team Borax is in every clean farm kitchen and bathroom—*is it in yours?* Make this week's wash *clean*. *At ALL Grocers and Druggists.* Send for the Magic Crystal Booklet.

Pacific Coast Borax Co.

NEW YORK CHICAGO SAN FRANCISCO

NATURES GREATEST CLEANSER

$5 for 100 Words

The Washington Farmer will award three cash prizes amounting to $10 to the three best articles on the following subjects:

"What Advertisements in the Four October Issues of The Washington Farmer Appealed to Me Most Strongly and Why?"

Each article must be limited to 100 words.

First prize $5, second prize $3, third prize $2.

All entries must be received by November 1.

Address—

"OPINION" DEPT.
THE WASHINGTON FARMER
SPOKANE, WASH.

Guernsey Herds Are Dispersed

Sixty-nine head of purebred Guernsey cattle brought an average of about $330 at the two herd dispersal sales in the Yakima valley last week, those of Wallace & Fordyce of Sunnyside and H. E. Angel & Son of Mabton. The two top animals of the sales were in the Wallace & Fordyce herd, being the outstanding champion cow, Edna of Mountain View, that brought $2800 from R. W. Krobitzch of Troutmere farm, at La Honda, Cal., and the well-known grand champion herd sire, Chicona Lover Bold, that went to the same purchaser at $1315. These two high figures brought the average of the Wallace & Fordyce herd of 31 animals to about $389. The Angel & Son herd of 38 head sold for figures about the same as those in the Wallace & Fordyce herd, other than these two outstanding individuals, the Angel average being $283, with a top price of $605 for the outstanding 4-year-old cow, Khedive's Yeksa Eavdrop of Rose City. This animal was also purchased by the California breeder. She holds a record of 507.65 pounds of butterfat in class GG. Her sire was Langwater Khedive, a grandson of Imp. King of the May, and is out of a cow for which Mr. Angel paid $1320.

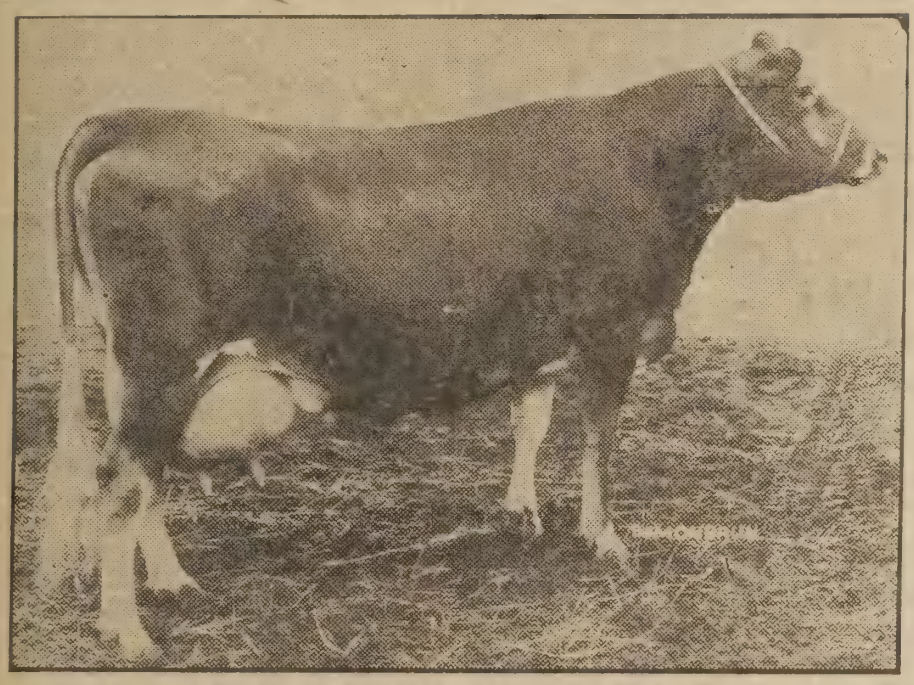
Of the 38 head sold by Angel & Son 12 were purchased by Craig L. Spencer of Seattle, owner of a farm at Grangeville, Idaho, where the cattle will be shipped. Eight were taken to La Honda, Cal.; three to Montana for the Plains Guernsey Breeders' association; three to Potlatch, Idaho, and one to Centralia. There were only 11 head that stayed in the Columbia river valley, five of these going to Martin Hansen of Walla Walla.

The Angel senior herd sire, France's May King, a great grandson of Imported King of the May on the sire's side, and a grandson of Imported Masher's Sequel on the dam's side, sold to the Plains Guernsey Breeders' association, where he will be used as one of the association bulls and moved from one block to another as his usefulness is needed.

Mr. Angel expressed himself as being well satisfied with the result of the sale, although he said that he had expected a $300 average from all animals. He gives as his reason for selling, the high cost of feed and the difficulty of getting help, with a complication of finance.

A list of the animals sold by Angel & Son, together with the names of the purchasers and the prices paid, follows:

Middledale September Morn 2d, Craig L. Spencer, Grangeville, Idaho, $215; Dairymaid of Ruby Dell, Spencer, $215; Ruby Dell Morning Star, Spencer, $180; Middle Grace Darling, R. W. Krobitzsch, La Honda, Cal., $365; Aloah of Ruby Dell, F. H. Sharkey, Yakima, $300; Ruby Dell Hambrolett, Spencer, $210; Angel's Lila May, Krobitzsch, $430; Lila May's Daisy, Sharley, $320; O. C. Butter Girl, Krobitzsch, $420; Ruby Dell Butter Queen, Krobitzsch, $300; Ruby Dell Goldie, Spencer, $290; Golden Rod of Olga, Spencer, $325; France's May King (senior herd sire), Plains Guernsey Breeders' association, Plains, Mont., $255; Golden Rod of Ruby Dell, Plains Guernsey association, $240; Ruby Dell Queen Frances, W. H. Harrison, Sunnyside, $300; Khedive's Yeksa Eavesdrop of Rose City, Krobitzsch, $605; Lura's Kate of Bonnie Brae, Krobitzsch, $300; Rosella of Pleasant Acres, Seb Henricher, Centralia, $290; Glenwood Diamond Gladys, Krotralia, $290; Glenwood Diamond Gladys, Krobitzsch, $390; Glenwood of Yakima, Spencer, $105; Imported Osceola's Creampot, Spencer, $110; Georgianna of Ruby Dell, Martin Hansen of Walla Walla, $190; Creampot's Margaret of Ruby Dell, Hansen, $165; Middledale Bernice (consigned by Harry West of Yakima), Spencer, $380; Lila May, F. M. Yackey, Outlook, $180; Hambro's Janetius, Mrs. Phillip Kays, Parker, $290; Rexetius, Spencer, $300; Ruby Dell Rexola, Hansen, $250; Alga Dunn, Plains Guernsey association, $430; Ruby Dell French Girl, Spencer, $275; Ruby Dell Rexella, Hansen, $210; Pearl of High Rock, Emil L. Boller, Potlatch, Idaho, $230; Ruby Dell Hambro Sunderland Rex, O. E. Jones, Yakima, $185; Ruby Dell Sultana, Hansen, $485; Lavina Goldine, Spencer, $160; Dame's Prospect of Ruby Dell, J. L. Balch, Idaho, $150; Ruby Dell Acord, Krobitzsch, $400; Show Girl of Ruby Dell, Boller, $320.



Edna of Mountain View, that sold for $2800.

The Second Sale.

Interest was keen and bidding spirited at the Wallace & Fordyce sale the following day, October 19. Even though it was a strictly cash sale, 15 animals were purchased by breeders of the immediate district. The two outstanding individuals, prices of which are noted above, gave exceptional zest to the bidding. Edna of Mountain View is not only a show cow of merit, but has a record of 933 pounds of butterfat in a year. Chicona Lover Bold is well known as a championship winner in many of the western shows, and on the production side has 13 A. R. daughters, while his dam has a class A record of 565 pounds of butterfat and was of such show caliber as to win grand championship at the Pacific International in 1917.

Three Wallace & Fordyce animals went to California, while the Plains Guernsey association bought five head and Spencer secured five for his Grangeville herd. There were three outside buyers who bought one animal each, who did not buy at the sale the day previous. They were W. D. Olsen of Elma, R. T. Burkey of Wenatchee and A. Patterson of Thornton. There were in all eight local buyers who took one animal each and George Lett of Granger purchased seven head.

Both Mr. Wallace and Dr. Fordyce were well satisfied with the result of the day's sale and T. F. Meyers of Outlook received all he expected from six animals he consigned to the sale.

This sale was the result of a termination of the partnership between Mr. Wallace and Dr. Fordyce.

Following is a list of the animals, buyers and prices:

Aloha Darling, Plains Guernsey association, $335; Catherine's Dimpled Queen, Plains Guernsey association, Plains, Mont., $320; Anchor Lily of Outlook, George Lett, Granger, $325; Edna of Mountain View, R. W. Krobitzsch of Troutmere farm, at La Honda, Cal., $2800; Chicona Lover Bold, Krobitzsch, $1315; Anchor Rose of Fawndale, Krobitzsch, $705; Fawndale Prima Donna, Martin Hansen, Walla Walla, $500; Molly of Lavaland, W. D. Olsan, Elma, $500; Filipina of Groton Farms, George Lett, $315; Fawndale Lover Bold, George Lett, $130; Jean of Fawndale, George Lett, $305; Glenwood Jean of Clover Hill, Plains Guernsey association, $280; Fawndale Dixon, R. T. Burkey, Wenatchee, $230; Dairy Maid of Muskego, Craig L. Spencer, Grangeville, Idaho, $300; Matilda of Autrim, George Lett, $385; Midget of Elmwood, George Lett, $330; Ella Velma, J. C. Thrush, Granger, $203; Fawndale Matador, A. Patterson, Thornton, $165; Kate of Fawndale, Martin Hansen, $300; Pollyanna of Springcrest, Plains Guernsey association, $240; Dot of Fawndale, Spencer, $485; Glenwood Dewdrop of Oak Knoll, George Lett, $300; Branford Warrier's Coamo, Dr. J. F. Scott, Yakima, $305; Coamo's Lover Bold, Spencer, $205; Twinkle's Daughter, Spencer, $225; Princess Twinkle, Spencer, $230; Fawndale Comet, W. J. Knight, Outlook, $160; Dimple of Fawndale, Hansen, $205; Hopeful's Enchantress of Muskego, Plains Guernsey association, $125; Pride of Outlook, John Golob, Sunnyside, $75; Lily's Fair Lady, J. L. Balch, Potlatch, Idaho, $200; Thallia Princess, Ray W. Spiers, Outlook, $250; Heifer calf out of Midget of Elmwood, Hansen, $120; Adventurre's Lily, Spiers, $250; Serenader, Mrs. Roy Bush, Outlook, $95; Fawndale's Bold Anchor, Thompson & Pickering, Yakima, $75; Bull calf out of Anchor Lily of Outlook, $60.

Both sales were conducted by George Gue of Auburn, while E. D. Hobson of Sunnyside worked the ring.

Raising Wheat in Palouse

(Continued from preceding page.)

or 12 years before he didn't have anything. He married a nice, smart little woman and together they had built up the place. They had chickens, sheep, cows and horses and were bound to get up. If he had raised just wheat he wouldn't be anywhere. He came to me and wanted to buy my place. I felt like telling him he had better stay where he was. He didn't know what he was biting off. He will have to hire too many men. If we could just do something to bring wheat up to $1.25 or better he might do something. This fellow is young and ambitious and strong, and he can make it if anybody can.

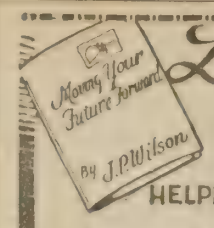
"The family farm is the one that succeeds. We should have not many big farms, but farms of a quarter or half section. A man who owns a farm of 5000 or 7000 acres in Whitman county came to me to manage his farm at commencement of harvest. I almost accepted the place, but then I thought that is just what I had jumped out of. I told him I would rather not do it. The family farm is the one that is going to make it.

Russian thistle is a big problem. If you don't get your wheat harvested when you ought to, the weed is going to grow up and choke out the wheat. Put it in sacks with the wheat, and it will rot the sacks. There is not much morning glory in that country. I fought it like I would rattlesnakes. Many times on a day when the sun was fiery hot I would haul straw and spread over it and then set fire to the straw.

"Unless things change soon there will not be bread enough to feed us. The farmers can not afford to raise wheat any more. You can not make me believe that the soil value is not run down. We couldn't raise the amount of wheat we used to if we tried. If you do away with that board of trade and with the milling trust, the problem is solved."

Are Testing Dairy Cattle

Many of the dairy cattle in Grays Harbor county have been tested for tuberculosis and so far close to 5000 head have been examined. Dr. Ralph A. Parson of the United States department of agriculture is doing the work and hopes to have 100 per cent of the cattle tested before winter. Some communities have been practically cleaned up. In the Alder Grove, Fairview and Wynooche Valley communities all the herds have been tested but four, and arrangements have been made to test these. Although some towns have regulations prohibiting the sale of raw milk except from tuberculin tested cows, it is not the rule in all towns. This indicates that there has been and, probably is at present milk from tubercular cows being sold to be fed to babies. The majority of farmers are interested not merely from the human health side, but from the health of the herd standpoint.



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Write for Bargain Catalog on Navy and Army Goods. We pay shipping charges on all goods all over the country. Money back guarantee.

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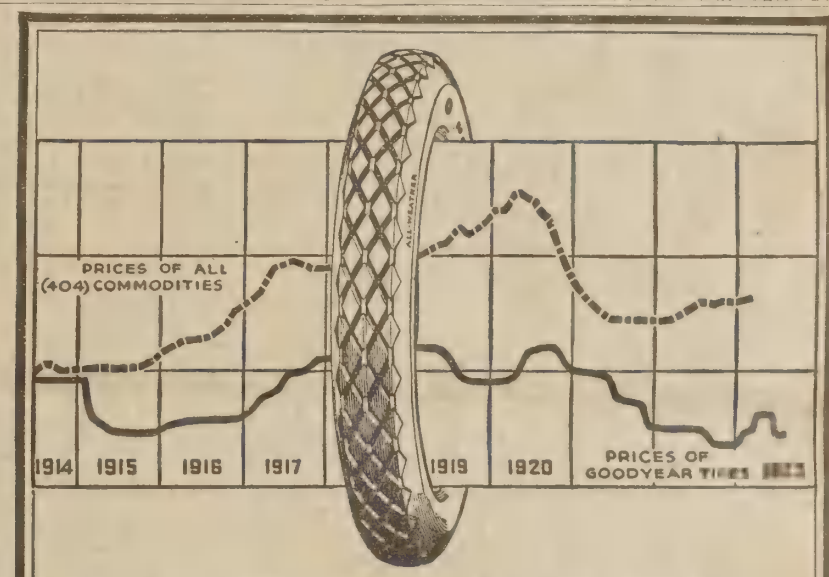
1223 Pacific Ave. Tacoma, Wash.

In writing advertisers, be sure to say you saw their advertisement in The Washington Farmer.



Better Tires at Better Prices

A glance at the above simple chart tells you how extremely fair present Goodyear Tire prices are.

Below 1920 prices by 37%; below 1914 prices—the first European war year—by fully 30%.

And these attractive prices are accompanied by a higher quality in Goodyear Tires today than ever before.

Goodyear Tires are made of top-grade, long-staple, high-tensile-strength cotton. They have the powerfully tractive and longer-wearing All-Weather Tread.

For years, as the chart shows, Goodyear Tires have represented extreme value. Today that value offers you the best tire bargain to be had. Now is a good time to buy Goodyear Tires.

Made in all sizes for Passenger Cars and Trucks

GOODYEAR

How to Cure Your Meat

The following is an answer to a subscriber who desired the government recipe for curing meat:

Meat must be properly and thoroughly cooled to insure good keeping qualities when cured. If salted before the animal heat is out, the shrinkage of the muscles causes the retention of injurious gases, giving an offensive odor to meat. Neither should meat be frozen when salted, as the action of the frost will prevent the proper penetration of the salt and uneven curing will result. It is important, also, that curing should begin as soon as the meat is cooled and while it is still fresh. Tainted meat may be cured so that it will keep, but nothing in the line of preservatives can bring back the natural flavor when it is once lost. The safest rule to follow is to salt meat as soon as the animal heat is out, and before it freezes or starts to decay. Ordinarily 24 hours to 36 hours after slaughtering will allow sufficient time for cooling.

Vessels for Curing.

A clean hardwood barrel, is a suitable vessel in which to cure meat. A barrel made for the purpose is best, but where it can not be had a molasses or sirup barrel will answer.

A kerosene barrel that has been burned out and used for water barrel for some time is often used for a meat barrel. The important point is to have it clean and tight enough to prevent leakage. A large stone jar is the best vessel that can be had. One holding 25 to 30 gallons is expensive, however, it must be carefully handled to prevent breakage. The jar is more easily cleaned than a barrel, and is in every way preferable if the first cost can be afforded. A barrel or jar that has once held meat may be used again and again unless meat has spoiled in it. If used repeatedly it will be necessary to scald it out thoroughly each time before packing fresh meat in it.

Preservatives.

Salt and sugar or molasses are the preservatives most commonly used, and are considered the only ones necessary for perfect curing and the finest quality of cured meats. Borax, boracic acid, formalin, salicylic acid, and other chemicals are sometimes used in preserving meats, but they are considered by so many authorities to be harmful to the health of the consumer that their use should be avoided.

Salt is an astringent, and when applied alone to meat renders it very hard and dry. Its action is first to draw out the meat juices. In a few days it will contract and harden the muscle fibers, thus shrinking the volume of meat. Saltpeter is used to preserve the natural color of the flesh or give a reddish color. It is more astringent than salt. Sugar is not an astringent and its presence in the pickle softens the muscles and fibers and improves the flavor of the meat. Saleratus (baking soda) is used in small quantities to sweeten the brine. In warm weather a small quantity will aid in preventing the brine from spoiling.

In Brine and Dry Curing.

Brine-cured meats are the best for farm use, for the reason that a suitable place for dry-curing is not usually obtainable. It is also less trouble to pack the meat in a barrel and pour on a brine than to go over it three or four times to rub in the salt. The brining method also gives better protection from insects and vermin. Trouble is sometimes experienced in keeping brine, but if pure water is used and directions followed in making the brine there should be no difficulty in keeping it for a reasonable length of time. During warm weather brine should be closely watched. It becomes "ropy," like sirup, it should be boiled or new brine made. A cool, moist cellar is the best place for brine curing. Dry curing may be done successfully in a cellar also, though even more moisture is needed to effect a thorough cure. The cellar should be dark and tight enough to prevent flies and vermin from damaging the meat.

Corned Beef.

The pieces commonly used for corning are the plate, rump, cross ribs and brisket, or in other words the cheapest cuts of meat. The loin, ribs, and other fancy cuts are more often used fresh, and since there is more or less waste of nutrients in corning, this is well. The pieces for corning should be cut into convenient-sized joints, say 5 or 6 inches square. It should be the aim to cut them all about the same thickness so that they will make an even layer in the barrel.

Meat from fat animals makes choicer corned meat than that from poor animals. When the meat is thoroughly cooled it should be corned as soon as possible, as any decay in the meat is likely to spoil the brine during the corning process. Under no circumstances should the meat be brined while it is frozen. Weigh out the meat and allow 8 pounds of salt to each 100 pounds; sprinkle a layer of salt one-quarter of an inch in depth over the bottom of the barrel; pack in as closely as possible the cuts of meat, making a layer 5 or 6 inches in thickness; then put on a layer of salt, following that with another layer of meat; repeat until the meat and salt have all been packed in the barrel, care being used to reserve salt enough for a good layer on the top. After the package has stood over night add, for every 100 pounds of meat, 4 pounds of sugar, 2 ounces of baking soda, and 4 ounces of saltpeter, dissolved in a gallon of tepid water. Three gallons more of water should be sufficient to cover this quantity. In case more or less than 100 pounds of meat is to be corned, make the brine in the proportion given. A loose board cover weighted down with a heavy stone or piece of iron, should be put on the meat to keep it all down under the brine. In case any should project, rust would start and the brine would spoil in a short time.

It is not necessary to boil the brine except in warm weather. If the meat has been corned during the winter and must be kept into the summer season, it would be well to watch the brine closely during the spring, as it is more likely to spoil at that time than at any other season. If the brine appears to be ropy or does not drip freely from the finger when emersed and lifted, it should be turned off and new brine added, after carefully washing the meat. The sugar or molasses in the brine has a tendency to ferment, and, unless the brine is kept in a cool place, there is sometimes trouble from this source. The meat should be kept in the brine 28 to 40 days to secure thorough corning.

The Day of Small Things

(Continued from page five.)

sibilities, probably the most valuable food plant in the world.

"It is like a romance to read that 'the first crop of the wheat that was destined within a dozen years to overtax the mightiest elevators in the land was stored away in the winter of 1904-5 in a paper packet no larger than an envelope.

"Thus from the wild wheat of Mount Hermon there evolved one of the most important food plants in the world. * * * It is now the dominant spring wheat in Canada and the United States, and it has enormously increased the real wealth of the world in the last 10 years."

It is fascinating to speculate on what would be the price of wheat today if western Canada were out of the world markets, or if there, were offering the small production that Canada could have grown before hardy and quick-growing varieties were developed that are suited to that northern climate.

World production of wheat at this time is substantially in the same quantity as before the war. Russia has dropped out for the time being, but western Canada has come in, and consequently there is about the same supply of export wheat that was available before the war.

Back in 1915, when the World war was young, Russia produced 18 per cent of the reported wheat yield of the world, and exported the bulk of that. But Russia ceased to be a wheat-exporting country several years ago and, in the judgment of authorities, will not soon be exporting on a considerable scale. It is selling some wheat to Germany this year, but the quantity is small, and Russia is parting with that, not because her own people do not want it, but because they have urgent need of other things that Germany can supply them.

Still, it seems certain that Russia will come back as a large exporter of wheat. When that time comes, and Canadian production is greater still, what will be the lot of the wheat growers of the Pacific northwest?

He would be a rash prophet who would make a sure prediction where so many unknowable factors enter in. Twenty years ago James J. Hill, who had studied wheat crops and markets for all his adult life, thought it certain that the United States was approaching a wheat production that would meet its own needs and leave nothing to export beyond the seas. But even the astute James J. Hill missed his guess and missed it widely. He could not foresee the speeding up of production by the forces of the war, nor the enormous increase of the Canadian crop, nor the falling off in per capita consumption in the United States.

Still it seems probable, unless the unexpected shall arise, that 10 or 20 years from now wheat growing will be waning in the Pacific northwest. Before that time our growers may be driven to other crops.

The possibility is not to be overlooked, however, that ways may be found by American inventive genius and resourcefulness still further to cheapen production.

A WEST SIDE CHAMPION.

Herewith is a picture of Norlum Inka Vale Wayne, the grand champion Holstein heifer at the Skagit county fair at Burlington in August. She was exhibited by the state hospital at Sedro-Woolley, being a member of the excellent Holstein herd being kept in that institution for the production of dairy products for the use of the state's wards there.

DO NOT FEED POOR HAY.

Hay is plentiful, so feed your cows good hay. Poor hay with coarse stems is worth more for bedding than for feed.

Many Like Bacon Type of Hog

Wherever two or three hog men are gathered together, there one is able to start a debate at the drop of the hat, the question being, Resolved: That the bacon hog is (or is not) superior to the lardy type. Usually these debates end with each side to the argument unconvinced of the merit of the opposing argument. Nevertheless, we now and then find an excellent herd of the bacon type hog, usually in the northwest, represented by the Tamworth. One of the outstanding Tamworth herds in the northwest is that of I. J. Oder of the Yakima valley. The picture herewith shows two of the pize-winning sows on a recent fair circuit.

AT YOUR SERVICE.
DEMPSEY
Hotel and Restaurant
(C. C. DEMPSEY & SONS)
UP TO DATE.
Opposite Union Station. Spokane.

Train to Be a Radio Operator
Travel and pleasant, profitable employment. Big demand for trained operators during the spring and summer months.
YMCA
Prepare now for one of these positions. Write for Free Catalog.
UNITED Y. M. C. A. SCHOOLS,
Fourth and Madison, Seattle, Wash.

Farmers' Want Ads

MONUMENTS F

COMPLETE STOCK. WRITE FOR DESIGNS and prices. Inland Monument Co., N1001 Monroe, Spokane.

HELP WANTED—Female 1

GIRLS DESIRING WORK FOR HALF BOARD and room, while attending school, write Gooding College, Gooding, Idaho, today.

HELP WANTED GENERAL 5

MEN AND WOMEN, AGE 17 TO 30, AT ONCE to train for positions with Western Union Telegraph Co. and various railroads. Pacific Telegraph Institute, Spokane, Wash.

SITUATIONS WANTED—Male 21

POSITION WANTED AS RANCH MANAGER; experienced in dry farming, irrigation, dairying, alfalfa grinding, mixing. George Heller, Box 186, Lewiston, Idaho.

SCHOOLS AND COLLEGES 26

EARN $110 TO $250 MONTHLY; EXPENSES paid as railway traffic inspector; position guaranteed after completion of 3 months' home study course or money refunded. Excellent opportunities. Write for free booklet G-157. Stand. Business Training Inst., Buffalo, N. Y.

FRESH FOOD PRODUCTS 51-3

PRUNES FOR SALE, DEHYDRATED—Oregon famous nonirrigated Italian variety direct, especially fine quality; packed in wax paper lined boxes, sanitary; 28-pound boxes (25 net), large size, 30-40 to pound, 12c pound; 40-50 at 11c lb.; 50-60, 9c lb.; 60-70, 8c lb., or the above grades 2c less per pound in 100-pound double bags. These prices are f. o. b. Red Hill Orchard, R3, Box 158, Salem, Ore.

FISH—4 LBS. SMOKED SALMON, $1; 4 LBS. Alaska salmon bellies, $1; 4 lbs. black cod, $1; 3 lbs. best codfish, $1; delivered by mail. Coffin Fish Co., Seattle, Wash.

MERCHANDISE 51-5

YOUR ANNUAL OPPORTUNITY—FOR QUICK disposal we offer salesmen's samples of woolen goods, underwear, hoisery, blankets, sheep-lined coats, mackinaws, leather vests, etc., at one-third to one-half less than regular prices. Our price list of sample goods is now ready. Send for it today. Minneapolis Woolen Mills Co., Dept. 23, 612 1st ave. North, Minneapolis.

ARMY GOODS—PURE O. D. WOOL BLANkets, $3.50; O. D. pure wool long pants, $2.95; O. D. wool breeches, $1.95; army wool shirts, $3.25; wool socks, 25c; cotton socks, 10c. Order from this ad; postage paid. Write for big illustrated catalog. Walker's Army Store, Lewiston, Idaho.

SPECIAL—ONE-POUND TIN "SATISFACTION tobacco" and pipe for $1. Smoking, chewing tobacco, cigars, cigarettes and complete line of pipes. Wholesale and retail. Peter M. Jacoy, 3 Washington st., Spokane.

HONEY 53

ALFALFA, SWEET CLOVER HONEY, PREpaid second zone, 3 10s, $5; 60 lbs., $8.30; two cans, $14.50, not prepaid. Harry Fisher, Prosser, Wash.

HAPPY HOME HONEY — ALFALFA AND clover; 60-lb. can, $7.50; two cans, $14.50; case six 10-lb. pails, $8.50. H. N. Paul, Mabton, Wash.

PURE WATER-WHITE SWEET CLOVER honey; 60-lb. can, $5.50; two, $10.75. H. R. Bowen, Roberts, Idaho.

EXTRACTED HONEY FOR SALE—WELLS D. Rose, Sunnyside, Wash.

MISCELLANEOUS—FOR SALE 60

SASH AND DOORS—O. B. WILLIAMS CO., 1943 First ave. So., Seattle. Chicken house sash, 20" wide by 25" high, 80c; a dozen different sizes in stock for immediate shipment. Skylights for chicken houses, 36"x40"; price, glazed, $2. This is the size recommended by the Western Washington experiment station. We carry them in stock for immediate shipment. Sash and doors for all purposes at lowest prices. All orders receive prompt attention. Our large illustrated catalog No. 35, showing full line of building material and built-in fixtures for the home, free on request. O. B. Williams Co. Established 1899.

FOR SALE—ONE MARVEL MILL NO. 1, CAPacity 25 barrels; together with equipment, complete, ready to operate; original cost $6000, new; never used, but only installed. Compelled to sell for $3500. Best opportunity to secure first-class mill for foreclosure price that you will ever have. L. E. Armstrong, Rawlins, Wyo.

PIPE—GET PARTICULARS ON OUR SPEcial flue pipe, 1¼, 1½ and 2 inch. Big saving on it. We also have all sizes second-hand and new standard pipe at low prices. We also save you on roofing, belting, pumps, engines, cables, etc. Alaska Junk Co., S120 Adams, Spokane, Wash.

WALL BOARD—WRITE FOR SAMPLE OF Washington plaster wall board; won't warp, won't burn. Manufactured by Washington Building Products company, 6851 E. Marginal Way, Seattle, Wash.

NATURAL LEAF TOBACCO—CHEWING, 5 lbs., $1.75; 10 lbs., $3; smoking, 5 lbs., $1.25; 10 lbs., $2. Pay when received. Pipe and recipe free. Farmers' Tobacco Union, B19, Paducah, Ky.

TOBACCO—AGED LEAF, SELECT CHEWING, 3 lbs., $1; 10, $3; smoking, best, 10, $2.50; good, 10, $2; satisfaction guaranteed. Cooperators, Murray, Ky.

TOBACCO—KENTUCKY'S PRIDE: EXTRA fine chewing; 10 pounds, $3; smoking, 10 pounds, $2; 20 pounds, $3.50. Farmers' Club, Mayfield, Ky.

ALL WOOL KNITTING YARN FOR SALE from manufacturer, 95c up per lb; golf and plain socks. Free samples. H. A. Bartlett, Harmony, Maine.

ARMY GOODS BARGAINS—WRITE FOR catalogue. Simon's Army Supply Store, 309 Riverside ave., Spokane.

50,000 SACKS FOR SALE. INLAND HIDE & Junk Co., W21 Main, Spokane.

OASIS CIDER MILLS AND FRUIT PRESSES. W20 Riverside, Spokane, Wash.

MISCELLANEOUS. 61

ELIJAH COMING BEFORE JESUS, FREE book. N. Megiddo Mission, Rochester, N. Y.

MISCELLANEOUS—Wanted 63

LEARN BEEKEEPING—READ "YORK'S Bees and Honey" monthly; $1 year; sample free. York Honey and Bee Supply Company, Spokane.

(Continued on the following page.)

Why pay cash for something when you can trade for it? See the "Want" ads this issue.

MACHINERY—For Sale 93

1—45 HOLT CATERPILLAR, NEW $5600
1—25 Best tractor, like new $1450
1—20-35 Trundaar, new $2100
1—20-35 Trundaar, good repair $1000
1—60 h. p. Best tractor, good condition ..$2850
1—75 h. p. Best tractor, good condition ..$1750
1—75 h. p. Best tractor, good condition ..$3000
1—Oliver gang, 9-16 and hitch $320
1—Oliver gang, 4-14" auto $165
1—Oliver gang, 4-14" auto, used $85
1—Lacrosse gang, 4-14", new $120
1—Farquhar pony sawmill $616
1—Farquhar cider press, 250 bbls. $900
1—Farquhar cider press, 60 bbls. $450
1—Mt. Gilead cider press, 60 bbls. $450
Threshing machines, used or new, cheap.
WESTERN FARQUHAR MACHINERY CO.
220 East Water st., Portland, Ore.

DOLLARS IN YOUR POCKET ON OUR USED engines, wood sawing outfits, farm equipment. New sawmill outfits, etc. Fallquist Brothers, W204 Riverside, Spokane.

FOR SALE—90 H. P. STEAM TRACTION ENgine suitable for sawmill, also other heavy second-hand engines. Nampa Tractor Co., Nampa, Idaho.

HAY PRESSES, TRACTORS, FEED MILLS. Exchange Machinery Co., W20 Riverside, Spokane.

AUTOMOBILES—FOR SALE 112

SEE CHEVROLET FIRST—NEW AND USED cars at prices that will surprise you; stop in or write Inland Empire Chrevolet Cales Corp., 916 2d ave., Spokane. Open evenings. Open Sunday.

AUTO ACCESSORIES AND PARTS 119

NEW AND USED AUTO PARTS, NEARLY ALL cars. Our low prices and prompt service will convince you. Money refunded if not satisfied. C. & D. Auto Salvage & Supply Co., 1904 Grand ave., Kansas City, Mo.

PATRONIZE THE HOUSE THAT CAN GIVE you the best service. Complete stock of automobile repair parts. Pacific Gear and Auto Parts Co., 1022 First ave., Spokane, Wash.

STOVE REPAIRING 128

WRITE MYER RUBENS, SPOKANE, ABOUT stove repairs, welding broken parts, nickel plating.

RABBITS and HARES. 173

RABBITS, TOULOUSE GEESE HAVE MADE my living for 10 years. Prize winning blue Flemish Giants, New Zealand Reds, Himalayans, at utility prices. Agnes Brenner, R4, Box 49, Tacoma, Wash.

POULTRY 174

CERTIFIED WHITE LEGHORN QUALITY chicks from selected free-range, heavy-laying, utility hens, mated to double pedigree cockerels with authentic trapnest records. Our breeding flocks are inspected and accredited by the Sonoma county farm bureau. Safe arriva, and full count of live, vigorous chicks guaranteed. Booking orders now for the spring season of 1924 delivery. Send for catalogue and attractive prices. Must Hatch Incubator Co., Inc., the world's largest electric hatchery, 445 Seventh st., Petaluma, Cal.

FOR SALE — PULLETS AND BREEDING cockerels; April hatched pullets of Hollywood's best strain, trapnested stock, ready for your laying pens. From real layers mated to cockerels of 250 to 275 egg records. Price f. o. b. Prosser, $1.85 (crates returned). Send 25 per cent with order, balance C. O. D. We guarantee satisfaction or your money back. Choice cockerels from same stock. $1.50 each. Pulletpens, Prosser, Wash.

ACCREDITED CHICKS—ALL OUR CHICKS for 1924 will be from accredited flocks mated with certified cockere's sired by hens with 225-egg record. A limited number of chicks from cockerels sired by our $1000 champion cockerel and our world's record pen of hens. Write for special prices for those who order early. Queen Hatchery, 1430 1st ave., Seattle, Wash.

"HENACRES" BABY CHICKS FOR 1924—Booking orders now. Early orders get delivery when wanted. We never have enough February, March or April chicks to meet the demand. Strictly high grade chicks at common chick cost. $22 per 100; $200 per 1000. Free catalog. "Henacres," Box A, Prosser, Wash.

KEEP INFORMED — SELECT POULTRY reading with care. Only paid writers of recognized authority featured in The Pacific Poultryman. Must read it to get the best. Has guided thousands to success. Special, four months for two-bits; two years for a dollar. 503 Polson bldg., Seattle, Wash.

S. C. WHITE LEGHORN CHICKS, 100 PER cent live, delivery guaranteed; 20 per cent books order. 100, $16; 500, $75; 1000, $140, postpaid; hatch only eggs from my own flock; no lights; trap records to 292. Absolutely only one grade. Catalog free. Roy S. Hands, B614, Cottage Grove, Ore.

WHITE LEGHORN BABY CHIX FROM flocks mated to males having sire's dam record of 240 to 297 eggs per year. Full particulars and interesting literature on request. We are accredited by Sonoma county farm bureau. The Pioneer Hatchery, 422 Sixth street, Petaluma, Cal.

BUY SONOMA COUNTY ACCREDITED Hatcheries chicks; electric hatched by the man who put electric incubation where it is today. I am the father of electric incubation. Stock the best. Prices right. Write for booklet. White Hatchery, Petaluma, Cal.

PUREBRED BABY CHICKS AT REASONable prices. Leghorns, Reds, Barred Rocks, White Rocks, Minorcas, Anconas. Booking orders now for '24. Postal secures free catalog. Salem Chickeries, Salem, Ore. C. N. Needham, Mgr.

DANIEL'S "IDEALS"—WHITE ROCKS AND White Leghorns; 100 per cent trapnested stock used; place your 1924 baby chick orders now. Our capacity, 2000 chicks every seven days. Free list. Ideal Poultry Yards, Hoquiam, Wash.

"FRESHLAID" WHITE LEGHORN CHICKS for 1924 will produce results. Thirteen years production of real chicks. World's largest electric incubator. Free catalog. Freshlaid Farm, Colfax, Wash.

HUNT'S BARRED ROCKS, UTILITY COCKerels from the best egg producers, Imperial Ringlets, both matings. Prices right, satisfaction guaranteed. W. A. Hunt, Lebanon, Ore.

JERSEY BLACK GIANTS, FIVE MONTHS old, $2.50 and $3. E. M. Chambers, Bovill, Idaho.

PRINTING FOR POULTRY MEN. EMPIRE-Pacific Printing Co., Auditorium bldg., Spokane.

BROWN LEGHORN HENS, PULLETS AND cockerels for sale. B. Campbell, Freewater, Ore.

SHIP YOUR POULTRY AND EGGS TO THE Washington Meat & Poultry, Spokane, Wash.

WANTED—BARRED ROCK PULLETS. JAMES Jensen, Bluestem, Wash.

FARMERS' WANT ADS

This is the farmers' "want," "sale" and "exchange" department for small advertisements of farmers, including live stock and poultry.

Advertising rates for ads running 1 to 3 times, 10c per word per insertion, with a special rate to Farmer subscribers, as follows: Ads running 4 to 12 times, 9c per word per insertion; ads running 13 times or more, 8c per word per insertion.

All commercial and land advertising, 10 cents per word per insertion. Open also to nonsubscribers.

In using these columns advertisers must observe (1) No advertisement will be accepted for less than $1.00 per insertion. (2) Every word, number and initial, including name and address, must be paid for. (3) New advertisements, changes of copy or cancellations must reach general office, Spokane, Wash., 10 days in advance of publication date. (4) Cash must accompany order.

Above rates include insertion in The Washington Farmer, The Idaho Farmer and The Oregon Farmer, which constitute the Pacific Northwest Farm Trio, 46 Review building, Spokane, Wash.

POULTRY (Continued) 174

ANCONAS—BACKED BY OFFICIAL CONTEST records and splendid list of winnings in the west's leading shows. Booking chick and egg orders. Oscar Dunlap, Junction City, Ore.

DOLLARS FOR YOUR EGGS—WE PAY THE top market prices for your eggs and poultry. Daily cash remittances. McClintock-Trunkey Co., produce department, Spokane.

MAMMOTH BRONZE TURKEYS, YOUNG hens and toms, $6 and $10 each; large boned, well marked; sired by a 40-lb. gobbler. Mrs. Zeige, Okanogan, Wash.

SPECIAL PRICES ON GUARANTEED DAY-old pullets; fall and winter delivery. Write for particulars. Eureka Hatchery, Petaluma, Cal.

BOURBON RED TURKEYS—150 CHOICE young toms and hens; large and well marked. Mrs. A. H. Yates, Parma, Idaho.

WE WANT YOUR TURKEYS, GEESE, POULtry and eggs; highest prices, Hotchkiss Produce company, Spokane.

FOR SALE—TOULOUSE GEESE, UNRElated trios, ten dollars. Mrs. Glen Thomas, Prosser, Wash.

ROSE COMB BLACK MINORCAS—COCKERels, $2; pullets, $1; hens, $2. Mrs. Carley, Carley, Wash.

TO MAKE ROOM, WILL SACRIFICE ROCK and Leghorn breeders. D. W. Allen, Laconner, Wash.

BLUE ANDALUSIAN COCKERELS FOR SALE. Mrs. Dan Calbreath, Monmouth, Ore.

LIVE STOCK 177

NOTICE TO SHEEP MEN—I HAVE 50 RAMbouillet yearling bucks for sale. They are large, smooth, heavy, tight fleeced and very heavy shearers. Two bucks from this bunch have completed the fair circuit of the northwest. They took first and champion at Spokane, Yakima and Salem fairs. The decision of the judges is to the effect that these are the best Rambouillets in the northwest. I will price these sheep to you at a reasonable figure. Order promptly as no reservations will be made. Orders will be filled as received. E. C. Burlingame, Walla Walla, Wash.

WE GUARANTEE TO PAY THE HIGHEST market price for your poultry and live stock. Veal market growing stronger. Owing to the constant changes in the market we are unable to quote prices in this paper from week to week. We will furnish tags and prices when you are ready to ship. Write us what you have to sell. Prompt returns. John Lewis & Co., Spokane, Wn.

JERSEY BULL FOR SALE—BIG BOY'S ARMistice No. 222764, dropped November 11, 1922. Solid dark color, first prize junior bull class, Twin Falls county fair, 1923. A bargain for this particular individual. $100. Filer Seed company, Filer, Idaho.

25 REGISTERED GUERNSEY FEMALES FOR sale; imported and American bred young cows, heifers and heifer calves of correct type and blood lines. Leslie G. Perry, Wendell, Idaho.

CALVES FOR SALE—WILL HAVE A LIMited number of Tillamook's famous dairy calves yet this fall. Write for prices. Smith, "the Calf Man," Tillamook, Ore.

WE PAY TOP PRICES FOR YOUR LIVE OR dressed veal, hogs and poultry. Your check by return mail. Shipping tags on request. M. & J. Packing Co., Spokane.

SUSY'S ST. MAWES 2D YEARLING GRANDson for sale; backed by highest producers; registered Airedale puppies and matrons. Wiley, Kent, Wash.

TOP PRICES PAID FOR CREAM, EGGS, poultry, pork, veal. Inland Products company, Second at Cedar. Dept. E. Spokane, Wash.

FOR SALE—HOLSTEIN BULLS, COWS AND heifers, sired by senior champion Washington state fair. D. F. Nugent, Granger, Wash.

FOR SALE—CHESTER WHITE BOARS. Write for prices. Booking orders for bred gilts. H. S. Curtis, Palouse, Wash.

REGISTERED HOLSTEINS—BULLS, HEIFers and cows for sale; accredited herd. Oscar Dunlap, Junction City, Oregon.

FOR SALE—10 HEAD OF REGISTERED Shorthorns, priced for immediate sale. E. W. Haag, Sandpoint, Idaho.

CHOICE DUROC JERSEY SERVICE BOARS, open and bred gilts; priced to sell. Geo. De Bok, Oregon City, Ore.

REG. JERSEY BULL, FINE BREEDING, $75. Willamette valley ranch; a snap. B. Embree, Wolf Creek, Ore.

MILK GOATS—REGISTERED SAANENS AT prices that will please you. Ferd. H. Dietzel, Portland, Ore.

REGISTERED HAMPSHIRE BREEDING bucks and ewe lambs. Far Niente Farm, R2, Bothell, Wash.

REGISTERED POLAND CHINA BOAR, price reasonable. Henry P. Carstensen, Almira, Wash.

FOR SALE—20 YOUNG FEMALE HOLSTEINS, about ¾ purebred. H. E. Westby, Newport, Wash.

HOGS—REGISTERED SPOTTED POLAND China. Howard Tucker, Route 1, Boise, Idaho.

REGISTERED SHROPSHIRE RAMS AND ewes. Write McK. Edwards, Valley, Wash.

REGISTERED ANGORA BUCK GOATS, $15, crated. C. D. Hartman, Silverton, Ore.

FOR REGISTERED DUROCS, WRITE F. L. Stocking, Caldwell, Idaho, R4.

MILK GOATS, BRED DOES, $10 TO $25. Fannie Branson, Dallas, Ore.

HARNESS and SADDLERY 189

SEND FOR FREE HARNESS AND SADDLE catalog today; cut out the middleman, buy direct from the manufacturer. Lowest prices in the west; satisfaction guaranteed. Established 1881. Write Pierce Harness Co., Dept. T, Spokane, Wash.

HAY FOR SALE. 200

ALFALFA, GRAIN HAY, TIMOTHY AND straw, mill feed, grain, etc.; guaranteed quality; prompt shipment; buy direct and save money. Prices upon application. Richard Nyman, Walla Walla, Wash.

HOTELS 306

WHITE'S HOTEL AND RESTAURANT. ROOMS $1 and up; special weekly rates. Stevens and Sprague. Right on the corner; 5 minutes from all depots. In heart of the business district, Spokane.

FAIRMONT HOTEL—RATES $1 DAY AND UP. 319 Riverside, Spokane. Free bus.

JOB PRINTING. 372

WEDDING ANNOUNCEMENTS AND INVItations, catalogs, booklets, high school annuals, letter heads, envelopes, cards, butter wrappers, etc. Union Printing Co., 412 First ave., Spokane, Wash.

LETTERHEADS, ENVELOPES, BUTTERwraps, special prices; 500 letterheads, $4.25; 500 envelopes, $3.25; 1000 letterheads, $5; postage paid. Gazette, Kendrick, Idaho.

CLEANING, DYEING, Etc. 420

FRENCH DRY CLEANING BY PARCEL post. Ladies' and gents' suits, furs, hats, etc., prompt service. Address City Dye Works (Dept. A), E422 Sprague ave., Spokane, Wash.

TANNING 425

WE WILL TAN YOUR COW OR HORSE HIDE for robes or coats, and guarantee our work. We are custom tanners, manufacturers and taxidermists. Write for prices. Spokane Fur Tanning Co., 7 Pine st., Spokane.

ANY KIND OF HIDE TANNED WITH HAIR on, or for leather. Fur and taxidermy work done to order. M. R. Mohr Co., 321 Sprague, Spokane, Wash.

BEAUTY CULTURE 450

JAR COLD CREAM FREE—BEAUTY CLAY, $1.25; cold cream, 50c, both sent you prepaid for $1.25. XL-O Mfg. Co., 12 Riverside, Spokane.

KODAK FILM DEVELOPING 472

FREE ENLARGEMENT WITH 75C ORDER high gloss print. Spokane Film Co.

FILMS DEVELOPED FREE—KODO, THE PICture King, 815 Stevens, Spokane.

MATERNITY HOMES 497

MATERNITY HOSPITAL; STRICTLY PRIvate; doctor in attendance; prices reasonable. Mrs. Elizabeth Peel, matron. W1324 Broadway, Spokane.

BUILDING MATERIAL 588

FIX BROKEN PLASTER WALLS WITH PERfection plaster wallboard; nailed on like lumber; takes calcimine or paint; sample and booklet from Western Wallboard Co., Seattle, Wash.

SEEDS 620

FARM SEEDS—RYE GRASS, RED AND ALsike clover, vetch and oats, fall barley and timothy seed of good quality, new, recleaned and ready for shipment. Rhoten Farms, Salem, Ore.

FOR CLOVERSEED, PASTURE GRASSES, vetch, gray oats, etc., get latest prices, stating amount wanted. Lee Hershberger, Hubbard, Ore.

GROWN MIXED TIMOTHY-ALSIKE CLOVER; very hardy; germination, 94; 9c, recleaned. M. Meador, Norwood, Idaho.

NURSERY STOCK 621

GROW NEW PEDIGREED WASHINGTON asparagus; best in the world. Roots now ready. Ask for circular. Cherries, pears, peaches, apricots, soy beans for silage and soil building. For lumber, shade, windbreak plant Siberian elm. Special prices on berries, grapes and asparagus for commercial planting. Home Nursery, Richland, Wash.

RELIABLE TREES AND PLANTS—PRUNES, apples, pear, cherry, peach, apricot, grafted walnut and filbert trees, gooseberries, currants, etc., at attractive prices for early orders. Send your want list today for quotations. Benedict Nursery Co., 185 E. 87th st. N., Portland, Ore.

TREES—NOW BOOKING MAIL ORDERS AT reduced prices for limited time only. Apples, pears, peaches, nut trees, prunes, cherry, small fruits, etc. Live agents wanted. Lafayette Nursery Co., Lafayette, Ore.

NURSERY STOCK—PRUNES, WALNUTS, FILberts, fruit trees of all kinds, gooseberry and small fruits. Buy direct and save 50 per cent. Brooks Nursery, Lafayette, Ore.

TREES—CHERRY, PEAR, PRUNE, APPLE, walnut, filbert. Mazzard cherry seedlings. Prices based on production costs only. Homer R. Brixey, McMinnville, Ore.

NURSERY STOCK SOLD DIRECT TO PLANTers; apple trees a specialty; no agents employed; can save you money. Write for prices. Lawson Nursery, Gates, Ore.

GOOD, THRIFTY APPLE AND PRUNE TREES at reasonable prices. R. B. Porter, Forest Grove, Ore.

TIMBER LANDS FOR SALE 645

FOR SALE—3½ MILLION FT. OF GOOD FIR timber; good location for sawmill. Lee Barker, Drain, Ore.

FARM LANDS FOR SALE 651

POTATO, POULTRY, BERRIES. ALL cleared and in meadow. A few feet from paved highway; located a half mile from railroad station, good store and sawmill; excellent neighbors, fine schools, close to several good towns. Priced at only $100 an acre. Sold in 5, 10 or 20 acre parcels. Small payment down, balance in 10 years at 6 per cent. This is the best land at the price that we know of. Write or call for full information. Carter, MacDonald & Miller, 208 Columbia st., Seattle, Wash.

20 ACRES GOOD HEAVY SOIL, SUITABLE for alfalfa, asparagus, strawberries and all garden truck; half under cultivation; adjoining irrigation canal and railway depot; four-roomed house. Write owner, E. A. Helps, R1, Kennewick, Wash.

FOR SALE—170 ACRES DAIRY RANCH; close to town and school; barn, hold 50 cows; good house; take good property part payment, balance to suit. Winter, Ontario, Ore.

157 8-10 ACRES, 35 MILES FROM SPOKANE; partly improved; buildings, spring water; near lake. Ida Frantz, Elk, Wash.

FARM LANDS FOR SALE (Continued) 651

CUTOVER LANDS, EASY TO CLEAR; $8 TO $20 per acre; 25 miles north of Spokane; on hard surfaced highway; Great Northern and Milwaukee railways; excellent opportunity for dairying and stock raising with Spokane markets and creamery near at hand. Will help the man who will live upon this land and agree to clear a part each year by giving lumber to help start his buildings, and a purebred Jersey bull to groups of farmers. Interest and payments low. Write Milan Farms Development company, Dept. T, Old National Bank bldg., Spokane, Wash.

PUGET SOUND WATERFRONT FARM, THIRty acres, all cleared; 1-3 well drained marsh, balance good upland; 1000 ft. beach frontage; good house and barn, with water piped into both; hog house, poultry house; well settled neighborhood; school, cream, phone route; 3 miles from live trading center. This farm splendidly adapted to dairy and poultry; owner has business in town; will include some personal property and sacrifice on price if taken soon. D. W. Packard, Oak Harbor, Wash.

5000 ACRES, NEWAUKUM RIVER VALLEY; highest type level farming land; all rich, productive scoil. No gravel. No floods. No crop failures. Well developed district. Near Chehalis, Washington, 20 acres up, $15 to $50, easiest terms. Settlers can get steady employment years to come; good wages; and live at home. See local representative, St. Helens hotel block, Chehalis, or write Graham Land company, American Bank bldg., Seattle.

ATTRACTIVE HOME FARMS—PRODUCING paying crops of alfalfa, grain, vegetables, etc., year after year, can be secured in the Lethbridge northern irrigation district at low prices and on easy terms. Favorable climate. Rich soil. Ample moisture. Wonderful country for mixed farming. Near towns, railways, good schools. Send for descriptive booklet to the Irrigation Council of Alberta, 12 Provincial building, Lethbridge.

FOR SALE—100 ACRES OF GOOD LAND, with good house and two good barns and silo. All farm machinery and 7 cows and three head of horses; two wells and one windmill, 40 chickens; one mile from Harrisburg, Ore. All for $8000 if taken at once; will give terms; electric lights in barn and house, cement walks around. Robert Venske, Harrisburg, Ore.

30-ACRE YAKIMA VALLEY HOME, ADJOINing county seat; government water right fully paid; some fruit, mostly alfalfa plow land; modern 7-room house, electricity; large barn, full; silo, horses, 12 cows, 75 pigs, farm implements, some furniture; immediate possession; terms. Owner, G. Dowe McQuesten, Prosser, Wash.

BIG OPENING SALE OF YAKIMA VALLEY farm land, under an assessed state and government approved irrigation project; best, deep soil; close to town and good roads. Price $25 per acre and up. Very easy terms. Western Lands, Inc., owners, 918 Green bldg., Seattle.

SPLENDID OPPORTUNITY—POULTRY FARM with hatchery; five-room plastered house, five chicken houses, waterworks, garage, outbuildings, orchard; on Columbia highway, McNulty station, near St. Helens and Portland; part cash, balance easy. A. B. Larson, Warren, Ore.

BIG LUMBER COMPANY LAND SALE—IN Skagit county; 40-acre tracts, $1400; $200 cash, balance easy. Lots work for the settler. Splendid district, roads, schools, towns. Information free. H. C. Peters, 726 3d ave., Seattle.

SELL YOUR PROPERTY QUICKLY FOR cash; no matter where located. Particulars free. Real Estate Salesman company, 501 Brownell, Lincoln, Neb.

$2400 CASH—160 ACRES SAGEBRUSH LAND in Harney valley, Ore.; sandy soil; easily cleared; water at 20 feet. Box 172, Kootenai, Idaho.

WESTERN WASHINGTON FARMS—LARGE or small tracts; Puget sound waterfrontage. Charles Somers company, Alaska bldg., Seattle.

IMPROVED DAIRY FARM OF 40 ACRES; stock and feed included. For price and terms address L. F. Lowe, Enumclaw, Wash.

40 ACRES, RUNNING WATER, BUILDINGS; $8000; TERMS. Helen Zumsteg, Route 1, Hubbard, Ore.

BARGAINS IN DRY AND IRRIGATED farms. Oregon Mortgage Co., Paulsen bldg., Spokane.

FARM LANDS—Wanted 654

NO COMMISSION—SELL YOUR FARM through Washington Farm Bureau Exchange, represented in 45 states. Lists of farms for sale by owners mailed free. 312 Lindelle bldg., Spokane, Wash.

I HAVE INQUIRIES FOR FARMS IN NORTHwest. Describe fully and state price. R. A. McNown, 310 Wilkinson bldg., Omaha, Neb.

WE HAVE BUYERS FOR SEVERAL FAIR priced farms and ranches. Central Land Bureau, New Franklin, Mo.

FARM LANDS FOR RENT 657

80 ACRES IRRIGATED LAND, IN YAKIMA valley, suitable for alfalfa, grain or truck farming. Also Colville valley diversified ranch, equipped. The Big Bend Land Company, 212 Symons bldg., Spokane, Wash.

GOOD FARM FOR RENT. INQUIRE OR write Box 72, Hunters, Wash.

IRRIGATED LANDS—For Sale 663

CORBIN ADDITION TO GREENACRES—IN the beautiful Spokane valley; 30 minutes from Spokane paved road; 40 inches of water for irrigation; gravity flow. Ask for booklet with all information.

Return coupon—The Fred B. Grinnell company, Spokane, Wash. I am interested in the Spokane valley. Please send booklet and all information to

Name .....
Address .....

FARMERS AND STOCK MEN—THE COLUMbia irrigation district has several tracts of irrigated lands of various sizes, in the famous Kennewick valley, with plentiful water supply. The district wishes to get these tracts into the hands of good farmers who will put them to work, and will make very low prices and long terms to such men. No speculators need apply. One tract 580 acres, especially suitable for stock or dairy ranch. Write the secretary, Columbia Irrigation District, Kennewick, Wash.

A MONEY MAKER THAT WILL ALWAYS show handsome profits; 130 acres, near Yakima; good water rights; excellent buildings and well equipped; large dairy herd. Price $22,000; good terms. Western Lands, Inc., owners, 918 Green bldg., Seattle.

51 ACRES, IRRIGATED; CROPS, ALFALFA, berries, asparagus, potatoes, corn; house, barn; highschool and station two miles; terms if desired; will trade cattle or sheep. Chris H. Olsen, Benton City, Wash.

WHY RENT WHEN LANDLORD'S SHARE will pay for well imp. home? Write Western Bureau of Exchange, Twin Falls, Idaho.

FOR SALE OR EXCHANGE 701

2-STORY BRICK HOTEL, FURNISHED; FOR stock, dairy or timber land; $30,000. Easy terms. W1504 Fairview ave., Spokane.

Cattle Ranch To College

By Russell Doubleday Copyright by Doubleday & McClure Co

CHAPTER XVII.

A Cowpuncher in Ernest.

The roundup was now at hand—that great account of "stock taking," literally, the closing of the year's books, as it were, on the cattle range. At its conclusion the ranchman would know whether the previous winter's storms and cold had allowed him any increase or not. The cattle roam at will over great tracts of country bounded only by watercourses and the wire fences along the railways; the herds of one ranchman mingle with those of another, and only during the roundup are they separated and the calves marked with their respective owners' brands.

The date of the roundup is fixed beforehand and all the details arranged, so that when the day arrives every man is ready to take the field. As several owners have cattle on the range, each sends his quota of cowboys to do the riding, and all work together under a general head or roundup boss.

The Sun River ranch had perhaps the largest number of cattle out, and its outfit consisted of 25 men, with two cook wagons and several other vehicles to carry beds and various necessaries.

The morning of May 25, the day set for the rendezvous of the roundup, was as near perfect as one could wish. With the first streak of light in the east all hands were routed out, and after a hasty breakfast every one at once set about making the last preparations to take the field. Some helped the cooks load up their wagons and pack the utensils; some were busy piling the beds into their places and the rest were occupied with their own riding outfits or looking after the large saddle band.

It was a gay crowd; you would have thought it was a gang of boys off for a swim instead of a party of men bound on a very serious undertaking, accompanied, as it was sure to be, with a good deal of danger and no end of hard work and privation.

John was in the thick of it, looking after the horses he had helped to break. Of these there were a goodly number, for from six to eight were required for each man. He noted with pride that "Lite's" bruises had entirely healed and that his bones were almost wholly hidden by the firm flesh and muscle he had gained under his new master's watchful care. The boy was to be one of the gang that represented the Sun River ranch and he looked forward to the roundup as an opportunity to show what was in him.

At last the procession was ready to move, and amid a chorus of "so longs" to those left behind, the shouts of men, the whinny of horses, the rattle and bang of wagons and cooking utensils, the snapping of whips and the beating of hoofs it started.

Little time was wasted in making the journey to the camping place, for all were anxious to get to work. At this time men gathered together from widely separated points, acquaintanceship was renewed and gossip exchanged. The folowing morning found them at the appointed camping ground in convenient proximity to a stream, and at about the center of the territory which it was proposed to sweep clean of cattle. Already the triangle bar and the M T outfits had arrived: their cook wagons were unpacked and their fires built. It was not long before the Sun River boys, called the Three X outfit, from their brand (XXX), were likewise settled. The settling in order was not a very elaborate proceeding; there were no carpets to be laid—"the grass of Uncle Sam" served that purpose admirably—the bric-a-brac consisting of saddles, bridles and some harness, which was slung carelessly on the ground; and the furniture, if the rolled-up blanket beds could be called such (and there was no other), were left in the wagons till wanted.

A hole a foot or so deep and a few feet in diameter was dug in the ground to hold the fire and at the same time prevent it from spreading to the surrounding prairie a thing to be dreaded. The tail of the cook's wagon was let down, thus forming a sort of table and disclosing a cupboard arrangement. An awning was spread over the whole and it was ready for business.

As soon as these arrangements were completed the men broke up into little groups, renewing old friendships and exchanging the bits of news that one or the other had learned. John hung round the cook's wagon, making friends with that important individual. He was no poor hand with the frying pan himself, and the appreciation of the cook's efforts soon won over this personage.

"Well, Billy," John was saying, "you'll be kept pretty busy this trip, I guess."

"Yes, it'll be no easy thing," he answered. "It's a big roundup, and it's so terrible dry for this time of year and so dusty that the boy'll be weary and lookin' for trouble—and it'll all come back on me."

"Oh, I guess not," said John consolingly, as he walked about, kicking the tufted buffalo grass and swishing his quirt about aimlessly. "I tell you what, Billy, it wouldn't take much to start a fire in this"—he slapped the grass with his lash. "With a wind like this we'd have a blaze in a minute that would be harder to stop than—Look out!"

John rushed over to the shallow firepit, shouting warnings as he ran, and began stamping down the thin edge of fire that was eating its way into the bone-dry grass. While the two were talikng a gust of wind had blown a brand out of the pit and into the tinderlike hay. John kept stamping frantically, and in an instant Billy had joined him and was also vigorously engaged in crushing out the dreaded flames. They both shouted lustily, and soon a number of the punchers, seeing the thin smoke and realizing the danger, came over to help.

Fire is perhaps the thing of all others that the plainsman dreads; a prairie blaze once fairly started and sweeping over an expanse of territory is almost impossible to stop, and there is nothing to do but run before it; man and beast, tame and wild, flee from it. Only charred and blackened ashes lie behind the swiftly advancing thin line of flame.

All this came into the minds of the men as they tramped on the red tongues of flame that lapped ever further along and around. There was no time to plow round (even if such an aid as a plow could be had) and so check the fire by turning under what it fed upon. Soon it was seen that it would take more than the trampling of men's feet to put it out, and a line was started down the creek with buckets. Then blankets and gunnysacks were wet and beaten against the flames.

The smoke choked and blinded, and the heat was almost unbearable, but the men kept the blankets going until the spiteful red tongues drew back defeated, and died. It was a hard fight for a couple of hours, and when it was over those who took part were hardly recognizable—faces blackened and eyes reddened by smoke, hair, beards and mustaches singed.

John, who had drawn his smoke-begrimed fingers over his cheeks and forehead, was a sight; Frank saw him thus and said he looked like a cross between a tiger and an ourang outang.

For a day or two after all the outfits came into camp the time was spent in organizing the roundup and planning the campaign. The ranchmen or foremen, as the case might be, were extremely busy during this time, but for once the punchers were at liberty to do as they pleased. All sorts of cowboy sports were indulged in; horse racing (where Lite, like Baldy generally came out ahead, under John's understanding jockeyship), rope throwing and feats of horsemanship. What to an easterner would appear impossibilities were commonplace acts of good riding for a cowpuncher. Picking up a hat from the ground while riding at full speed was a feat of good but not at all extraordinary riding.

The men were full of life and energy—skylarking was going on continually. It was no place for the seeker of peace and quietness; the air was filled with cowboy yells and shouts of laughter. The unwary one, afoot or on horseback, was likely to hear a sudden swish and in a second find himself hugging mother earth and acting as if he was trying to pull a peg with his teeth, the result of some rope throwing in his rear.

As evening draws near the word is passed that "real work will begin tomorrow," and all hands quiet down, realizing that they will need all the strength that rest can give them. Soon after supper the men pull out their bed rolls, spread them and, using their saddles as head rests, turn in.

The Sun River roundup is in camp.. The moon beams placidly down and shows in high relief the white-topped wagons and tents huddled together. Beds are scattered here and there upon the ground, and from each comes the sound of tired men's breathing. Half a dozen saddled and picketed horses crop the grass near by and a small bunch of cattle, guarded by a single rider, who lolls sleepily in his saddle, lie a little further off, their heavy bodies appearing strange and shapeless in the half light. A coyote from a little distance barks and howls, but even its voice is drowsy. The only animated sound comes from a bell on a horse tinkling as he feeds.

At 4 o'clock a little red spark appears near the XXX outfit and the cook can be dimly discerned moving round his wagon. Soon the smoke begins to pour from his fire, and then the cooks of other outfits also show signs of life. Tin pans and kettles are heard to rattle, and breakfast is under way. At a quarter to five the cook begin the reveille of the plains; dishpan in hand, they move about among the sleeping men beating an awakening call neither musical nor poetic, but most effective. Between the strokes comes the long-drawn croy, "Grub p-i-l-e! Grub p-i-l-e!"

Apparently it is no easier to rouse up from the rough couch, knobbed as it is with the inequalities of the surface of the ground beneath, than it is to rise from "flowery beds of ease."

"Cowpunching ain't what it's cracked up to be," said Jerry grumblingly to John as they lay near a XXX wagon. "I'm goin to quit after this roundup and drive a horsecar."

"It is kinder tough," returned the younger. "I haven't got used to Lite's prancin's yet and I'm stiff."

It's the privilege of every working man on land and sea to grumble at the early getting-up time, and the cowpuncher takes all possible advantage of this immemorial right. They obeyed the summons, nevertheless, and by the time the night wrangler came up with the saddle band Jerry and John were on hand with the rest of the punchers, having rolled up and stowed their beds in the wagon. A rope corral was drawn about them which sufficed to keep them together, the cow pony having learned the lesson thoroughly not to run against a rope, even if it is flimsily supported. Each man took his lariat and flung it over the horse he wanted to ride that day. As the noose tightened round the neck of each horse it stood stock still till its owner came up to it. Led a little apart, the 50-pound saddle was flung over, and in spite of more or less struggling the cinches were drawn tight and the heavy bridle buckled on.

The rush for the mess wagon which followed resembled a run on a bank, and for a few minutes the clatter of tin dishes and steel knives and forks drowned all other sounds. A tin cup of strong, black coffee, a slice or two of bacon, potatoes swimming in gravy, and a generous chunk of bread comprised the bill of fare.

With plates and cups filled, John and Jerry go off a little way to a wagon and sitting crosslegged with backs against the wheels, proceed to put away with all possible dispatch the food allotted to them. In a few minutes breakfast is over, when each man brings his dishes and throws them on the pile which cook is already busily engaged in washing. Similar proceedings have been going on at all the different outfits at the same time, and soon all hands converge toward the roundup boss' camp.

John and Jerry joined the gathering crowd near the "captain's" wagon and waited for orders. After a few minutes Kline, captain of the roundup, appeared, a stocky man with a gray beard, slouch hat and greasy, roundup clothes: chaps, flannel shirt and big spurs. The crowd quieted down instantly.

"Barrett, take six men and go to the

The smoke choked and blinded and the heat was almost unbearable.

Bits of Fun for Everyone

Last Shall Be First.

The man who puts safety last usually goes to the hospital first.—Two Bells.

The Scotch of It.

Sandy had just met his girl at the end of the street, where she was waiting for him. She was looking into a confectioner's window when Sandy made his presence known by remarking:

"Weel, Jennie, what are y' gaun to have the nicht?"

She, not inclined to ask too much, replied: "Oh, I'll just tak what you'll tak, Sandy."

"Oh then, we'll tak a walk," said Sandy, as he led her away.—Pearson's Weekly.

Father's Blow to Mother.

"Poor Broome! He's gone over to the silent majority."

"Why—I—when did he—is he dead?"

"Well, no; but he's married."—Tit-Bits.

Handy Man.

An inmate of a certain penal institution recently received a call from the warden, who said:

"I understand you got in jail on account of a glowing mining prospectus."

"Yes," admitted the gentlemanly prisoner. "I was quite optimistic."

"Well," continued the warden, "the governor wants a report on conditions in this jail. I want you to write it."—Harper's.

Some Trip!

Motorist: "Say, buddy, how far is it to Bingville?"

Schoolboy: "Well, mister, the way you are headed now it is just 24,996 miles; but if you turn around it is only four miles."—Exchange.

Simplification.

The following is an example of the simplicities of "pidgin" English, as set forth in a bill rendered by a Jap taxi driver in Hilo, Hawaii:

"10 comes and 10 goes at 50c a went. $5."—Washington Star.

A Low-Down Dog.

The garage keeper's little daughter never had happened to see a dachshund before.

"Look, papa," she exclaimed, "See what a long wheel-base that dog's got."—Selected.

New Rule for Our Employees.

All requests for leave of absence on account of toothache, severe colds and minor physical ailments, and on account of church picnics, weddings and funerals and the like, must be handed to the foreman in charge of your department before 10 a. m. on the morning of the game.—Houston.

Home, James!

Unlucky Motorist (having killed the lady's puppy): "Madame, I will replace the animal."

Lady: "Sir, you flatter yourself."—Bison.

Base Ingrate.

Zeke: "Wall, how ye feelin', Jed?"

Jed: "Oh! purty good."

Zeke: "What? Purty good, after me walkin' four mile to see ye?"—Brown Bull.

head of Bar creek and rake the brush like a fine toothcomb," began Kline. Barret swung into the saddle and, picking out six men, rode off with them.

"Haggerty, take six men and clean up Crooked creek; Moore, three men and go up Indian gulch," and so the orders went. Each group started on the instant and, trotting off, disappeared in a cloud of dust. Soon all the punchers had gone; only the cooks, the horse wranglers and a few drivers were left.

Jerry and John had been sent up a small creek to drive in all the cattle they found in that section. The head of the creek reached (it was about 15 miles off), Jerry, who was riding some distance from John, signalled to him to turn back and make a detour so as to get around the animals ahead. At the sight of the riders the wild cattle began to gather into bunches and stare; this tendency to come together made it much easier to drive them.

By the time they had driven two miles a considerable number had gathered, which increased as it moved onward as a snowball gathers bulk when it is pushed along.

When Jerry and John reached the main valley they were driving perhaps a couple of hundred head before them. Herds were pouring in from every direction, and soon the whole valley was filled with a vast mass of variously tinted animals, their horns tossing like a sea of tall grass. Over all hung a great cloud of dust that obscured the sun and made it impossible to distinguish a rider the other side of the herd. "This is fierce," ejaculated John as he tried to peer through the brown-gray cloud at another rider.

"A cowpuncher can't live without dust," returned Jerry, whose face was covered with a gray mask, through which his eyes shone in strong contrast. "My teeth is worn down and my lungs coated with it, but I don't mind it no more. Look out for that cow there!"

An old cow, made angry and brave at once by an apparent menace to her calf, was charging down on John full tilt—tail up, head down, eyes rolling—vengeance in every motion; for a minute it looked as if he would be run down: the charging beast was going at such speed that she would be hard to avoid; but when she was within five feet of the boy's horse he gave a quick pull on the rein, a sharp jab with his spurs, and the clever little cow-pony wheeled sharply round and out of range, the old cow lumbering harmlessly by, her own weight and impetus preventing her from turning.

"You want to keep your eye out for those old cows with calves," admonished Jerry, "they're looking for trouble."

All hands were now busy keeping the great herd together, single animals were constantly breaking out and had to be driven back; sometimes several would start at once, when there would be some pretty sharp riding for a while.

It was about midday, the sun was blazing down from above, the dust rose in clouds below, lining mouths and nostrils of the riders. Since 6 o'clock they had been in the saddle constantly and all felt, as Jerry expressed it, "Plumb empty and bone dry."

The herd presently quieted down somewhat and allowed the men to eat in relays, some watching while others fed. It was the briefest kind of a meal, but it sufficed, and in a half hour every man was ready, mounted on a fresh horse, for the real work of the day—"cutting out."

John and Jerry approached the tumultuous herd, a swirling restless sea of backs and horns. The din was tremendous; every cow lowed to her calf and every calf to its mother; the tread of thousands of hoofs even on the soft earth caused a heavy, rumbling sound that filled the air, and above all was the sharp rattle of one horn against another, of a thousand horns against each other. Into this seething mass of living wild creatures armed with sharp horns, and the tread of whose hoofs was death, must go the cowboy and his intrepid pony. To drive out the cows and their accompanying calves, so that the brand of the mother might be put on the offspring, was the cowpuncher's duty.

Jerry and John were as usual near together, and Jerry as usual grumbling. He declared that this cowpunching was a dog's life and that he would surely quit it after this roundup. John, as was his custom of late, was discoursing on the merits of Lite. "I'll show you what a good cutting-out horse he is today," the younger was saying. "You just watch him." Jerry suddenly rode off to head off a steer that had broken out of the bunch and so stopped the boy's talk. When he came back John was about to dismount to aid a weak calf to rise. "Look out!" was all Jerry had time to shout, as an old cow with horns like spears came charging down on the stooping boy. It was not her calf, but she thought it was. John's horse had become startled and ran back so fast that he could not reach the saddle horn to mount. The infuriated cow was within 20 feet of him, the cattle hedged him in on every side so he could not run, and he reached round for his six-shooter as a last resort. He was about to pull the trigger when Jerry's rope came flying through the air, settled round the animal's hind legs, and down she came in a heap just in time.

"You'll take my word next time when I tell you not to dismount in a bunch of cattle." John said nothing, but he realized that it was a pretty close shave.

Soon the cutting-out process began, to accomplish which the rider enters the main bunch, selects a cow with a calf bearing the brand of his outfit, and drives them out to a place apart, where other riders keep them separated from the main bunch and from the similar collections of other brands. To select his own brand from dozens of others requires a quick and sure eye on the part of the rider and to follow that particular cow through all the turnings and twistings she is sure to take, requires great cleverness and perseverance on the part of the horse.

It was Lite's first experience as a cutting-out horse, but John had full confidence in his ability in this as in every other branch of cow-pony education. "You just watch him"—this to Jerry, who had expressed some doubts. John and Lightning rushed into the sea of cattle. Whether by the gentle pressure of the knees or remarkable knowledge Jerry knew not, but he saw the little horse single out an animal and start it out, following directly at its heels. It turned to the left sharply; Lightning deftly threw his fore legs over its back and stood in its path; it turned to the right—horse and rider were there also. Through the herd they went full speed, twisting, turning, passing through lanes of cattle so narrow that John's legs rubbed their rough bodies on either side; but always they were close at the heels of the XXX cow, and finally they drove her out where Jerry was guarding several others of the same outfit.

"How's that?" said John breathlessly. It was hard work for horse and rider, particularly for the former.

"That's all right," Jerry answered, more enthusiastically than was his wont. "He's got the making of a good cow-horse in him."

(To be continued.)

Question Answered.

The old lady tourist in Florida was interestedly viewing a monster alligator, and finally demanded of the attendant:

"You say you don't have to feed him very often. What kind of food does he like best?"

"Babies, ma'am," replied the man mildly.

"Why, mercy me, how horrible! I shouldn't think the law would allow you to feed him such things."

"It doesn't, ma'am," asserted the attendant. "We feed him fish mostly, but you asked what he liked best."—Selected.

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FAMILY CIRCLE

ALICE W. BARLAND
EDITORIAL CONTRIBUTOR

THE KIND OF A GIRL I AM.

I have to live with myself and so
I want myself to be fit to know,
I want to be able as days go by,
Always to look myself straight in the eye.

I don't want to stand with the setting sun,
And hate myself for the things I've done
I don't want to keep on the closet shelf
A lot of secrets about myself,
And fool myself as I come and go,
Into thinking no one else will know.

The kind of a girl I really am,
I don't want to dress myself in sham.
I have to live with myself and so
I want to be fit for myself to know.
—Henry Van Dyke.

Experience Letters

Dear Editor: You ask women to write of farm life and I believe by that you mean to invite the real successful ones to write, or rather, the woman who has a successful husband farmer to write. Well, I wish I could write in that capacity, but I can't, but am going to unburden my mind by writing an article which I have little hope of having printed as I have no doubt it will be considered too apt to dampen the ardor of many who are struggling farmers' wives, striving for a mere existence.

I would not for anything do this, as they need all the sympathy and inspiration that can be extended to them.

I can look about me here where I live and see five farms which have been vacated. The husbands and wives who tried to make those farms into homes worked 16 hours a day during the farmers' working season and then had to move out and leave them because they couldn't pay for them. One neighbor, with his wife and two sons, spent $45,000 and three years of their time, trying to meet payments, but couldn't because of low prices. They were all hard-working people, sacrificing every comfort to meet obligations from the sale of crops, which brought almost nothing.

Another neighbor and his wife paid down $2000 cash and improved their place to the amount of $2000 and then walked out and left after one year of hard work, both worn out with the awful struggle.

Another neighbor traded for some land here, giving a suburban home worth $4000, and left the place without enough money to pay rent in either city or country for more than two months.

Two more families built homes and paid I know not how much money on the land, and left after a couple of years. I know that these were all very hard working people and put in long hours of hard work. But it seemed impossible for any one to ever pay a debt on a ranch here.

Husband and I milk eight cows; we get up at 4 in the morning, then after milking we work in a hop field nearby and if it were not for the work that we do away from home we would have to leave our place after making payments for three years on it.

We raise our own garden truck and some cow feed; we raise chickens, pigs, etc., but we do not know at what time we will fail to make our payments and have to leave, like the rest of our neighbors.

There is a large orchard near by where several men are employed and one who is employed there owns a ranch not far away, but he can not live on it as he can not earn enough to make a living.

We are feeding potatoes to our cows that we took from the pits of our unfortunate neighbors. There was no sale for them after they had raised them by the ton. (This letter came last spring.—Editor.) Onions, too, were raised by our neighbors and almost given away. And this, after women and children had crawled on their hands and knees, weeding and thinning, to raise a crop that wouldn't sell.

Editor, you who sit in your editorial office and hear the bright tale of the few who succeed, try to feel just a little sympathy for us who work so hard and gain nothing. Give us all the advice you can; pray for us if you ever pray. As for us, we hardly have time for prayer at home, and as for going to church, the women about here seldom have decent wearing apparel. If they have a hat they have no shoes, and if they have these things they lack other things needed to be decently dressed.

You may think this is all a trumped-up story. Come and see for yourself. I am giving my address, but not for publication, as we do not want the eyes of all the readers of THE FARMER turned this way.

Dear Editor, we all love God's great outdoors and the city has no attraction for us or our neighbors. We would like to remain in it. MRS. E. C. B., Wash.

(I fully intended to send this letter to press long ago, but it slipped out of sight among my many letters and also slipped my mind.—A. W. B.)

If the boy who signed himself R. R., Idaho, will send me his address he will hear something to his advantage. I accidentally destroyed it.

ALICE W. BARLAND.

Family Circle Girls

Dear Mrs. Barland: I am a constant reader of the Circle for some time and followed the discussions, and some of the letters have prompted me to write.

I am a tall blonde, 19 years old, and have been out of high school for two years. I have gone with boys since I was 14 and have always had boy friends, but never could fully understand them. I can't understand if boys feel as they say they do about the rouge and kissing kind of girls why they go with them in preference to the other kind.

I am not the rouge and kissing kind, but that doesn't mean I never kiss boys, for I do, but not just any one who happens to take me home. I have gone with lots of boys, but I don't believe I ever went with one more than two or three times before he asked me to kiss him goodnight or deliberately did it without asking.

I am sure I am not the only one with this kind of experience and I would ask if this is some fault of the girl? I wish some boy would be kind enough to answer this for me.

If these boys hate so much to be kissed except by their future wives I would say to them, don't ask the girls to do it. Very few will kiss without asking or you may get your face slapped if you run onto one like me. More than one boy has.

Idaho. TRIX.

Dear Mrs. Barland: You asked a while ago what girls do for recreation who do not find favor with the opposite sex. I can tell you what six of the happiest girls alive do.

In the summer we ride, hike, golf, tennis, swim and countless other things. A hot afternoon is sometimes made very interesting when one of us reads aloud and the others sew or do other hand work for our "hopeless chests." We even find an old-fashioned quilting bee an interesting change. Occasionally we all "throw in" and make ice cream and cake and have lots of fun while we are doing it.

In the winter we coast, ski, skate, play cards and have candy pulls. Every week is just bubbling over with fun. I will venture to say that we have better times than any "boy struck" girls do in any part of this old world. Boys are troublesome creatures and though we might have had a number of boy pals they always prove themselves to be bores.

Why all the row about smoking? Nice girls won't smoke anyway (neither will nice boys). If those who do smoke were not doing that they might be doing something worse; anything to shock the public, you know. Arguing till doom's day won't get us anywhere.

I am 18 years old, tall, slim and a blond. I can drive a car or a tractor and I love to work with horses. I also cook, sew and do all kinds of housework.

"BETTY JOE," Idaho.

Family Circle Boys

Dear Mrs. Barland: I received your letter asking about our farm, so here it is. The farm contains 320 acres; 120 acres are a mixture of oats, wheat and rye, 120 in hay and 60 in grass.

The house is entirely surrounded by trees and it and all the other buildings are painted a chocolate color with orange trimmings.

We have a large water tank which holds about 10,000 gallons and is 28 feet high. The water is piped to the sheep shed, which is about one-fourth of a mile away. The sheep shed is 140 feet long and 24 feet wide and it will accommodate 250 sheep. Outside there are two sheds made of straw and there are six corrals to keep the sheep in.

There is a two-room bunk house about 15 feet from the sheep shed and it has running water in it and two stoves. It is plastered and has window boxes and is furnished.

Our school house is in one corner of the ranch and has two rooms, though we use only one.

My brother Fred has a goat which we hitch up to our coaster; we sheared it this spring. It has a long, thin beard and a stubby tail, which is always in the air. I am 12 years old and in the sixth grade.

JAMES YOUNG RAWSON, Idaho.

(I seldom print letters from such young people, but this boy of 12 has written so clearly about his home that I thought you would like to read it.—A. W. Barland.)

Your Health

By Royal S. Copeland, M. D., F. A. C. S.

Yesterday I saw a young woman on the verge of insanity because of her terrible fright over what a doctor had told her. She had complained of her eyes and the occulist suggested that as soon as clouds appear before the sight blindness is near at hand.

Dr. Copeland.

I am happy that most doctors are extremely conservative and rarely make dire predictions. Sometimes you get angry with your doctor because he tells you so little. His education and experience have taught him how foolish it is to make positive statements about health and disease. On this account he says little.

It is not safe to be too confident. Particularly is it dangerous to predict evil. Why? Because nature has a way of accomplishing wonderful cures. There is one thing I wish everybody in the world would remember. It is this:

The natural tendency of disease is toward recovery.

There may be long delays. There will be days and days when things look black. The weeks may run into months. But the joy of it is that after a while this wonderful human body will find its stored-up forces asserting themselves, the evil agents of disease will be driven back, ever so slowly, perhaps, but little by little improvement will come.

There can be no doubt that the followers of Christian Science hold certain advantages over the rest of us. By constant exercise of the powers of faith and hope, they make themselves invincible against the depressing effects of hysteria, discouragement and despair.

My patient of yesterday did not need medicine. She needed faith, hope, encouragement, happiness and confidence in herself.

You must use common sense about your ailments. Don't wake up in the night to worry over some impending disaster. Live such a life of physical righteousness that your sleep will be undisturbed. Get up refreshed and strong, ready for whatever the day offers. There may be trials and burdens, but a vigorous and healthy body will help to carry them bravely.

Mind and body are so related that neither can be normal unless both are right. A disturbed mind upsets the functions of the body. Illness and pain interfere with normal mental operation.

Consult a doctor who is known to you as a capable practitioner and an honest, wise man. Give him the chance to examine thoroughly into your physical condition. Then accept his views, confident he is right. Let him carry all the responsibility. Then you won't worry.

You will develop a philosophy which will sustain and comfort you. The surest prescription for cure is 50 per cent profession skill and 50 per cent confidence in your doctor.

Home Recipes

Tomato catsup—(Small quantity)—Two uarts tomatoes, boiled and strained, two tablespoons salt, two cups vinegar, two-thirds cup sugar, one teaspoon cayenne pepper.

Add the salt to the tomatoes, then the vinegar, sugar and pepper. Boil until quite thick, being very careful not to burn. Pour in hot jars or bottles, seal. If bottled dip the tops in hot paraffin.

Green pepper and raisin pickles—Three quarts green peppers, three red peppers, one quart ripe tomatoes, six medium-sized onions, one-half cup salt, one and one-half pounds of sugar, one cup raisins, two teaspoons pepper, one-half teaspoon mustard, three pints vinegar.

Chop the peppers, ripe tomatoes and onions until fine, add the salt and let stand over night, then drain carefully and add all other ingredients. Cook slowly one and one-half hours. Put in glass jars and seal.

Potato puff: A good way to use left-over mashed potato: Two cups of mashed potato, two tablespoons of melted butter, six tablespoons of sweet cream, two eggs, a little salt. Beat the potato, butter and salt, add the eggs beaten separately, then the cream; mix all together well and bake in a quick oven until browned. A. W. B.

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We were talking of a building contractor who had been a part of the town's life for 30 years and who had built some of its business blocks and some of its finest residences. The architect said: "He would be a rich man today if he had not taken quite so much pains in all his work, had not been quite as anxious that all the work should be workmanlike, and that all the material in the construction, seen and unseen, should meet the specifications. But then," added the architect, "he can look every man square in the eyes, and that is some satisfaction."

It may be an old song, but mere dollars do not give all the satisfactions of life. To be able to look a man straight in the eyes is an accomplishment as well as a satisfaction. Merely doing the right thing does not assure one of the accomplishment, but doing the right thing is the biggest requisite. Something must be added and that is self-assurance born of that action.

Doing the right thing apologetically does not get you anywhere. Unless you have confidence in yourself you can not look a man straight in the eyes.

That self-confidence may be so nicely imitated by a crook that he may get by in looking a man straight in the eyes, but the crook can not keep it up always or make it work with everybody. E A S

An Echo From the War.

A colored soldier in the American army was doing sentry duty for the first time in his life. A dark form approached him. "Halt!" he cried in a threatening tone. "Who are you?"

"The officer of the day."

"Advance!"

The O. D. advanced, but before he had proceeded half a dozen steps the dusky sentinel again cried "Halt!"

"This is the second time you have halted me," observed the officer. "What are you going to do next?"

"Never you mind what ah's gonna do. Mah orders are to call 'Halt!' three times, den shoot!"—Selected.

Latest High Class Patterns for the Home

Please order the patterns you desire at least two or three weeks before you wish to use them. Desiring to obtain the latest high-class patterns for its readers, THE FARMER has made arrangements to have them sent direct from the east, and under present mailing conditions it takes about that time for them to reach you.

4522. Ladies' Dress. Cut in 7 sizes: 36, 38, 40, 42, 44, 46 and 48 inches bust measure. A 38-inch size requires 3 1-4 yards of 54-inch material. The width at the foot is 1 7-8 yards. Price 10c.

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4030. Ladies' Apron Dress. Cut in 4 sizes: Small, 34-36; medium, 38-40; large, 42-44; extra large, 46-48 inches bust measure. A medium size requires 4 1-2 yards of 36-inch material. Price 10 cents.

3778. Harlequin Suit. Cut in 5 sizes: 6-8, and 10-12 years for children, 14-16 years for misses', and 38-40; 42-44 inches bust measure for adults. A 10-12 year size requires 5 1-2 yards of 27-inch material for the suit, and 5-8 yard for the cap. A 38-40-inch size requires 3 3-4 yards of 27-inch material for the suit and 7-8 yard for the cap. Price 10c.

3860. Girls' Dress. Cut in 4 sizes: 6, 8, 10 and 12 years. A 10-year size requires 2 yards of 27-inch material for the guimpe and 2 1-4 yards of 36-inch material for the dress. Price 10c.

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4526. Ladies' Blouse. Cut in 5 sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. A 38-inch size requires 2 1-2 yards of 40-inch material. Price 10c.

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The department editors of this paper are anxious to be of service to you. Do not fail to write to us if they can be of help to you.

High Points in News of the Week

Steps were taken at Washington, D. C., last week for the coordination of state and federal enforcement of prohibition laws, when a conference of state governors met with President Coolidge and pledged to him state support in carrying out the Volstead act as designed to make effective the prohibition amendment to the constitution. The annual meeting of governors, held this year in Indiana, took similar action in pledging state aid to the national administration in prohibition enforcement as well as general law enforcement.

President Coolidge has placed himself on official record not only in favor of strict enforcement of prohibition laws but of the laws and the constitution generally. In his address to the governors at the national capitol last week the president said in part:

"The eighteenth amendment was proposed by the congress in 1917, and its ratification proclaimed in January, 1919. It prohibits the manufacture, sale or transportation and the importation and exportation of intoxicating liquors for beverage purposes and confers upon the congress and the several states concurrent power to enact enforcement legislation. This power was exercised by the congress in the national prohibition act, which was finally passed in October, 1919, two-thirds of the house of representatives and senate present, having voted in the affirmative.

"The national prohibition act places the duty of its enforcement on the commissioner of internal revenue, his assistants, agents and inspectors. In accordance therewith, there is an assistant commissioner in direct charge of prohibition enforcement, and there are prohibition agents and inspectors in each state. Corresponding provisions will be found in nearly all state laws.

"The Constitution and the laws of the nation and of the several states are binding alike upon all the inhabitants. It is the Constitution to which we have given our oaths to support; the Constitution which requires of the president that he shall take care that the laws be faithfully executed; and the state constitutions lay a similar obligation upon their governors.

"The Constitution and the laws are perfectly plain, and the directions which they contain to the president and the governors are equally plain. The country ought to know all this. It ought to understand just what duties the laws have imposed. It ought to comprehend that when laws have been made there is, and can be, no question about the duty of executives to enforce that with such instruments and by such means as the law provides for securing enforcement. They have no alternatives. They can not be criticized for doing their duty.

"This is not a political question; it can not be made a political question. If there be any principle which has been established by time, by common consent, by the unqualified assertion of fundamental and statute law, it is that executives are the law-enforcing officers of this nation.

"No provision of the 18th amendment, or the national prohibition act, contemplates any surrender of state responsibility. Under them prohibition becomes obligatory in all states, for the Constitution and the laws made in pursuance thereof are specifically declared, by the federal Constitution, to be the supreme law of the land. They are binding upon every inhabitant. But there still remains to the states the power, specifically reserved in the 18th amendment, to pass enforcing acts, and there is still on them a joint responsibility to enact and execute enforcement laws, which may not always be exercised, but which can never be avoided.

"The great body of the people are thoroughly law-abiding. This great law-abiding element of the nation is entitled to support and protection. I propose to give that support and protection to the limit, provided by the Constitution and the law of the land, against every lawless element. The executives are required to enforce the law. The machinery for the enforcement of the law is that supplied by the acts of congress and the acts of the state legislature. That machinery must be used to the full extent of its capacity to secure the enforcement of the law. It is certainly my own purpose so to use it. The people are going to continue to yield obedience to the law. This principle will continue to prevail, whenever the American people shall pass judgment on it, because it is the foundation of all their institutions."

* * *

The federal trade commission has issued an order that the Utah-Idaho Sugar company of Salt Lake City, the Amalgamated Sugar company of Ogden, Utah, and E. R. Wooley and A. P. Cooper of Salt Lake City, "cease and desist from conspiring to maintain the monopoly in the beet sugar industry enjoyed by them." The case against these sugar manufacturing concerns has been before the trade commission for several months, during which several hearings have been held. It has been charged that these concerns have maintained a mutual monopoly over the beet sugar industry of the northwest and that they have operated in such a way as to prevent other interests from successfully competing with them.

* * *

The two dark spots seen by Herbert Hoover, secretary of commerce, in a survey of world conditions are the American agricultural situation and the chaotic condition in Germany. In spite of these obstacles, however, the secretary expresses optimism over the general world industrial situation.

Farm Business and Markets Outlook

(Continued from page five.)

fresh eggs are gradually tapering off, however, and are not more than needed to supply the demand, so that prices have been stable, even with large total receipts.

Receipts of poultry are increasing and all signs point to a heavy supply throughout the fall and winter. Consumptive demand is excellent and prices have held up quite well thus far.

Butter prices have recovered the loss incurred after the issuance of the preliminary report on cold storage holdings which showed that most of the "shortage" in stocks compared with the last year had been caught up during September. Receipts of fresh butter at the leading markets have fallen off and reports of a decrease in the make point to a further decline in arrivals.

Cheese prices have not declined much during the last week, but the undertone is not strong. Receipts at the leading markets are heavy and storage stocks are large.

Fruits and Vegetables.

The white potato crop was placed at 401,000,000 bushels in the October estimate, an increase of 12,000,000 bushels over the preceding month, but 50,000,00 bushels less than was harvested in 1922. The improvement in crop prospects was chiefly in Maine and New York. The sweet potato estimate also was raised to 96,350,000 bushels, compared with 109,539,000 bushels last year.

The apple crop estimate was reduced slightly in October, the commercial yield being placed at 33,104,000 barrels. A substantial decrease was made in the estimate for New York, while Washington was credited with a larger crop than a month ago. Only minor changes were made in the other states. The apple market is practically steady with a week ago in spite of an exteremely heavy carlot movement from producing sections, which has probably reached peak for the season.

The onion market is unsettled at the present time, as the demand is slow. Carlot shipments from the surplus areas are falling off, but arrivals at consuming markets remain heavy. Midwest yellows are quoted at $2.75 to $3.25 per 100 pounds on the Chicago market.

LATEST QUOTATIONS.

The Live Stock Market.

PORTLAND, Oct. 20.—Cattle—Beef steers, good grade, $7@7.50; medium grade, $5.75@7; common, $4.50@5.75; beef cows and heifers, good grade, $4.75@5.50; medium, $3.75@4.75; common, $3.25@3.75; canners and cutters, $1.50@3.25. Bologna and butcher bulls, $3@4.25; feeder steers, $5@5.50.

Calves—Medium to choice 100-pound down, $9@11; 190 to 260-pound, $7@9; 260-pound up, $5.50@7; cull and common, $3.50@5.50.

Hogs—160 to 200-pound medium, good and choice, $8.80@9.35; 200 to 250 pounds, $7.75@8.80; 250 pounds up, $7@7.75; packing hogs, smooth, $6.50@7.50; packing hogs, rough, $5@6.50; slaughter pigs, $8.50@9; feeder pigs, $8.25@8.75.

Sheep and lambs—Lambs, 84 pounds down, medium good and choice, $9.50@10.75; cull and common, $7@9.50; yearling wethers, medium to choice, all weights, $6@9; wethers, $5.50@7.50; ewes, medium to choice, $3.50@6.50.

SPOKANE, Oct. 21.—Cattle—Prime steers, $6.75@7.25; good to choice steers, $6.25@6.75; medium to good steers, $5.50@6.25; fair to medium steers, $5@5.50; common to fair steers, $4.25@5; choice cows and heifers, $4.75@5.25; good to choice cows, heifers, $3.50@4; fair to medium cows, heifers, $3@3.50; canners, $1.50@2.25; bulls, $3.25@4; light veal calves, $8@9; heavy veal calves, $6.50@8; stockers and feeders, $4@5.25.

Hogs—Prime mixed, $8.75@9; medium, $8.50@8.75; heavies, $5.75@8; fat pigs, $8.50@8.75; stockers and feeders, $7.25@7.75.

Sheep—Prime lambs, $10@10.35; fair to medium, $8.50@10; yearlings, $7@8; wethers, $5.50@7; mutton ewes, $3@5.

The Grain Markets.

PORTLAND, Ore., Oct. 20.—Wheat—Hard white, Bluestem, Bart, $1.05; soft white, $1.04; western white, $1.03; northern spring, western red, $1.02; hard winter, $1.01.

DAVENPORT, Wash., Oct. 20.—Bluestem, 85c; Club, 85c; Gold Coin, 85c; northern spring, 80c; Turkey red, 80c.

DAYTON, Wash., Oct. 20.—Club, 90½c; red, 88½c.

ODESSA, Wash., Oct. 20.—Bart and Bluestem, 86c; Marquis and Fortyfold, 85c; Turkey red, 84c; Jones Fife, 82c.

RITZVILLE, Wash., Oct. 20.—Bart, 86c; red, 84c; Fife, 82c.

PULLMAN, Wash., Oct. 20.—Red, 82c; white, 85c.

WALLA WALLA, Wash., Oct. 20.—Bluestem, 92c; Club, 90c; Turkey red, 86c.

SEATTLE, Wash., Oct. 20.—Wheat: Bid—Hard, soft and western white, $1.04; hard and soft red winter, northern spring, western red, $1.03; Big Bend Bluestem, $1.05.

Hay and Feed Grain.

PORTLAND, Ore., Oct. 20.—Millfeed—Cit delivery prices: Mill run, $31 per ton; mid dlings, $43; scratch feed, $50; rolled barley $42@44; cracked corn, $53; rolled oats, $42.

Hay—Buying prices f. o. b. Portland: Al falfa—$16.50@17 per ton; cheat, $12@13 valley timothy, $18@19; eastern Oregon tim othy, $20@22; clover, $13@14; oats, $14@15 oats and vetch, $15@16; straw, $8 per ton.

SPOKANE, Oct. 20.—Wheat—Feed whea $36 per ton. Oats—$38 per ton; rolled, $4 Corn—$50 per ton; cracked corn, $52 per to Barley—$38 per ton; rolled, $40. Bran—$2 per ton. Bran and shorts—$29 per ton. Short —$33 per ton.

Alfalfa—$22 per ton in ton lots; $19 car load lots, new timothy, $20 in ton lots, de livered.

General Produce.

PORTLAND, Ore., Oct. 20.—Butter—Cube extra, 46@47c lb; prices, parchment wrappe box lots, 51c; cartons, 52c. Butterfat, 54 delivered Portland.

Eggs—Buying prices, white hennery stand ards, 55c; mixed color standards, 48c. Sellin prices: Front street, selects, 60c; candle ranch, 52c; storage processed, 43c; No. 1 whit storage, 39c; No. 1 mixed color storage, 36 Association selling prices, cash at store: Ex tras, 57c; pullets, 44c.

Cheese—Price to jobbers, f. o. b. Tillamook Triplets, 30c; longhorns, 31c; loaf, 32c per lb

Poultry—Hens, 25@28c; springs, 21@22c ducks, 17@20c; geese, young, 15c; turkeys, liv young, 30@33c; dressed, 38c.

SEATTLE, Oct. 20.—Eggs—Select loca ranch, white shells, cases included, 55@56 per doz f. o. b. Seattle; mixed colors, 26c pe doz; checks, 30c per doz; cases returned t shippers, 1c less; do to country stores, f. o. b 52c per doz, loss off; eastern Washington, cas count, 50c per doz f. o. b. Seattle.

Butterfat—F. o. b. Seattle: A grade, 52c pe lb, raw milk, $2.30 per cwt.

Poultry—Hens, 4½ lbs and up, 23c per lb do 3½ and under 4½ lbs, 16c per lb; spring 2 lbs and heavier, 22c per lb; do 1 to 2 lbs, 28 per lb, hens, 3 to 3½ lbs, 11c per lb; do dr picked, 2c above live; fryers, roosters, 22c pe lb; capons, live, fat, 6 to 10 lbs, 32c per lb; d dry picked, fancy, dressed, 35c per lb; ol roosters, 11c per lb; Belgian hares, 3½ lb and heavier, 12@13c per lb; geese, fat live 16c per lb; ducklings, live, 3½ lbs and up, 1 @18c per lb; ducks, old, over 3 lbs, 15c per lb turkeys, fat, dry picked 12 lbs and heavier 38c per lb; do 8 to 12 lbs, 36c per lb; do live 30c per lb; squabs, large, dressed, $4 per doz pigeons, $2; guineas, $6 per doz.

SPOKANE, Oct. 20.—Poultry, live weight— Hens, 4 lbs and over, 18c; light hens, unde 4 lbs, 14c; springs, 20@22c; old roosters, 8c

Fresh ranch eggs—$8.50 to $9.50 case; fanc poultry farm, $9.50@10.

Butterfat, 49c.

Range of Live Stock Prices for Week Ending October 17

	Chicago.	Spokane.	Portland.	N. Salt Lake.
CATTLE.				
Choice and prime heavy steers (1100 lb. up)	11.25@12.85			
Good heavy steers	10.25@11.65			
Medium heavy steers	8.15@10.85			
Common heavy steers	5.75@ 8.40			
Choice and prime light steers (1100 lbs. down)	11.35@12.75			
Good light steers	10.35@11.75			
Medium light steers	8.25@10.90	6.25@ 7.25	6.50@ 7.50	6.00@ 6.85
Common light steers	5.50@ 8.50	4.25@ 6.25	4.75@ 6.50	3.85@ 6.00
Common to choice butcher heifers	4.50@11.00	3.00@ 5.50	3.75@ 5.50	3.00@ 4.75
Common to choice butcher cows	3.50@ 8.50	2.50@ 4.75	3.00@ 4.75	2.60@ 4.25
Bologna and beef bulls	3.00@ 7.00	3.25@ 4.00	3.25@ 4.25	2.00@ 3.50
Canners and cutters, cows and heifers	2.50@ 3.50	2.00@ 2.50	1.75@ 3.00	1.25@ 2.75
Canner steers	3.25@ 5.50			
Medium to choice light veals	8.25@12.75	8.00@ 9.00	8.00@11.50	6.50@ 7.50
Common to choice heavy veals	3.00@12.50	6.50@ 8.00	4.00@ 7.00	5.50@ 6.50
Common to choice feeders (750 lb. up)	5.25@ 8.40			
Common to choice feeders (750 lb. down)	4.50@ 7.75	4.00@ 5.25	5.25@ 5.75	
Common to choice stocker cows and heifers	3.00@ 5.25			
HOGS.				
Top of market	8.35	9.10	9.50	7.70
Bulk of sales	7.00@ 8.20	8.00@ 9.00	8.25@ 9.25	6.50@ 7.50
Heavy (250 lb. up)	7.45@ 8.25	8.00@ 9.00	8.00@ 9.00	
Medium (200-250 lb.)	7.50@ 8.25	8.50@ 9.10	8.50@ 9.25	5.70@ 6.70
Light (150-200 lb.)	7.15@ 8.20	8.25@ 9.10	9.25@ 9.50	6.70@ 7.70
Light lights (130-150 lb.)	6.60@ 7.90	8.00@ 9.00		
Smooth packing sows (250 lb. up)	6.75@ 7.25	6.50@ 7.25	6.50@ 7.50	4.70@ 5.50
Rough packing sows (200 lb. up)	6.50@ 7.00	5.75@ 6.75	5.00@ 6.50	4.50@ 4.90
Medium to choice pigs (130 lb. down)	6.00@ 6.60	8.50@ 8.75	8.50@ 9.00	
Stock pigs		7.25@ 7.75	8.25@ 8.75	6.50@ 7.00
SHEEP AND LAMBS.				
Medium to prime lambs (84 lbs. down)	11.25@13.90	9.50@10.35	9.50@10.75	10.00@11.00
Culls and common lambs	8.25@11.75	8.00@ 9.50	8.00@10.00	8.00@10.00
Medium to prime yearling wethers	8.00@11.50	7.00@ 8.00	7.00@ 8.00	
Medium to prime wethers	5.00@ 9.50	5.50@ 7.00	6.50@ 7.50	5.50@ 6.00
Common to choice ewes	3.75@ 7.00	3.00@ 5.00	3.00@ 7.00	3.00@ 5.00
Culls and canner ewes	1.00@ 3.75	1.00@ 3.00	2.00@ 3.00	1.50@ 3.00
Feeder lambs	11.50@13.25			10.00@11.00

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Cynthia Harlow of Stevens county is also a new cousin. She is 10 years old and has one little sister and three brothers older than herself. She says, "I did not plant any garden this year, but I helped mamma with her garden. We have pumpkins, squash, corn, tomatoes, cabbage, peas, strawberries, raspberries and onions. We also have a pretty flower garden in front of the house with marigolds, phlox, candytuft, pinks, asters and roses growing in it. On the sides of the garden we have poppies, hollyhocks and verbenas growing." Cynthia will be 11 October 20.

This little message comes to us from Verna Wenneberg of Wenatchee valley, Wash.: "I am a little girl 8 years old. I shall be 9 February 2, 1924. I have red hair and brown eyes. I like to knit, tat and sew for my dolly and I like to go to school. I shall be in the fourth B grade when school starts. I am having a nice vacation now and we are spending it at my grandma's. I have lots of fun playing with the farm pets."

After a long time we hear again from Martha Wurgler of Whitman county, Wash. Martha isn't going to wait so long before she writes to us next time. She has promised us one of her pictures, too, which will be fine. Martha takes piano lessons.

Two girls are visiting at the home of Thordis Fjerlie and they have good times swimming in the river and at Rosario beach. Thordis will be 10 October 23. School will commerce soon and she will be in the fifth grade. She is a cousin in Snohomish county, Wash.

Anna Olson lives on an 80-acre farm in southern Washington with her parents, two brothers and baby sister. She is 13 years old. This is our first letter from Anna.

There is "always room for one more," n our Corner, Dorothy. This new cousin, whose name is Dorothy Cole, has been borrowing copies of The Junior Farmer rom her friends. She has also been reading, "Cattle Ranch to College," "Children's Corner" and the "Bedtime Stories" in THE FARMER. Dorothy is 11 and is in the sixth grade at school. She has two brothers. One of them is her twin brother. The Coles live in Whatcom county, Wash.

Zoe Ludwin says she has not forgotten he cousins and Aunt Nellie even if she did not write to us for a long time. She s attending school again and is quite busy. She has four teachers.

We are glad because our little friend, Amy Weber, a Washington cousin, had such a good time this summer. One of her best chums spent the summer with her and Amy thinks any little girl could have a good time with her best chum. School commenced in September, however, and Amy likes to study, too. She will be nine November 9.

Welcome to our Corner, Ernest Toivonen. This new cousin lives on a farm three miles from town in southwestern Washington. His father is a berry grower and Ernest also has a strawberry patch of his own. He says he is interested in all kinds of birds and their habits. He is a 12-year-old boy and is in the eighth grade at school. He likes to read magazines.

Emma Lautenschlagar is an Okanogan county cousin. She says they are harvesting and have been since July. She is 9 years old. They have eight pupils in their school, which was just built last fall. The school is close to the road. Write again, Emma.

Birthday Greetings

THURSDAY, October 25—Gladys Daley, years old; Horace Engle, 10; Hubert Sparber, 10; Dollie Rice, 9.

FRIDAY, October 26—Mary Aharn, 10 years old; Isabel Pettichord, 10; Marle Wyatt, 9.

SATURDAY, October 27—Irene Goetz, 9 years old.

SUNDAY, October 28—Luale Downing, 11 years old; Selma Paananen, 11.

MONDAY, October 29—Irene Borowski, years old; Bennie Nead, 11.

BEDTIME STORIES

By THORNTON W. BURGESS.

WARBLER MAKES A DISCOVERY.

A joyous mate, a downy nest—
Could anybody be more blest?

Tiny the warbler didn't think so. It seemed to him his cup of happiness was quite full to overflowing. And yet he discovered that there was still greater happiness for him. He discovered it early one morning when he went to have a peep at that downy nest while Mrs. Tiny was off hunting for her breakfast. What do you think it was? Why, it was an egg, the most beautiful little egg, with a little wreath of brown and lavender spots around the larger end. It seemed to Tiny that there never could have been before such a wonderful and beautiful little egg.

And the nest it was in was just fitted for such a beautiful thing. It was a dainty nest, for Tiny and Mrs. Tiny are very dainty little people, quite the daintiest of any in the old orchard excepting Mr. and Mrs. Hummer, the humming birds. It was made of silver plant fibers, soft grasses, caterpillar silk and the soft brown cotton that grows on ferns. Could there have been a nicer cradle for such a jewel of an egg?

Tiny looked and looked and then he shook out his handsome yellow coat and sang over and over again a simple little song of pure happiness. After this he hunted up Mrs. Tiny, for he felt that he just had to share his happiness, and of course it was she who had given it to him. Together they hunted worms on the leaves of the apple trees in the old orchard and talked about that wonderful egg and the

Together they hunted worms.

baby bird that would some day hatch out of it. When they had eaten all they could they flew back to that wonderful nest so securely hidden way out on a branch of an old apple tree. Tiny was first, for he just had to get back for another look at that beautiful egg.

When he reached the nest and looked in he had such a shock that he quite lost his breath for a minute. Then he gave a funny little cry that brought Mrs. Tiny as fast as her wings could bring her. When she peeped into the nest she was even more shocked than Tiny had been. There were two eggs instead of one. And one egg was twice as large as the other and not at all beautiful.

Tiny and Mrs. Tiny looked at each other in dismay. It was very clear to them that while they had been away a visitor, a very handsome visitor, had been to their nest and had laid that strange egg there.

"Did you ever hear of such a thing?" cried Tiny.

"Yes," replied Mrs. Tiny. "I've heard of such a thing before, but I didn't ever expect it would happen to me. What are we going to do about it?"

"Kick it out!" replied Tiny promptly. He hopped into the nest and tried his best to kick the strange egg out. But the nest was deep and work as he would he couldn't get the strange egg out. Then Mrs. Tiny tried and she was no more successful. And all the time they had to take the greatest care not to break their own beautiful egg. At last they gave up and sorrowfully sat and stared at the hateful egg.

"I'd break it only that would muss our beautiful nest all up," said Tiny spitefully.

"That wouldn't do at all," declared Mrs. Tiny with tears of vexation in her eyes. "We must think of some other way."

"Who do you suppose did it?" asked Tiny. "If we hatch out our egg we'll hatch out that hateful egg."

"We won't hatch it," declared Tiny firmly. "Let's go about among our neighbors and see if they have seen a stranger around."

So together they made the rounds of the old orchard, inquiring if any one had seen a stranger there, but no one had.

(Copyright.)

LETTERS WELCOMED BY AUNT NELLIE.

Among recent letters received by Aunt Nellie are those from cousins whose names follow. A few of these will be published each week in the regular edition of THE FARMER and others will appear from time to time in The Junior Farmer:

Oliver Dilling, Doris Jones, Trygoe Lee, Elizabeth Anderson, Tynnie Kokko, Martha Kooko, Earl F. Lind, Murna Wright, Freeda Klippert, Dolores E. Evans, Hugh Adams, Ella Hennig, Jessie Manis, Rosa Reierson, Helen Zeller, Evelyn Ellis, Helen Phillips, Amy Doris Beam, Mary Trapp.

Dora Grace Urquhart, Albert Barraford, Ruth Sharp, Joyce McDonald, Renata Looff, Margaret Lettell, Orval White, Clarence Carlson, Alma Cook, Naomi Miller.

Mother! for your baby's sake consider these facts!

BABIES need certain food elements called "vitamins" for proper growth and health.

Breast milk may be deficient in vitamins if the mother's diet is not properly chosen.

The vitamins in cows milk will vary according to the feed the cow receives.

The sugars commonly used in plain modified milk are practically free of vitamins; as are patent cereals and patent flour.

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Ayrshire Achievements

Washington and Oregon figure prominently in the summary of Ayrshire achievement appearing in the September issue of the breed journal. A new Oregon state champion is announced, a Washington cow leads all those on test in the United States during June, and both Oregon and Washington cows are numerous in the monthly 50-pound list, so-called.

Oregon Robinetta R., owned by Oregon Agricultural college, is the new state champion, her record of 17332 pounds of milk, containing 671.92 pounds of fat, started as a junior 4-year-old, entitling her also to sixth place for age in the United States and to a silver medal of the Ayrshire Breeders' association. Robinetta averaged 1444 pounds of milk per month, and qualified for the 50-pound list in every full month of her test.

Another O. A. C. heifer, Oregon Pancetta Q., in the ninth month of her test as a senior 2-year-old, was A. R. state leader for June and ranked 12th among 40 animals of that age in the 50-pound list; and the college had one also among 28 junior 2s so honored.

Washington ranked fifth among 28 states having one or more animals in the list, Wenatchee Ayrshire farm having seven and Washington State college five, and the latter's Chinook Peter Pan Dimple, a mature cow in the fourth month of her test, produced more milk and butterfat in June than any other Ayrshire in the United States, and led the 233 cows in the 50-pound list. Her monthly total was 1941.1 pounds of milk and 91.23 of fat. Four other W. S. C. heifers ranked, respectively, eighth among 16 junior 4s in the list, third among 22 senior 3s, fourth among 40 senior 2s and 16th among 28 junior 2s, while Wenatchee Ayrshire farm had one second among junior 4s, one fourth among senior 3s, two 9th and 14th, respectively, among junior 2s and three among the first 20 senior 2s. Every animal mentioned, moreover, is of the owner's own breeding.

NICHOLS & PLUNKET HERD.

It is hard to find a herd of registered Jerseys that have better Island breeding than the animals in the Nichols & Plunket herd at Ellensburg, Kittitas county, Wash. His present herd bull, Majesty's Cowslip's Noble, is an animal of splendid island type and is sired by Cowslip's Oxford, who was a son of Cowslip's Peer, out of a daughter of Oxford You'll Do. The sire of the present bull was owned in partnership by Bert Pease and Charles M. Talmadge, then of Newport, Wash.

There are now four daughters of the herd bull and one gold medal cow, Brown Lad's Cowslip, with a record of 15,017 pounds of milk and 712 pounds of fat. She is a half sister to the herd bull, since she was also sired by Cowslip's Oxford. In the herd of 26 animals there are 13 that trace back to Oxford You'll Do and Noble of Oaklands, one of You'll Do's most prominent sons.

While Mr. Plunket, who has charge of the herd, is making every effort to get the maximum production from the mature cows, he admits that a better record could have been made, no doubt, had the cows been fed silage. They were fed on alfalfa hay and grain with what pasture they could get before cold weather set in all the time they were on official test. The record cow is said to have one of the highest Jersey records in the state. It is also interesting to note that there are three other gold medal cows in the state by the same sire.

Is it any wonder that the Jersey breeders of the northwest point with pride at the splendid showing that is being made in Kittitas county? It is not unreasonable to look for still greater records to come from this herd in the future, since it has already gotten such a splendid start.

EXPERT HOLSTEIN MAN COMING.

A man who for six consecutive years won the National Dairy show championship for Holstein females, who had a prominent part in making the "true type" models of animals of the breed, and who is one of the hardest worked judges in the ring, will tie the ribbon on Holsteins at the Pacific International. He is "Bob" Haeger of Wisconsin, who was picked for the task when H. H. Kildee, previously selected, had to cancel the engagement. Haeger showed Minerva Beets to the national championship for five years, and Paul Calamo Korndyke for three years, records not equaled with any other bull or cow. He has judged already this season at the Ohio, Maryland, New York and Illinois state fairs, the Tri-State fair at Memphis, Tenn., and the dairy cattle congress at Waterloo, Iowa.

DUROC EDITOR IS COMING.

Duroc Jersey breeders are feeling good over the prospect of a visit to the Pacific International of B. R. Evans, editor of the Duroc Jersey Bulletin. While dairy cattle at this show have been recognized by eastern editors and prominent breeders, and to some extent this is true, also, of beef breed journals and fanciers in the east, so far the hog men and journalists have been conspicuous by their absence. It is true that the Poland China record association has sent men out to western shows one or two years to superintend the futurities, but this will be the first visit of a man of much importance in Duroc Jersey circles. Mr. Evans is considered a high authority on characteristics of the Duroc breed and one of its most consistent boosters. His coming is occasioned by the Duroc Jersey sale which will be held on Wednesday of the show, as well as a desire to see the northwest and visit this classic live stock event.

LEADS TESTING ASSOCIATION.

St. Mawes Glen Thelma, a registered Jersey cow owned by A. E. Lundeen of Rochester, Thurston county, was high cow in the Thurston and Grays Harbor Cow Testing association for 1922-23. She began as a 4-year-old and produced 574.3 pounds of butterfat from 11,333 pounds of milk. She is a beautiful cow, with a good udder, and her owner is sure her record would have been much larger but for a severe and continued spell of sickness which veterinarians attribute to a piece of wire or a nail. Dr. Lundeen purchased "Thelma" as a yearling from Ed Carey of Carlton, Ore. He bought St. Mawes Dolly Lee at the same time, also as a yearling. Her record last year was not remarkable, but this year she promises to make over 50 pounds of fat, with a possible 600 pounds. Mr. Lundeen bought 16 head at Mr. Cary's sale last May and now has 26 head, including baby calves. Some of them were bred in Idaho, but are of the Cary line of breeding. Mr. Lundeen's herd sire, Anna St. Mawes Lad, is a son of St. Mawes Susy Anna, one of the five world record full sisters by Rosaire's Olga Lad. He is an exceptionally large bull, with straight top line and long, straight hips. His grade daughters have been sold at $100 each and his purebred offspring are showy, typy Jerseys.

HAS GOOD JERSEY HERD.

John R. Martin of Satsop, Wash., who won grand championship on Jersey bull at the Grays Harbor county fair the last of August, has reason to be proud not only of the individuality of the young bull, which enabled him to win, but of the rich breeding of the animal. Oxford Fern's Theatre Cup, the bull in question, is by Theatre Cup Prince, son of the medal of merit and great show bull, Fauvic's Prince, owned in Connecticut and one of the most noted bulls of the breed. Theatre Cup Queen, the dam of Theatre Cup Prince, was a first-prize winner "Over Jersey," and stands third among imported register of merit Jersey cows in America. The young bull was easily champion in strong competition. Mr. Martin had three of his get at the fair, sired when the bull was eight months old, and they are also of fine show type. While most of the Jerseys Mr. Martin exhibited were of his own breeding, he had a heifer calf that was made reserve champion to a very fine cow and the judge paid the little heifer a high compliment. This calf is out of Fancy Beau's Oxford Fern, that was bought from A. Albright of New Jersey, and by a son of Fauvic Prince. The calf was dropped after Mr. Martin purchased the cow.

A CHAMPION STALLION.

Herewith is a picture of Majesty's Best, purebred Clydesdale stallion owned by H. T. Whitman of Spangle. This horse was grand champion of the breed at the Spokane Interstate fair both this year and last year. He has also won similar honors at a number of local fairs and horse shows.

GLEN TANA WINS IN MONTANA.

Glen Tana Farm of Spokane was leading winner in the Jersey show at the Montana state fair the last week in September. In only one class in which it competed did its entry fail to win first place. In addition it won the senior and grand championship and the junior championship in the bulls and the senior and grand championship in the females, losing only the junior championship. The herd that showed was largely the same as that at the Spokane Interstate and Washington state fairs, where it made similarly excellent showings.

HOG ASSOCIATION GROWS.

J. R. Pfander, secretary of the National Duroc Jersey association, says that 14 years ago there was only one employee in the central office of that association. The growth of the association's work, however, has been such that today 60 employees are kept busy.

WORK FOR UNIFORMITY.

"Corn belt farmers pay a premium on stockers and feeders," says an exhibit in the department of agriculture's display on the fair circuit. "To produce them, use good purebred beef bulls of the same type, select well-bred, uniform cows and heifers and practice breeding at as nearly the same time as practical so that the calves will be about the same age," continues the statement.

Organize Bull Club

A bull club was formed in the Schrag community, where three farmers owning dairy cattle joined together and purchased a Jersey bull from the Waikiki farms. The animal will be cared for by Frank York. This is one of the first dairy bull clubs organized in Adams county. The farmers were assisted in their organization by County Agent Donaldson.

We Buy and Sell
Grade and Pure Bred Dairy Cattle.
We can save you money whether you wish to buy or sell. One or a carload.
Graham Livestock Co.
E2605 Broadway, Spokane, Wash.
NEAR CARSTENS' PACKING PLANT.

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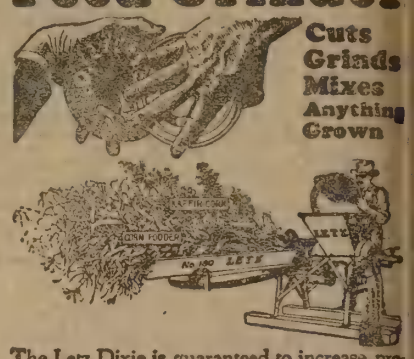

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LETZ
1002 West Road, Crown Point, Indiana.

Breeders' Department

FOUNDATION SALE

200 Head Registered Holstein-Friesian Cattle-200

Under the auspices of the Washington State Holstein-Friesian Association, to be sold at the Puyallup Fair Grounds, Puyallup, Washington, nine miles from Tacoma, on Monday and Tuesday, December 3 and 4. These animals are consigned by reliable Washington breeders, and represent the best of breeding. All tuberculin tested by state authorities.

Real Sale of Splendid Cattle

Buy them individually or in carload lots

Fresh Cows, Springers, Heifers and Bulls

For further information and catalogue write H. C. Stimson, secretary, Hollywood, Washington.

Washington State Holstein-Friesian Association

American Hampshire Sheep Association
has a valuable booklet with illustrations telling you the superiority of this breed. We believe the Hampshire to be the best all round sheep in the world. Also have list of breeders; some near you. This literature is free. Write
COMFORT A. TYLER, Secretary.
72 Woodland Ave., Detroit, Mich.

Shropshires, Oxfords and Dorsets
Fitted show rams for good registered flock headers; range rams in lots to suit.
20 Shropshire ewes, sired by imp. Brewin 92; 20 Oxford breeding ewes, 40 Dorset breeding ewes and ewe lambs. All priced according to value.
FLOYD T. FOX, Silverton, Ore.

Hewitt Farms Jerseys
Bulls ready for service of Rinda Lad and St. Mawes Lad breeding, from register of merit dams.
G. G. HEWITT, Rt. 1, Independence, Ore.

DIAMOND B RANCH
Pure Bred Hereford Cattle
Herd Sires:
DON FAIRFAX,
BEAU GOMEZ, JR.
A Few Choice Yearling Bulls.
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LOWELL (Lane County), ORE.

Kamaduk Herd Milking Shorthorns offer foundation cows up to 10,663 lbs. milk; also richly bred bull calves. Come and inspect this herd; it's federal accredited.
J. E. DANILLS, Murphy, Ore.

Read the "Want Ad" page this week for good offers of all kinds.

When you write to advertisers be sure to state that you saw their advertisement in this paper.

HOLLYWOOD FARM HOLSTEINS

Hondo, California.

The first 30,000-pound record ever made in Southern California was completed on September 23, when Hollywood Lilith Palmyra Abbekerk, star performer of the Los Angeles County Farm herd, completed 11 months of her yearly semi-official test. On that date she had 30,015 pounds of milk. With 30 days still to go, she is expected to make close to 32,000 pounds of milk in 365 days. During the 11 months she made 1128.6 pounds of fat, equivalent to 1410 pounds of butter. This is also the first time that any Southern California producer has reached the 1400-pound mark for butter. By September 27, she had displaced Adirondack Wietske Dairy Maid as California state champion for butter production and on October 7 will pass Carnation Stock Farm's famous world's record holder, Segis Pietertje Prospect. This record bids fair to be not only the highest butter production ever completed on the Pacific coast, but at least third highest in the entire United States, with a prospective total very close to 1500 pounds of butter, as the year does not close until October 23. Of the 11 California cows that have previously completed 30,000-pound milk records, only one has made more than 1325 pounds of butter. In fact, no other 30,000-pound cow has ever made such a high butter record.

Hollywood Lilith Palmyra Abbekeik. 365 days, milk, 21,606.8. Butter, 883.7. At 3 years old, 11 months ending September 23, 1923, has produced 30,015 lbs. milk and 1410 lbs. butter. Is expected to finish her year with 32,000 lbs. milk and close to 1500 lbs. butter.

The above is part of letter to Hollywood Farm from the Los Angeles County Farm, of Hondo, California.

This cow was bred at Hollywood, as were her sire and dam. She has three half sisters in the Hollywood herd that have produced over 29,000 pounds of milk at four years old, one was a world record.

Our herd is closely related to this cow, as her sire was our senior herd sire for over four years.

Excellent heifer calves for sale, also some very fine bull calves out of yearly record dams.

See our exhibit at Pacific International Live Stock Exposition, North Portland, Oregon, November 3-10, 1923.

HOLLYWOOD FARM

(NEAR SEATTLE)

HOLLYWOOD — A CALF OR A CARLOAD — WASHINGTON

GUERNSEY DAY, Portland, Oregon, Nov. 7, 1923

Pacific International Livestock Show — 40 Guernseys at Auction

A. R. and show cows (many exceptionally high producers), bred and open heifers. Champions of the show ring, young bulls from the most popular families, among the consignors are:

COTTONWOOD FARM, Tillamook, Ore.
Entire herd, including state champion A. R. cow and many show winners.

A. L. GILE, Chinook, Wash.
A son (soon ready for service) of Langwater Traveler, a daughter of King of Medford, a daughter of Langwater Traveler, etc.

RIVERBANKS FARM, Grants Pass, Ore.
An excellent heavy producing cow, eligible for the show ring.

H. L. CARL, Hubbard, Ore.
A beautiful granddaughter of Imp. Lord Kitchener, soon due to freshen.

WINNIE MILLER, Wendell, Idaho.
A beautiful, heavy producing young cow and a yearling heifer.

J. A. & J. T. RICHEY, Boring, Ore.
An outstanding yearling heifer of popular breeding.

OLYMPIA FARM, Seattle, Wash.
Several beautiful cows and a young bull eligible to head any herd.

SHANNON B. SHAFER, Deer Island, Ore.
Cows, heifer and a bull backed by the best show and production records.

This is certainly a great opportunity to secure your wants in GUERNSEYS.

REMEMBER THE DATE, WEDNESDAY, GUERNSEY DAY AT THE PACIFIC INTERNATIONAL SALE

WINNIE W. MILLER, Wendell, Idaho. C. L. HAWLEY, Portland, Ore.
R. H. TAYLOR, Chehalis, Wash. E. A. RHOTEN, Sales Manager, Salem, Ore.

KIN - SON POLAND CHINA AUCTION

The House of Paramount Sons

Annual Fall Sale, October 31, 1923

20 SPRING AND FALL BOARS. 20 — 20 SPRING AND FALL GILTS. 20

As good as have ever been sold, from the Kin-Son Live Stock Co. herd. These are sons and daughters of Paramount and Kin-Son Fashion. A Kin-Son Fashion son was junior and grand champion boar at Lewiston in September. A Paramount son was 1st prize junior yearling and senior champion boar at the Montana state fair, and another son was the first prize aged boar and grand champion at the Utah state fair, and we also won first get of sire and first breeder aged herd, all by Paramount, making three years in succession the winning get of sire on Paramount sons and daughters. To any one who has used a Paramount boar, here is a chance to get a Kin-son Fashion boar and you will make no mistake as Kin-Son Fashion is a full brother to Monarch, the Sr. champion boar of Iowa this year.

A superior big type offering that stands out as one of the real offerings of the season.

REMEMBER THE DATE, OCTOBER 31. SEND FOR CATALOGUE.

KIN - SON LIVESTOCK CO., Nampa, Idaho

Auctioneers:
COL. A. J. MILLER, A. L. WILSON, Mgr.
COL. BERT M. WILSON. HARVEY MOORE, Clerk.

First Annual Shropshire Bred Ewe Sale

Friday, November 9, 11 a. m., in the Pacific International Exposition building, Portland, Oregon, thirty head, selected from the best from the leading show flocks of the leading breeders. Many will be bred to the leading show rams. They will be sold singly and in pairs. Sale held under the auspices of

THE OREGON PUREBRED SHROPSHIRE ASSOCIATION.

F. A. DOEFLER, Pres., Macleay, Ore. J. J. THOMPSON, Sec., Macleay, Ore.

Willowdale Shorthorns

75 Bulls — 150 Cows

Bulls that have been used include Gen. Linnwood, Bapton Royal, by Bapton Ensign; Gold Mine 4th, by Golden Goods; Victor Star, by Imperial Victor.

Bulls now in use are Secret Master, by Ringmaster; Clover Leaf Archer, by Clover Leaf Royal.

High class herd headers or range bulls. Will sell singly or in car lots.

M. R. BIGGS
PRINEVILLE, ORE.

Milking Shorthorns

FARMERS! Why not diversify, work from both ends? Produce beef as well as milk at a minimum cost. We are offering bull calves from profitable milking cows of approved Shorthorn type. Herd headed by Gretna Challenger, grand champion Washington state fair and Western Royal, 1922. Visit the herd or write
NORTHWOOD FARMS, Redmond, Wash.

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Fort Steilacoom Holstein Herd

Where the high records are made. Several exceptionally well bred bulls for sale at most reasonable prices, sired by Chimacum King Korndyke Sadie Vale or Carnation King Matador Mutual, son of a world record senior yearling.

WESTERN STATE HOSPITAL,
Ft. Steilacoom, Washington.

Mt. Vernon Accredited Holsteins

especially. Buy purebred baby bulls and heifers from the most productive dairy district in entire northwest.
R. E. WAUGH, Burlington, Wash.

Linn County Holsteins

Cows, heifers, bulls and calves.
LINN CO. HOLSTEIN ASSOCIATION.
GEO. A. McCART, Sec. Harrisburg, Ore.

Pioneer Herd Hampshire Swine

10 head choice boars; 10 head of sows and gilts, backed by show records.
J. M. FRUITTS, Cambridge, Idaho.

Weanling Hampshire Pigs

and service boars. Most popular blood lines, good individuals, reasonable prices.
J. W. PARKER, Yamhill, Ore.

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Big Type Polands

The Royal Designer herd of the best blood lines. We offer 5 March boars, 1 two-year-old boar and a number of March gilts, tried sows and fall pigs at weaning time. Write for prices. Satisfaction guaranteed.
JOHN F. LYNN & SON, Peach, Wash.

Gano's Durocs

Have size, quality and individuality. Am offering a choice lot of breeding boars, also booking orders for fall pigs. Prices reasonable.
F. D. GANO, Sunnyside, Wash.

Duroc Jerseys

Spring boars and gilts by Idaho Sensation, Big Bone Sensation and by my 800-lb. herd boar. Priced to sell, papers furnished. Satisfaction guaranteed.
V. R. FISHER, Oxford, Idaho.

O. I. C. SWINE

Herd headed by Western Prince, No. 103084; he by Ohio's Best. Winners, size, quality and true type. Breeding stock for sale.
J. H. WEST, Ringgold Farm, Centralia, Wn.

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Prize Winning Stock

Some out of the first prize futurity litter, Oregon state fair; first prize senior yearling and other prize winners. Also some by the many times grand champion, Oregon Buster. Satisfaction guaranteed.

CASS A. NICHOLS, Salem, Ore.

Chester White Swine

For sale, spring service boars out of my Iowa sow. I am now booking orders for fall pigs. For further information write or see me at the Pacific International Live Stock exposition.
THEODORE J. RESCH, Aurora, Ore.

Berkshires

Improve your stock on my easy payment plan. Grand champion boar and Jr. champion sow at Spokane fair. Blood lines unsurpassed. Cedar Canyon Farms.
F. M. CURTIS, Prop., Fruitland, Wash.

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offering farms, live stock, poultry, second-hand machinery and a hundred and one other things on "Want Ad" page of this issue.

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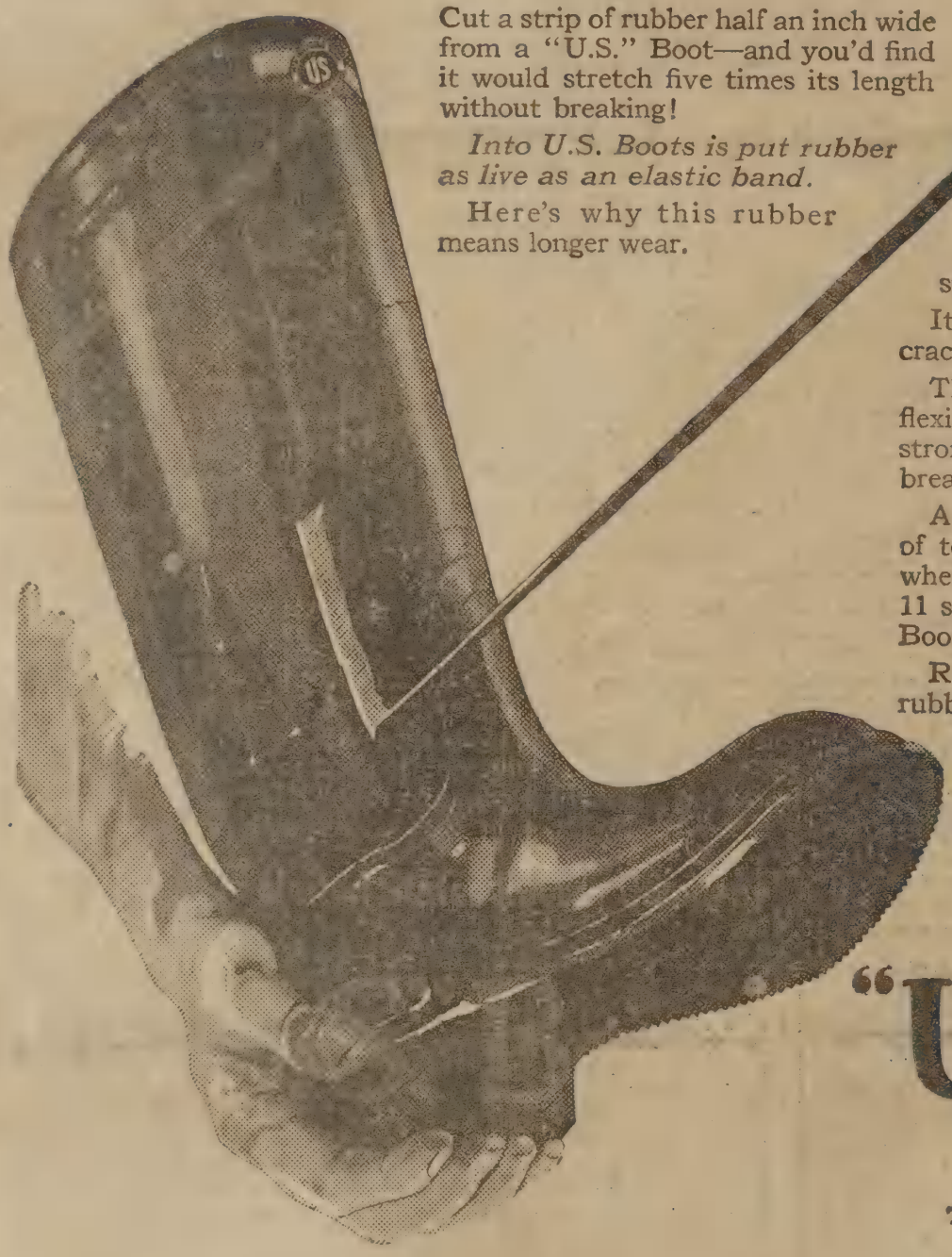
Stretches five times its length!

Why live, elastic rubber gives "U. S." Boots longer wear



Cut a strip of rubber half an inch wide from a "U.S." Boot—and you'd find it would stretch five times its length without breaking!

Into U.S. Boots is put rubber as live as an elastic band.

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Every step you take, your boots bend and wrinkle. Thousands of times each day—the same strains in the same spots.

It's these strains that make ordinary rubber crack and break.

The live, tough rubber of U.S. Boots has the flexibility to stand constant bending. It *stays* strong and pliable—resists strain and prevents breaking.

Anchored in this solid rubber is layer on layer of tough fabric reinforcements. In the places where the hard strains come there are from 7 to 11 separate plies of rubber and fabric in U.S. Boots.

Reinforcements that give rugged strength—rubber that stays tough and resisting—these are the reasons why U.S. Boots mean longer wear and better service. Be sure to ask for "U.S." *Get the longest wear a boot can give you.*

United States Rubber Company

"U.S." Boots

TRADE MARK

Made with the same live rubber

The "U.S." Walrus—the famous all-rubber overshoe—is made with the same live, elastic rubber that goes into the boot. It's reinforced, too, by layer on layer of fabric and rubber where the strains come.

Out to the barnyard a dozen times a day—kicked on and off—the U.S. Walrus is built to stand the hardest wear you give it.

You'll find every type of footwear in the big U.S. line—the U.S. Bootee, a lace rubber work-shoe for spring and fall. U.S. Rubbers and Arctics—all styles and sizes for the whole family. Look for the "U.S." trademark whenever you buy.

"U.S." Walrus

NOVEMBER 1, 1923. Washington's Great Farm Magazine EVERY THURSDAY

THE WASHINGTON FARMER

ESTABLISHED 1894

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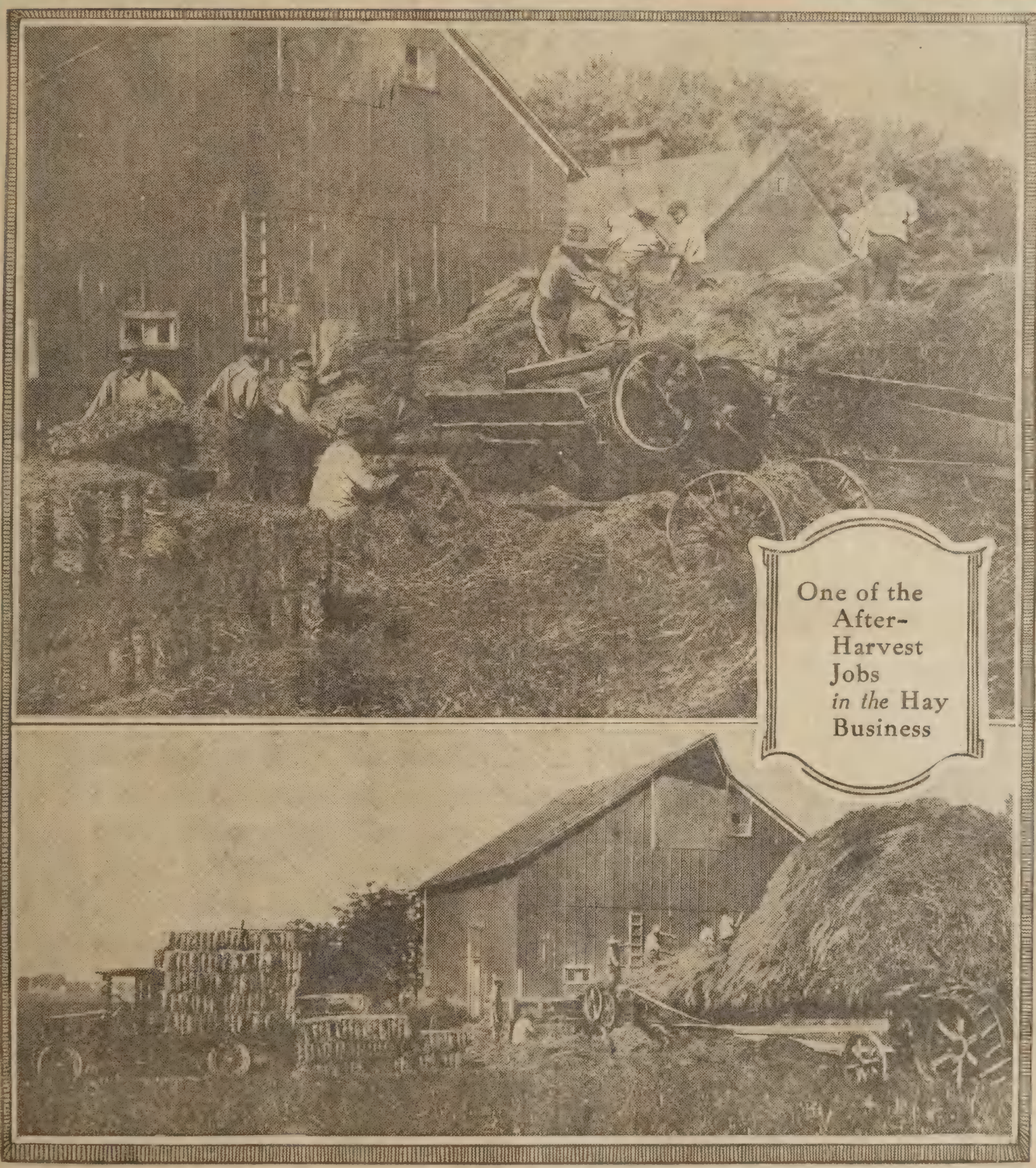

One of the After-Harvest Jobs *in the* Hay Business

President Coolidge Has Thrust Cooperation Into the Public Limelight---Page 5

Buick Double Service Sedan—$1695

THE new Buick Double Service Sedan brings to traditional Buick sturdiness, power and dependability, an entirely new standard of closed car utility. It is designed to meet hard daily service—yet its appearance and well appointed interior make it the ideal family car. A 70 h. p. six-cylinder Buick valve-in-head engine provides this Sedan with more than ample power for all kinds of roads and grades. Proved Buick four-wheel brakes assure complete driving safety at all times and under all conditions

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BUICK MOTOR COMPANY, FLINT, MICHIGAN

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Pioneer Builders of Valve-in-Head Motor Cars Branches in All Principal Cities—Dealers Everywhere

Cooperation Takes Another Start

President Coolidge's Interest Thrusts Subject Upon the Attention of American People

President Coolidge's recently announced purpose to use the department of agriculture and other federal agencies to help the cooperative movement among farmers has thrust that subject anew upon the attention of the American people. Opinions range all the way from enthusiasm down the scale to skepticism, and from skepticism still further down the line to downright knocking. "Cooperative marketing will solve the wheat growers' problems," say the enthusiasts. "It won't be worth a tinker's darn," declared its critics, including the grain dealers.

Three Notable Authorities.

Three notable articles by three notable authorities on farm cooperatives have recently appeared in American periodicals. Aaron Sapiro, attorney for several cooperative organizations, who has spoken before audiences in the Pacific northwest, says the average farmer has never really tried cooperation. Farmers have organized, it is true, but their organizations have been local. What is called cooperative marketing is in reality only cooperative packing, grading, buying or manufacturing. These organizations did some good locally. They secured local sales for local produce and stopped petty larceny, but they never even conceived the real problem of marketing. Real cooperative marketing, Mr. Sapiro says, is illustrated by the California fruit growers, the first group who conceived the idea of distribution on a commodity basis. Tobacco, potato, rice, bean and nut growers, dairymen and stockmen are now organized on a commodity basis. Other groups are following.

In the Pacific Northwest.

That is a clear statement of a thought frequently expressed by THE FARMER as to the efficiency of the cooperative movement in the Pacific northwest. To a large extent, as we have pointed out, cooperative organizations are competing with each other. Part of the fruit growers, for instance, in one orchard district will be organized, while other growers will deal with private sales agencies. The same divided condition exists over in another orchard valley, and in another, and another. And the net result is that they cut each other's throats competing for markets.

Cooperation in Denmark.

In another periodical E. C. Lindeman explains the cooperative method in Denmark, where it has been brought to a high degree of efficiency. But the cooperatives in Denmark are built on educated loyalty in the local community groups. "In this country," he says, "there exists among cooperative organizers a theory which leaves the community emphasis until last. This," says Mr. Lindemann, "leaves the weakest point, the most vulnerable point in the entire structure, undeveloped and unguarded." The legal contract binding the farmer to deliver his products to the cooperatives, which has become so popular, is in itself insufficient to produce the cohesion and loyalty necessary for a cooperative movement which will endure, according to this authority.

C. L. Christensen of the United States department of agriculture also deals with Denmark's experience of over 40 years. Eighty-six per cent of Danish farmers are members of some cooperative organization. The organizations operate on a strictly business basis, and sufficient patronage must be assured before beginning business. Control is democratic and there is capable technical and business management.

Less of Grains, More of Meats

Pays to Find Out What Foreign Buyers Want Most of Our Farm Products

The successful merchant studies his customers' wants, and stocks up with merchandise that will fill their demands.

The same method should govern the farm producers of an exporting country like the United States.

The wants of foreign buyers are recorded in our current exports. We are selling less wheat and other grains abroad, but are selling more meats, fats and dairy products.

Exports of American meats in September, as shown by a statement of the United States department of commerce, totaled 95,370,000 pounds, as compared with 66,045,000 pounds in September of last year.

But September exports of grain and preparations of grain fell to 831 926,000 in value, as compared with exports valued at $59,650,000 in September, 1922.

The record of exports of grain and preparations of grain in the first nine months of this year tells a disquieting story of declining foreign demand—$247,095,000 worth this year, as against $400,965,000 in the nine months from January to September last year.

We exported in the first nine months of this year 80,196,000 bushels of wheat, as against 126,155,000 bushels in the corresponding nine months of 1922.

On the other hand, exports of animal oils and fats (chiefly lard) in the first nine months of this year had a value of $117,278,000, as compared with exports valued at $86,938,000 in the corresponding months of last year.

What goods are you going to put on your shelves, Mr. Farmer of the Pacific northwest? Will it be yet more wheat and other grains, for which a decreasing demand is shown, or meats and dairy products, for which expanding markets are indicated?

To Market Eggs

The Farmers' Union Egg and Poultry association has established headquarters in Spokane at 8166 Post street. D. F. Mitchell is president and general manager and A. C. Whisler is office manager and secretary.

"This is a poultryman's organization," says Mr. Whisler, "run by poultrymen for the sale of poultry products and its success or failure depends upon the efforts put forward by its membership.

"The poultrymen, through this organization, are endeavoring to reach the consuming public through a more direct route than has heretofore been in effect by selling direct to the retailer and restaurant man without the intervention of the wholesaler.

"By establishing our own grades we hope to get the producer more for his product and give the consumer more for his money.

"The producer, by belonging to this association, does not need to worry about his markets. All he needs to do is to get the eggs and it is the duty of the management to find the best markets.

"The association eggs will be marketed under the farmers' union label, which will be on every egg case and every carton sent out by the association as soon as these can be secured from the printer. Thus we will make a direct appeal to the union labor to purchase eggs that are sold under the union label.

"We have the climate and the soil. The market has been there, but there has been no way to reach it. Now that we have the agency, all we need is the eggs."

What Time Should Poultry Be Marketed for Most Profit?

By GILBERT GUSLER

How, when and where to market the farm paultry surplus, and in what condition to market it, are questions that call for answer with the arrival of fall.

Most poultry is sold from the farm "on the hoof." The individual farmer does not wish to take the time for home dressing. He is unfamiliar with the best methods of finishing, dressing, packing and shipping. He lacks the equipment for chilling and holding and he does not have the market outlets to dispose of the dressed product to the best advantage. Similar reasons were responsible for the shift from farm slaughter of cattle and hogs to the big packing houses and caused creameries to replace farm butter making.

Much poultry is shipped alive to the large consuming centers, but whether dressed in the smaller towns near the point of production or in the large cities, a goodly fraction of it is put through an intensive fleshing or finishing process before slaughter. Spring chickens are fed about 10 or 15 days and hens five or 10 days in crates arranged in batteries in the poultry packing houses. They are given all they will eat two or three times a day of a ration such as 60 per cent of finely ground corn meal and 40 per cent red dog flour or white middlings mixed with enough buttermilk to make it like mortar.

Young chickens will add 20 to 60 per cent to their original weight by feeding in this way and 300 to 400 pounds of dry feed with the buttermilk used to moisten it will produce 100 pounds of gain. Compared with the cost of making gains on other kinds of live stock, together with the selling price, poultry finishing has distinct advantages.

Farmers at Disadvantage.

Besides the additional weight, the carcass is made more plump and attractive in appearance and is bleached by the milk feeding. All these benefits are preserved by slaughtering as soon as the finishing process is completed. Poultry which is milk-fed and fattened to capacity on the farm will shrink and be very easily bruised and blemished when shipped alive so that it will not grade as first class when dressed and most of the results of special feeding are lost.

This does not mean that no effort should be made to finish poultry to be sold from the farm. Handlers of poultry constantly complain that only a small percentage comes to market as well-finished as it might properly be made by the producer. For this very reason, the poultry fleshing industry has furnished a golden opportunity to the packers.

Prices for live poultry in the large cities discriminate between the unfinished and the well-fleshed. To some extent, this is shown by weight. Heavy hens, for example, are selling for four to seven cents more than hens weighing under four pounds. This discrimination is most pronounced during the fall and early winter since the percentage of heavy, well-finished birds in the receipts increases after the first of the year.

Country buyers may try to buy all poultry at a flat price instead of paying a premium for that which is fat. In such cases, producers can ship direct to reliable commission houses on the large markets, if the distance is not too great, where their poultry will sell more nearly on its merits. Regular shipping crates, which can be obtained through the commission house, should be used.

During the cold weather, the farmer can dress his birds and ship them without fear of spoiling. Dressed poultry costs less to ship than live and if properly dressed and chilled, the shrinkage will be small. The farmer who undertakes to dress his own poultry will be competing with the professional dressers, however, and must approach the standards of packing set by them.

An Expert's Job.

For proper dressing and packing no food is given for a day before slaughter, the birds are stuck so that they bleed thoroughly, and they are plucked dry instead of scalded. The heads are wrapped in paper to avoid smearing other parts of the carcasses with blood. The birds are cooled for a day or so in a room slightly above freezing and then sorted into uniform sizes and grades and packed a dozen birds to the box or barrel. The barrels may be packed with ice, or if the weather is cold, the birds may be shipped by express in boxes without ice.

Assorted by Weight.

Markets differ to some extent, but dressed broilers are usually sorted into those weighing under 20 pounds to a dozen, those weighing 20 to 24 pounds, and 25 to 30 pounds; fryers, 31 to 35 pounds; and roasters, 36 to 42 pounds, 43 to 47 pounds and 48 pounds up. Fowls, which are hens and pullets beyond the springer stage, are sorted into similar groups from 30 pounds down to 66 pounds up. Those in barrels or kegs are not sorted so closely. Milk-feds, at the present time, bring one to three cents a pound more than corn-feds on the New York market.

Poultry producers located reasonably close to the larger towns and cities found in every state have an opportunity to develop a special trade with hotels or well-to-do customers who are willing to pay attractive prices for high-class, milk-fed poultry dressed on the farm. For such trade, it may be advisable to draw and truss the birds before they are delivered.

All these methods or marketing call for extra time and labor which the farmer may find it inconvenient to furnish when field work is pressing. Cooperative marketing, when it reaches the stage of operating poultry fleshing and packing plants, which are not costly, offers a better way for the producer to get the full worth of his products.

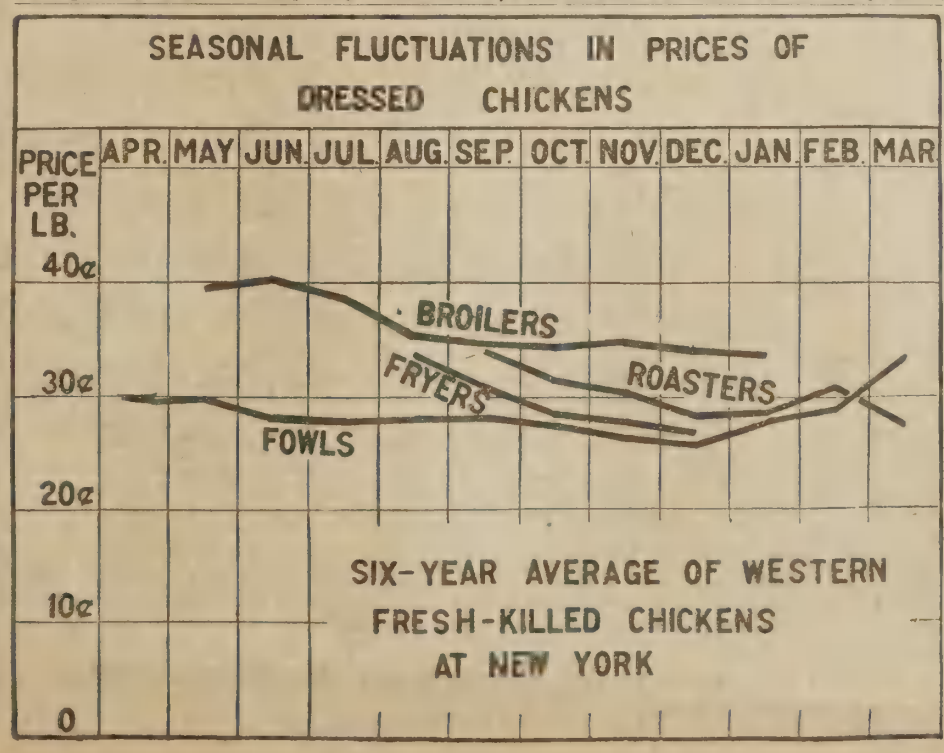
Early Marketing Pays.

Poultry marketed early in a season commands the highest prices, just as does every other highly seasonal product which is ready for sale before the mass. Broilers are very scarce in late April, May and June, for example, so that they bring a big premium over fowls and a much higher price than later on when the supply becomes more abundant. The farmer who can have broilers weighing from one and a half to two pounds to market early in the season can be fairly certain of good returns.

Way Prices Vary.

Since a bird which is a "broiler" at one stage of its growth becomes a "fryer" later on and still later a "roaster" and then a "fowl" or "stag," it is not so easy to determine the comparative merits of selling at different seasons of the year. The accompanying chart, however, shows the trend of prices on the different kinds, using quotations on fresh-killed western chickens at New York. Live chicken prices maintain a fairly uniform differential below dressed. Broilers decline during July and August from their spring high point, but have averaged fairly stable as between the different months thereafter. The demand for them usually is excellent during the fall. Starting in September, roasters decline until December and January, which are the low months. Fowls reach their peak in March, April and May when they are laying heavily and are kept back on the farm. December is the low point as young chickens are plentiful then, but

(Continued on page thirteen.)



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Poultry at Adams Fair

One of the especially noticeable features at the county fair recently held in Ritzville was the poultry department, in charge of W. Bischoff of Lind. H. H. Collier of Tacoma, who judged the show, said that a wonderful improvement was noticed in the poultry exhibits since he judged at Ritzville four years ago. A special prize for White Wyandottes was won by Henry Oesterisch of Ritzville.

County Agent Service

County agent work at Wenatchee is closely tied up with the allied horticultural office. Between these two offices Chelan county possesses one of the best organized services in the state.

It is now announced that the fruit growers in the vicinity of Cashmere and the upper valley may obtain more direct service from the county agent and horticultural office from a branch office that is being established at that point.

Requests for services of the county agent or horticultural inspector will be taken by officials at the bank in Cashmere and listed and then these calls will be taken care of in order of listing.

Another Experimental Crop

The Pasco district is experimenting with its sweet potatoes. Success is reported with the "Nancy Hall" and "Red Bermuda," the southern varieties of sweet potato, noted for quality, but not often seen in northern markets. Last spring a few bushels of these varieties were planted. The yield was reported highly satisfactory and the quality excellent. Merchants in town are paying the farmers 5 cents a pound for these sweet potatoes.

Already there is promise that the sweet potato will take its place with the strawberry and cantaloupe as highly specialized crops in the Pasco district.

Where Cooperation Pays

It has been officially announced that the farmers' union live stock commission at the stock yards in Kansas City, Mo., has returned to the farmers who have shipped their live stock to it during the first six months of this year 40 per cent of the charges which it has made for its selling services.

The significance of this is seen when it is remembered that the farmers' union commission is a cooperative organization operating in the stock yards in competition with the private commission companies and charging the same commission fees to the live stock shippers as do the private companies. The difference is that the shippers themselves own the farmers' union commission and receive back at the end of every six months all that they have paid in in the form of fees less the actual cost of operation. Last year this same organization refunded 20 per cent of its commissions after paying 8 per cent on its outstanding capital stock and placing 10 per cent in its reserve fund for the protection of the business.

Successful Fair Management

The successful fair manager finds no time for rest. No sooner is one fair over than plans and preparations go forward for the next yearly event.

This is evidently the habit of mind possessed by Secretary George R. Walker of the Southwest Washington fair. Mr. Walker already announces that the beautification of the fair grounds, which are located midway between Centralia and Chehalis, will begin this fall. An order of 200 Oregon maple trees has been made, which will be uniformly planted in various parts of the grounds. The principal buildings will also be reshingled this winter.

Persistent Campaign Pays

A hard and persistent fight has been made against forest fires, largely caused by careless campers. It has seemed at times as almost hopeless to drill into the minds of the average seeker for recreation and pleasure in the mountains the necessity of due attention in putting out the camp fires. At times one would seem to despair of the result.

There have been, however, those who have obeyed the scriptural injunction not to be weary in well doing, relying upon the promise—"For in due season we shall reap if we faint not."

Results in the Wenatchee forest the last season would seem to confirm the fulfillment of this promise to a large degree, for the rangers report that but two of the forest fires, covering more than a quarter of an acre, were caused through the carelessness of campers.

That the campaign is not over is seen from the addition to the report that in the same territory 33 persons were convicted of having left camp fires burning.

Nearly half a million persons visited the forest districts of Entiat, Lake Wenatchee, Chiwaukum, Leavenworth, Cashmere, Liberty and Easton.

Combat Dangerous Weeds

Brick Burford, secretary of the Whitman county farm bureau, has the following to say concerning one of the weed pests of his county.

"A bad weed is gradually, but steadily working its way northward into the various wheat fields of the county. This is the Russian thistle. At first appearance in the field or on the roadside, it seems harmless and ordinary, but once started it becomes a pest and one of the hardest of weeds to eradicate and control. Wherever found for the first time it should be carefully picked, put in a gunny sack and burned. Whenever Russian thistles are dragged by a harrow or a disc drill around the summer fallow during either fall or spring seeding, the entire length of soil thus covered by the machine will be infested with seed and a heavy growth of thistle will follow. Once the soil becomes infested with this seed, it is almost impossible to ever free the land from them again. They get their start in an isolated part of the field and from there they gradually creep along the roadways, fence corners and thus entrench themselves till finally the fields are continually surrounded with an ever ready supply of seed to be carried when ripe by the winds, animals and machinery."

What Mr. Burford says about the Russian thistle may be applied in a general way to a great many of the weed pests of this state, and yet it would appear impractical under conditions as they now exist to keep such weeds as Russian thistle, Jim Hill mustard and the like from becoming widespread and permanent pests. Sometimes a weed is almost a blessing in disguise, as it compels the farmer to be more vigilant in the tilling of his soil. This, however, is no argument against the wholesale warfare against weeds, but merely another argument in favor of such warfare. Any virtue which a weed has depends entirely upon the effort to get rid of it.

Washington State Gleanings

When hop picking started, hops were being bought for 22 cents a pound, says a Yakima report. Recently John Hanses, Tampico, received 31 cents for 300 bales of fancy hops, and other sales have been made at 30 and 30 1-2 cents.

Of 15,000 to 20,000 bales produced this year, fully half were under contract. Open prices have ranged from 13 to 30 cents a pound. Dealers are offering contracts for next season at 20 cents, saying the outlook is more optimistic than a year ago.

PAYS $60,000 FOR FARM.

W. W. Richardson of Pomeroy is back from a trip to San Francisco, where he closed a deal with Mrs. M. H. Houser by which he became the owner of 600 acres eight miles south of Pomeroy on the Pataha flat. The exact consideration is not known, but is reported to be about $60,000, which is the price at which Mrs. Houser had offered to sell. This is one of the first hill ranches improved in Garfield county, and always has been considered one of the most productive wheat farms. This purchase extends Mr. Richardson's ownership of cultivated lands to about 2000 acres.

PLANS DAIRYMEN'S SCHOOL.

Promotion of the dairying industry in the Prosser section of the Yakima valley was the main topic of discussion at a recent community club luncheon at Prosser. A special committee was appointed to arrange, through the Washington State college extension department, for a winter dairy school for the dairymen in the region.

An effort will be made to obtain speakers through the extension department and plans are being laid for a three-day dairymen's short course. Realization by farmers that each ranch should be equipped with a small herd of dairy cattle has brought the club to believe that it should extend every effort to assist this movement.

APPLE CROP ABOVE ESTIMATE.

While there is wide divergence of opinion among authorities, it is estimated by the district horticultural office that the Wenatchee region apple crop will be larger than the September estimate of 17,900 cars. As picking and packing the fruit progresses, it is possible to more closely check the crop, and it is stated that best figures available indicate that it will overrun the earlier estimate. Throughout the orchard country the fruit is coming off in good color, size and quality, with the later varieties especially free from worms. Loss to growers from this cause will be lower, it is believed, than in former years, probably not more than 1 per cent of the yield.

WILL HAVE COUNTY AGENT.

Whitman county will go back to the county agricultural agent after a year without one. An estimate for the work was included in the budget adopted recently by the county commissioners. Negotiations are under way between the commissioners and Washington State college for employment of Brick Burford, who has been secretary of the Whitman county farm bureau a year.

When the county dropped agricultural work a year ago in the interest of economy, farm bureau members as individuals contributed cash for the employment of a secretary. Mr. Burford was named and, in addition to looking after the interests of the farm bureau members, he has done much general county agent work.

KENNEWICK FRUIT SHIPMENTS.

A total of 208 cars of fruit have been shipped by the Kennewick branch of the Yakima Valley Fruit Growers' association and there are still many cars of apples to be shipped which are now being held in storage. Out of this number there were 18 cars of cherries, one straight car of strawberries, 17 cars of peaches, 30 cars of mixed fruits, which include pears and early apples, and 53 cars of Jonathans, Rome Beauties and a few Yellow Newtowns. The association estimates that it has practically 50 per cent of the fruit in the district, which puts the total near 1000 cars when all the late apples are counted. There is a capacity of 108 cars in the cold storage rooms and 45 cars of dry storage in the large $65,000 plant at Kennewick, which is said to be one of the largest and best equipped packing and storage plants in the valley.

WASHINGTON APPLE CROP MOVING.

Virtually 20 per cent of the estimated Washington apple crop of 36,489,000 boxes had been shipped up to October 17, according to figures compiled by the Spokane office of the bureau of crop estimates. From August 25 to October 17 Washington growers had shipped 9304 cars of apples, or 7,033,824 boxes.

Government figures of recent years show that the "peak" of apple shipments is normally reached about this time of the year, and the 1923 season is running true to form. The largest day's movement, 644 cars, for the season was reached October 15. Apple shipments are going out of the state, chiefly through the Spokane gateway at the rate of about 400 cars a day on an average.

This is equivalent to 20 trains of 20 cars each every 24 hours, almost one an hour. In 17 days in October 7000 cars, or about 5,000,060 boxes, were shipped out.

SHEEP INDUSTRY IMPROVES.

The sheep industry in Washington in 1923 produced an income of some $3,500,000. Sheep men figure that the profits in 1923 and in 1922, another good year, have made it possible to liquidate from one-half to two-thirds of the indebtedness incurred in the "off" years of 1920 and 1921.

Washington wool growers in 1923 ran 500,000 sheep. They clipped from 4,000,000 to 4,500,000 pounds of wool. Wool prices ran from 26 to 40 cents a pound. Most of the clip was sold under 35 cents and 32 cents is probably a fair average price. This would bring a total return of from $1,280,000 to $1,440,000 for wool alone. There were about 300,000 lambs, which were sold at an average around $7.50 a head. Washington lambs weighed from 60 to 90 pounds, averaging perhaps 75 pounds. For the season 10 cents a pound is regarded as a fair return in the Inland Empire. On this basis, the 1923 lamb crop brought in around $2,250,000.

Virtually all the lambs have been shipped, barring the late lambs, small animals, pee-wees and cutbacks, which will be fattened this winter. The number is not great, but every sheepman has some of this type.

Enforce the Constitution

Don't Let Any Governor "Pass the Buck" on Volstead Law

It is the sworn constitutional duty of President Coolidge and of each of the governors of the 48 states of the Union to enforce in vigor and sincerity the 18th amendment to the Constitution and the Volstead law.

That was the gist of the president's address at the recent notable conference of the president and a majority of the governors, at the White House in Washington.

Friends of law enforcement everywhere should be on guard against any attempt by a governor to "pass the buck" by asserting that it is the sole duty of the president to enforce the Constitution and the Volstead law.

It would be just as false for a governor to assert, if the United States were at war, that it was the exclusive duty of the president to fight the war without aid from the states.

President Coolidge stated the case in a nutshell when he told the assembled governors that "no provision of the 18th amendment or the national prohibition act contemplates any surrender of state responsibility. * * *"

After he had pointed out that it was the clear duty of the executives of the United States, both the president and the governors, to defend the Constitution and protect the public against law-breakers, President Coolidge declared:

"I propose to give that support and protection to the limit provided by the Constitution and the law of the land against every lawless element."

And at another point the president declared that the machinery of the law "must be used to the full extent of its capacity to secure the enforcement of the law; it is certainly my own purpose so to use it."

Any governor who may try to shirk his own duty by calling on the president to do all the law enforcing against rum-runners, bootleggers and moonshine makers will justly be regarded by the public as in sympathy with them and as playing into the hands of the criminal elements.

That applies with special force in states like Washington, Oregon and Idaho, which had state prohibition before national prohibition was adopted. The federal government stepped in to help them, when the 18th amendment was adopted and the Volstead law passed, not to make it easy for "wet" governors or dodging governors to slip out from under their duty of enforcing prohibition.

Shrewd Manipulations Somewhere

As shown by the records of the United States department of commerce, grain exports during the week ended September 1 totaled 9,214,000 bushels, an increase of 4,764,000 bushels, as compared with exports the previous week. Exports of wheat during the week ended September 1 totaled 8,215,000 bushels, as against 3,271,000 bushels the previous week.

But there must have been "a nigger in the woodpile" somewhere, for the price of cash wheat on the Chicago market at the end of the week of these heavy exports was actually lower than at the beginning of the week. On August 25 No. 2 hard cash wheat was quoted on the Chicago exchange at from $1.05 to $1.07; one week later the quotation was $1.05 to $1.05 1-2.

How do the foreign buyers and the American exporters do it? How do they contrive to slip into the market and make heavy purchases and not run up quotations against themselves? Suppose it had been the other way around; suppose the foreign demand, which had been more than 8,000,000 bushels in one week, had fallen to 3,000,000 bushels. Why, that, of course, would have knocked the price There must be shrewd manipulation somewhere; there must be peddling of a lot of false information. A vigorous investigation by the department of agriculture, the department of commerce and the big grain growers' associations should illuminate this dark subject.

Does It Point the Way?

Shall the Fig Tree Be Given Another Opportunity to Make Good?

A certain man had a fig tree planted in his vineyard: and he came and sought fruit thereon, and found none. Then said he unto the dresser of his vineyard, "Behold, these three years I come seeking fruit on this fig tree, and find none; cut it down; why cumbereth it the ground?" And he answering said unto him, "Lord, let it alone this year also, till I shall dig about it, and dung it: And if it bear fruit, well: and if not, then after that, thou shalt cut it down."—St. Luke XIII, 6-9.

First impressions may hold good, and then again they may not. Whatever you may say, snap judgments are dangerous. Many a person is entitled to the benefit of the doubt, who does not get it.

But the above parable gives evidence that the owner of the fig tree was not hasty in giving his order to have it cut down. He had given the tree a reasonable trial. For three years he had been seeking fruit and found none. Yet the plea was made for one more trial. Not only was the tree to have another trial, but that trial was to be made under better circumstances. It was to be especially cultivated and fertilized. Evidently the stress of work in the vineyard had prevented this individual attention.

After usual trials, perhaps a little additional personal attention is needed to save a worker from utter failure, to save the child from the fatal pathway, to save the trusted agent from the penitentiary.

The New Testament goes the limit on this line: "Then came Peter unto him, and said, Lord, how often shall my brother sin against me, and I forgive him? Till seven times? Jesus saith unto him, I say not unto thee, until seven times; but until seventy times seven."

You say that is not practicable. But does it point the way? Are you utterly dead to its meaning?

FARM BUSINESS AND MARKETS OUTLOOK

RECENT prices of important farm products as combined in various index numbers average the highest they have been in many months and show that they are making some progress toward rising to the level of prices of other commodities.

The index figure of the farm price of 10 leading crops on October 1, combined by the United States department of agriculture, was 172.5 compared with 135.5 a year ago, or a gain of 37.3 per cent. This year's figure was the highest since November 1, 1920. Corn and cotton bear chief responsibility for the favorable comparison.

Wheat lags behind. Last year at this time No. 2 hard wheat in Chicago was quoted at $1.14 1-2@16; this year, $1.07@1.12. No. 2 red last year was $1.17@17 1-2; this year it is $1.11.

The department's index of farm prices of meat animals on September 15 was $7.68, the highest since October 15, 1922. It was practically unchanged from the corresponding date one year ago, but 8 per cent higher than two years ago.

These index numbers do not cover live stock products, of which milk and butter are substantially higher than a year ago, eggs about the same price and cheese slightly lower. Some grades of wool are quoted lower, but the majority are higher.

The index numbers compiled by the bureau of labor statistics confirm findings of the department. The September index of wholesale prices of farm products was 144, compared with 133 a year ago and with one minor exception the highest since December, 1920. Likewise the "foods" group, which includes many unprocessed farm commodities, was 147, compared with 138 a year ago and the highest since March, 1921.

The bureau index for all commodities was 154, against 153 a year ago. Farm products are only about 5 per cent below the all-commodity group, whereas a year ago they were 11 per cent below. The exchange value of farm products is higher than last year, but is still considerably below normal, especially in purchasing clothing, fuel, building materials and home furnishings.

Weak Spell in Cattle Trade.

Cattle markets have been unusually sympathetic to supply conditions in the last month. The public is consuming beef with avidity, so that every light run brings an advance, which is taken off as soon as the country can respond by heavier loading. Smaller arrivals permitted an upturn early last week, but a larger supply later on, especially at Chicago, which had the heaviest run of the year, put the price-making function in the hands of the buying side once more and values are lower nearly all along the line.

Leading market centers report a big percentage of short-fed steers and country advices to commission houses show that many more will be unloaded on every hard spot owing to the advance in corn, and the wobbly habit of the fat cattle market. Heavy steers, which were scarce a few weeks ago, are now so abundant that fat yearlings are bringing a small permium at Chicago. Western rangers are coming fast and numerous. Indications are seen that some western breeding stock is going to the shambles. The peak of receipts will probably be passed in the next month, after which the pressure on prices should gradually diminish.

Packers are not accumulating frozen beef, as they formerly did at this season, which means that practically the entire supply must go into current consumption. In the past several hundred thousand carcasses went into "sharping" plants each fall. On October 1 only 27,060,000 pounds of frozen beef were in storage, compared with a five-year average on that date of 99,616,000 pounds.

With feeders anxious to empty feedlots filled in the last two or three months, fresh demand for thin cattle has not been brisk and the movement to the country in the last two weeks has been about 25 per cent less than in the same period of 1922. The available supply of stockers and feeders has been ample.

Hog Market Supply.

Receipts of hogs have reached recent midwinter volume already. As eastern shippers bought more sparingly, prices lost their recent showing of stability and values melted fast. The Chicago top was more than $2 below the September high point and the lowest since July. Receipts probably will increase another 25 per cent before reaching the peak, so that no advantage in holding back finished hogs is apparent.

Decline in Lambs Checked.

Lamb prices broke sharply early last week as a result of congestion in the eastern dressed trade, which reduced shipping competition at middlewestern pointss. Receipts are gradually falling off, however, so that the market is beginning to recover. Lambs placed in corn fields are returning to market in increasing volume and the supply available for slaughter will be ample during the next 60 days. The farm-feeding states have taken and are still taking an unusually large number of thin lambs each week and most of these must come back before February 1. Colorado and adjacent feeding districts appear to be putting more lambs on feed than they were expected to do at the time of the recent government survey.

Wool Market Steady.

A moderate demand for wool continued in seaboard markets last week. Lower qualities were in greater demand than the finer sorts, although a few buyers favor the latter, anticipating a shortage later on. Both primary and secondary foreign wool markets are firm, especially for good wools at prices above our market, so that very little is being brought to come here. The fall clip in the southwest is now being shorn and moderate quantities are for sale, although growers are holding for prices above a parity with eastern markets. The woolen goods market is in a more healthy state.

Wheat Regains Firmness.

Although only part of the recent loss in wheat prices has been recovered, the market shows a firmer undertone than a week ago. Hope of some form of governmental aid was a factor as well as the lack of pressure of cash grain on domestic markets.

Exports have been much better right along than the reports from grain trade circles indicated. Over 70,000,000 bushels have been cleared since July 1, or an average of 750,000 bushels for each business day. By the end of October nearly half of our calculated surplus will have been disposed of. Little difficulty should be experienced in selling the balance in the remaining eight months of the crop year in spite of competition form other countries. The likelihood that the markets east of the Rockies will go on a domestic basis remains an important consideration for the future.

The world's wheat situation is weak, however.

Rye has encountered keen competition abroad and exports have been extremely small recently. The visible supply keeps gaining. Prices have become firmer with wheat, however, as the crop was quite small and stocks are getting into stronger hands.

Sharp Break in Corn Market.

The corn market became decidedly top-heavy last week when receipts of new corn began to indicate that a fairly heavy movement could be expected soon and buyers backed away. Prices dropped 10 to 15 cents within a few days. The trend is likely to continue downward until a more normal level is reached.

Oats prices showed little independence of the corn market. Receipts are holding up after harvest longer than usual and the visible supply is making modest gains, although it is far smaller than in either of the last three years.

Cash Grain Markets.

The range of cash grain prices for the week ended October 24 was as follows:

CHICAGO—Wheat—No. 1 hard, $1.08@1.16; No. 2, $1.07@1.12; No. 3, $1.05 1-2@1.08 1-2; No. 4, $1.02 1-2@1.06; No. 2 red, $1.11; No. 3, $1.05@1.10; No. 4, $1.04 3-4. Corn—No. 2 mixed, $1@1.10; No. 3, $1.00 1-2@1.11; No. 2 yellow, $1.01 1-2@1.13; No. 3, $1.01 1-2@1.12; No. 1 white, $1.01 1-2; No. 2, $1.02@1.10. Oats—No. 2 white, 41 3-4@45c; No. 3, 40 1-4@44c; No. 4, 40@43c. Rye—70 1-2@73 1-2c. Barley—62@80c.

Seed and Feed.

Increasing receipts of new cloverseed have caused weakness during the last few days.

Feed markets are weak, with heavy offerings of wheat feeds at prices about $1 lower than a week ago.

Good Hay Moving Well.

Better grades of hay are in demand and are moving well, but lower grades are inclined to drag. Prices at the principal distributing markets were mostly firm under light receipts, partly due to rainy weather.

Fresh Eggs Trend Higher.

Fresh eggs are not very plentiful and are becoming scarcer, if anything. Prices advanced sharply last week and the normal trend on them for the next few weeks will be upward. The bulk of receipts show the usual seasonal irregularity in quality.

Receipts of eggs at the four leading markets thus far this month are about 20 per cent heavier than during the same period last year, indicating a heavier fall production than in 1922. The larger scale of receipts is still causing a smaller reduction of storage stocks, but the movement is not falling so far behind last year as in the same period in September, which gives promise of a more favorable outlook for the holders of storage eggs.

Receipts of live poultry continue far ahead of last year and withdrawals from the heavy storage stocks during the last month have not been so large, so that, although consumptive demand is excellent, the decline in prices last week was not surprising.

Latest quotations: Chicago—Eggs—Miscellaneous, 30@34c; dirties, 22@25c; checks, 20@23c; fresh firsts, 34@40c; ordinary firsts, 27@28c. Live poultry—Hens, 22c; springers, 19 1-2c; roosters, 14c; ducks, 20c; geese, 20c; turkeys, 25c.

Butter Market Unchanged.

Supplies of fresh butter were not large last week and reports show a continued fall in production. Prices maintained a steady level, with dealers appearing uncertain as to what might develop in the market during the next few months.

Lower British markets made Danish butter more attractive to American buyers and the sale of several thousand casks for shipment later in the month was reported. Arrivals of foreign butter at New York city last week amounted to 2300 boxes of Argentine and some Norwegian and Canadian butter. They were not large enough to materially affect the market, but future importations seemed more probable than for some time.

Storage Stocks Depress Cheese.

Influenced materially by the large and increasing surplus of storage stocks over last year, cheese prices declined sharply last week. Buyers became extremely cautious and were reluctant to purchase new stocks until their floors were entirely cleared.

(Continued on page twenty.)

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Shows Importance of Seed Inoculation

Three Ways Are Pointed Out of Maintaining and Increasing the Nitrogen in Farm Lands

By PAUL W. ALLEN

Bacteriologist, Experiment Station, State College of Washington

The soil contains a chain of some 10 elements which are all necessary to plant growth. The weakest element in this chain is nitrogen. It is this element which is most often lacking in soils. Also it is this element which is most quickly exhausted, as plant life draws on it most heavily. There is no better illustration of the old saying that the strength of a chain is known by its weakest link than we have in soils. Many a farm which is considered worn out often has fair amounts of all of the elements required for large crop production except the one, nitrogen.

The crop-producing ability of much of the land of our eastern states would have been completely depleted by the farming of the last century if there had been no other source of nitrogen for these soils except the purchase of nitrates. However, the eastern farmers have been forced to become experts in the practice of crop rotations in which some legume crop acts as the benefactor of the others. In Canada a soil containing very little nitrogen in a few years was found to have 170 pounds of nitrogen per acre, due to the growing and turning under of a legume crop each year.

It is true of most sections that one man during his active life time can remove enough of the natural nitrogen of the soil by continuous cropping with wheat or other nonleguminous crop to reach a point of soil depletion where crop growing is no longer profitable.

Three Possibilities.

There are three main ways of maintaining or increasing the nitrogen of farm land: (1) The growing and turning under of legumes. (2) Live stock farming in which more or less feed is purchased and the manure used. (3) Purchase and use of nitrogenous fertilizers.

Of course the method of maintaining nitrogen is determined by the surrounding condition. However, there are few localities where other methods of returning nitrogen to the soil have been found to be cheaper than the method which utilizes legume crops. The air is calculated to be 50 miles thick and is four-fifths nitrogen, but farmers have no way of utilizing any of this nitrogen for crop growth except as they grow legumes.

A Partnership Affair.

The legume plants, such as alfalfa, clover, sweet clover, peas and vetch, differ from all other plants in that they have a way of obtaining nitrogen from the air. Legume plants are not able to do this alone, but nature has furnished them with an ability to enter into a sort of partnership with certain bacteria called legume nodule bacteria. These bacteria are sometimes found in the soil and sometimes they are lacking in the soil. When they are present they will enter the root system of the legume plant and cause the formation of nodules as a sort of home for themselves. These bacteria then begin to gather nitrogen from the air of the soil and to furnish it to the plant, which aids the plant's growth. The bacteria in return use as food part of the sugars and carbohydrates which the plant forms from carbonic acid gas and water. This is a most striking case of a very successful partnership between a plant and bacteria of the soil.

Should Inoculate Seed.

Farmers are beginning to realize the great significance of the partnership and are making seed inoculation one of the important steps to be taken in the planting of legumes. Some farmers take it for granted that their soil is inoculated sufficiently for the successful growth of legumes; in other words, they leave this important factor in legume growing to chance. This is poor practice in face of the facts that legume seed inoculation costs so little, while the failure of a crop of legumes due to the lack of inoculation costs so heavily. Proper legume inoculation has been made the subject of investigation at the Washington experiment station for the last seven years and considerable progress has been made in obtaining legume cultures which are especially adapted to Washington soils and climates. This work has been considered so important that it has been the custom for some years for the experiment station to furnish pure legume cultures for inoculating any of the legume crops to all farmers applying for them. A charge of 25 cents per acre is made to partly cover the cost of preparation. By furnishing these cultures it is felt that farmers are aided at one of the most difficult points in legume growing. These cultures may be obtained by any farmer in the state by applying to the department of farm crops, Washington experiment station, Pullman, Wash.

Most people who have had experience in the growing of leguminous crops think in one of two ways. Either they are very enthusiastic over the possibilities of certain leguminous crops or they feel that legumes have little use in the operations of their particular farms. It is true that there are many places where the growing of legumes is impossible; however, very many failures with legume crops are due to the fact that the farmer does not understand the conditions required by this crop well enough to secure the best crop possible on his particular farm. This is shown by the fact that the growing of alfalfa and clovers has steadily increased in the last 20 years in the country as a whole. It has only been during the last few years that the factor of inoculation has been considered as important as the preparation of the soil and the selection of proper seed.

A cross-section of the root system of an alfalfa plant in loamy soil, showing how the roots sink deep into the soil for moisture, also how nodule production is greatest in the upper layers of the soil, where there is most air.

An early June crop of a well-inoculated field of alfalfa. A yield of better than five tons per acre was obtained the third year, part of which was harvested and part turned under. Soil nitrogen was not sufficient to produce a crop in former years when inoculation was not practiced. Inoculation made the difference between success and failure on this field. It is calculated that about 1400 pounds of atmospheric nitrogen was fixed by nodule bacteria in one year.

Much Farm Land Needs Drainage

By L. J. SMITH,
Professor of Agricultural Engineering, State College of Washington.

The subject of drainage should be of interest to Washington farmers, for over 10,000 farms are now enjoying the benefits of drainage, and the last census report tells of 14,323 farms needing drainage to a greater or less extent. These farms are in nearly every county in the state. It is estimated that over 500,000 acres of land could be improved by drainage. It is a curious fact, however, that it is easier to interest land owners in expending money for putting water on land to increase production than it is to get them to pay out money to remove superfluous water, which will also greatly increase production and the value of their lands.

Farm drainage dates back over 200 years when tile drains were discovered in the "magic gardens" of a monastery in France. There was no record as to how long they had been used. Tile drainage was first practiced in New York state in 1835. Tile under-drainage, properly planned and installed, is a permanent improvement on the farms.

There are many benefits to be derived from land drainage. The main ones will be briefly enumerated.

Drainage removes excess water, thus lowering the water table so plants can live.

Drainage warms the soil. Wet soil is cold and a cold soil holds back germination.

Drainage enables plants to develop deep root systems and therefore resist drought to a much greater extent.

Drainage makes available the richest soil on the farm. Drained land almost invariably produces greater crops than the surrounding land.

Drainage increases the capillary supply of moisture and improves the structure of the soil, facilitating cultivation.

Drainage also permits better air circulation and assists in the liberation of plant food.

Drainage assists the decay of vegetable matter in the soil, and aids in nitrification.

Drainage assists in preventing erosion and soil washing by the removal of excess water.

Drainage puts the soil in condition to work earlier in the season, and lengthens the growing season from one week to over a month.

Drainage prevents the rise of alkali and stops heaving and the freezing out of plants.

Drained land will resist drought better than partially drained soil.

The draining of isolated small wet spots makes it possible to work the whole field at one time.

In general, drainage improves the sanitary conditions in the country and promotes greater healthfulness on the farm.

A circular letter of inquiry to farmers having drained land invariably brings the reply that land drainage certainly pays.

Wild Morning Glory

"What am I going to do with that wild morning glory?" is the question being asked by many Washington farmers. The morning glory is a dangerous weed and is spreading rapidly where no effort is made to control it. The weed spreads by seed and by root and from a small beginning will soon occupy the entire field.

The time to fight this weed is when they are few in number, is the recommendation of Leonard Hegnauer, extension specialist in crops and soils. It can be done in the early stages in the best possible way and at small expense. When they have once spread over the field the problem becomes very much more serious and the expense is far greater.

"During the last summer," said Mr. Hegnauer, "some successful demonstrations have been carried on in Walla Walla county on summer fallow land. The demonstration showed that carbon bisulphide will do the work and can be successfully used where conditions are favorable.

"Where a patch is to be treated with this material holes 18 inches deep and three feet apart are made in the ground. These holes can be driven with a sledge and an inch and a half iron bar, some three feet long. About four ounces of the liquid should be poured into each hole and the hole tamped with dry earth. In one week's time the tops begin to show the effect of the treatment and in a month the vines will be dead.

"Carbon bisulphide should be used while the soil is quite dry in order to let the gas spread as far as possible. When the soil is dry there is more air in it than when wet; and since the carbon bisulphide is heavier than air, it can readily displace the air and will spread fast in dry soil."

The use of carbon bisulphide can be recommended for small patches and has been used successfully in California, as the result of the experiment station of that state.

Plan Feeding Tests

More experimental feeding will be carried on at the irrigation branch experiment station at Prosser this season, according to R. P. Bean, superintendent of the station. From 100 to 125 steers will be fed on hay and silage during the winter. One car of these may be stockers, which will be fed only refuse hay from the lamb pens and silage. The experiment will involve varying amounts of hay and silage in order to ascertain the most profitable ration.

There will also be 1000 lambs, which will be fed under a more practical feeding experiment than was carried on last year. Mr. Bean expects to fatten off a few of the heavier lambs as soon as possible during the winter, and not hold them all until the lighter ones are ready to go to market. The lighter bunch, however, will be fed a lighter grain ration, but fed over a longer period of time.

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Same quality for children furnished in sizes 2 to 6 years. **Order navy by No. 52E7458. Brown by No. 52E7460. Send no money. Pay $3.48 and postage on arrival for either color. State size.**

Manchurian Wolf Scarf

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Look at this beautiful, soft, inexpensive Manchurian wolf scarf lined with messaline silk. Length about 44 inches. Width about 12 inches. Tail about 18 inches long and bushy. **Scarf by No. 52H9000. Order brown scarf by No. 52H9001. Send no money. Pay only $3.69 and postage on arrival.**

Women's Wave Top Walking Boot

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Women's all solid leather wave top walking boot, comes in brown or black calf finish leather; built on sensible rounded dress toe last; one-piece solid leather inner sole with steel shank, solid leather counter, outing sole and heel with rubber tip. Sizes 2½ to 8. Wide widths. **Order black calf by No. 52S203. Order brown calf by No. 52S204. Send no money. Pay $2.69 and postage on arrival.**

Sporty Style Silk Seal Plush Coat For Women and Misses

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Where else can you buy a genuine silk seal plush coat of this jaunty style and splendid quality for such a low price? Beautifully modeled of soft, warm, lustrous, deep pile silk plush with full lining of beautiful flowered sateen. Newest loose back flared style with belt. Wide 10-in. shawl collar, two pockets and roomy bell sleeves. Length about 34 inches. Women's sizes 34 to 44; Misses' 32 to 38 bust measure. State size. **Order No. 52E-7000. Send no money. Pay $9.98 and postage on arrival. Money back if not satisfied.**

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State Size

An absolutely new and novel Egyptian style dress pump of rich black velvet. Medium pointed dress toe and patent leather trimming as pictured. Patent leather vamp, collar and instep straps fastened on each side by buttons. Neat perforations at sides. Fancy carved Egyptian slave ornament on vamp. Leather insole; genuine oak outsoles; medium height, rubber tipped leather heel. Sizes 2½ to 8; wide widths. **No. 52S257. No money now. Pay $2.48 and postage on arrival. State size.**

Hi-Cut Lace Brown Dress Shoes for Children and Misses

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Extremely dressy boot of serviceable calf finished leather. Pretty wing tip with medallion on full rounded toe, perforated vamp, quarter and eyelet rows. One-piece extension oak sole and low heel with rubber top lift. Wide widths. **Child's sizes 8½ to 11, No. 52S439. Price $1.79. Misses' sizes 11½ to 2, No. 52S440. Price $1.98. Growing girls' sizes 2½ to 8, No. 52S441. Price $2.48. Send no money. Pay bargain price and postage on arrival. State size.**

Men's Four-Buckle All Rubber Arctics

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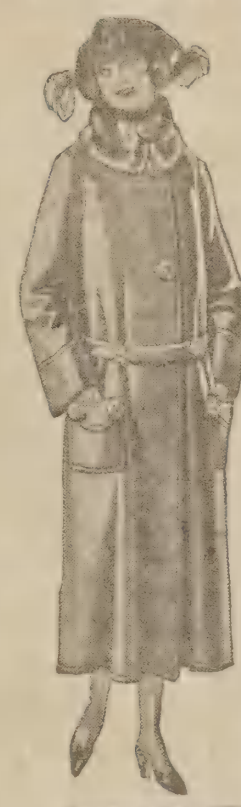

Another sensational value in a warm winter coat. This becoming model is of splendid Thibet cloth in choice of rich brown or navy blue. The ample collar is of genuine brown Coney fur. Coat is finished with all-around self material belt and two patch pockets, trimmed with pretty buttons. Imitation cuff is also button trimmed. Coat measures about 48 inches long, and comes in sizes 34 to 44 bust.

Order brown by No. 52E7094. Navy by No. 52E7096. Order black by No. 52E7095. Send no money. Pay $5.98 and postage on arrival. State size.

Women's Patent Leather Gun Metal or Brown Calf Finished Oxfords

$1.98

Made with imitation shield tip and medallion perforated vamp, perforated lace stay and circular foxing. Has medium rubber heel and medium pointed toe. Sizes 2½ to 8. Wide widths. **Order patent by No. 52S121. Order gunmetal by No. 52S122. Order brown by No. 52S123. Send no money. Pay $1.98 and postage on arrival.**

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Dressy Finish Walking Boot for Women

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Choice of two colors.

Women's black or brown kid finish leather hi-cut lace walking boot. Perforated stitched tip with medallion on toe; neat perforation at vamp and lace row. Medium extension oak sole with rubber tipped walking heel. Sizes 2½ to 8. Wide widths. **Brown kid finish, No. 52S195. Black kid finish, No. 52S194. Send no money. Pay $1.98 and postage on arrival for either color. State size.**

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Men's French-toe dress shoes or oxfords in brown mahogany calf-finished leather. Have brogue toes, oak soles and rubber heels. Perforated on vamp, toe and eyelet stay. Sensational values. Sizes 6 to 11, wide widths. **Order oxfords by No. 52A658. Order shoe by No. 52A660. Send no money. Pay $2.98 and postage on arrival for either style. State size.**

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Prepare for the Future

By F. J. SIEVERS, State College.

The farmer, in his strenuous efforts to readjust himself and his practices to the change in economic conditions resulting from the war which has had such a depressing effect on the purchasing power of his dollar, is being offered a mass of free advice. This advice comes from many sources, and, if it were taken at all seriously, would have a tendency to demoralize agriculture to the extereme.

Foremost among such advisers are those who are apparently attempting to leave the impression that the farmer at this time is well qualified and thoroughly understands the business of producing crops and should give preferred consideration to his system of farm accounting and to greater efficiency in the marketing of his products, subjects which, according to their notion, he has utterly neglected. There is an effort to lead him to believe that greater efficiency in marketing and a more accurate check on cost of production offer a complete solution of his problems.

The improvement in marketing conditions is also a consumer's problem, and the public is not justified in putting the burden of responsibility in perfecting a more efficient marketing system on the shoulders of the farmer, whose primary business is and always should be crop production. The fact of the matter is that if the urban consumer had given as much consideration to better and more efficient marketing as these problems have received from the rural population, many of the present unsatisfactory conditions would not exist.

Notwithstanding the importance of marketing, the business of efficient crop production is big enough and worthy of the best efforts of the farmer, and this is not the time for him to slack up in acquainting himself with the best and most scientific methods of producing farm products. The axiom, "In time of peace prepare for war," applies fully to the present agricultural situation. Agriculture is so basic in our national economic development, and is and always will be so open to competition, that any factor, be it marketing or what not, that will improve the status of the farmer will also improve equally the conditions affecting society in general.

The agricultural colleges the country over have had decreased enrollments during the last few years as the direct result of the poor reputation that farming has at the present time. The wise student is the one who has sufficient imagination and foresight to realize that this condition must change and change very shortly, and that he who prepares for efficient service along agricultural lines at this time will be in line to enter into an active participation and help satisfy the demands for well-trained men in agriculture which will necessarily come in the course of a few years.

With a full realization of this condition, the agricultural college of the Washington State college is putting more emphasis on the development of a successful short course this year than it has done for some considerable period. Beginning with the 8th of January, 1924, there will be offered at the state college one eight weeks' short course in diversified farming, in which special emphasis will be placed on all factors pertaining to the more profitable management of live stock and the most effective methods in crop production as determined from recent investigational work. This course is short, but exceedingly practical, and a special effort is made to aid the student, not only in comprehending the fundamental principles upon which the successful production of agricultural products is based, but upon the application of these fundamentals to diversified systems of farming adaptable to the various sections of Washington.

Beginning with January 8, there will also be offered two very specialized courses of four weeks each. The one in horticulture, planned especially to meet the demands of the student interested or at present engaged in commercial fruit production, will cover systems of soil management, storage and marketing and also problems pertaining to insect and disease control. The other is a specialized course in dairying, planned particularly for general farmers who are giving major consideration to the business of converting farm crops into dairy products. This course will deal with problems pertaining to breeding, feeding, housing and the general management of dairy herds.

Besides these courses the institution at that time will also offer specialized two weeks' courses pertaining to the operation of gas engines and tractors, the official testing of dairy cows and the operation of creameries. These courses have been very successful and much appreciated in the past and should develop considerable interest at this time.

All of these courses are open to any one who can read and write and is above 16 years of age. Any information desired concerning further details pertaining to any special feature regarding these courses may be obtained by addressing a letter to the dean of the college of agriculture, State College of Washington, Pullman.

Storing Potatoes

"Proper storage of potatoes has much to do with their keeping qualities and the work should begin during harvest," says George L. Zundel, extension plant pathologist of the state college. "When handling potatoes care should be taken not to break the skin, since an injury always gives fungi a chance to enter the tuber and cause storage rot.

"To help overcome the damage to the potato crop I would suggest that the potato cellar be disinfected by using either bluestone at the rate of one pound to 10 gallons of water or formaldehyde at the rate of one pint to 10 gallons of water. Spray on bins and walls.

"Provide each potato cellar or storage house with inlets for fresh air and outlets for foul air. Also provide false floors and walls for the bins. Have an air space between bins.

"Never store potatoes in piles more than five feet deep without making some provision for air to get to the center of the pile. Lastly, do not dig more potatoes than can be put in storage the same day.

"Every one is familiar with the 'mushy' frozen potato. Where the potatoes are kept in a temperature of around 30 to 32 degrees F. for only three hours there will be black streaks formed on the inside, though the outside may look perfectly good.

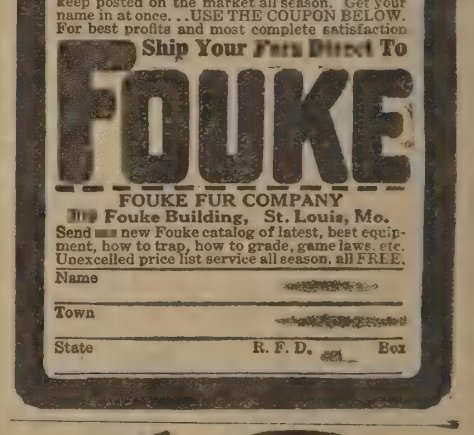
"Insufficient air in the storage house will cause a superficial breakdown, which appears as dark, sunken spots on the outside of the potato. Black heart is also caused by too high temperatures and lack of fresh air."

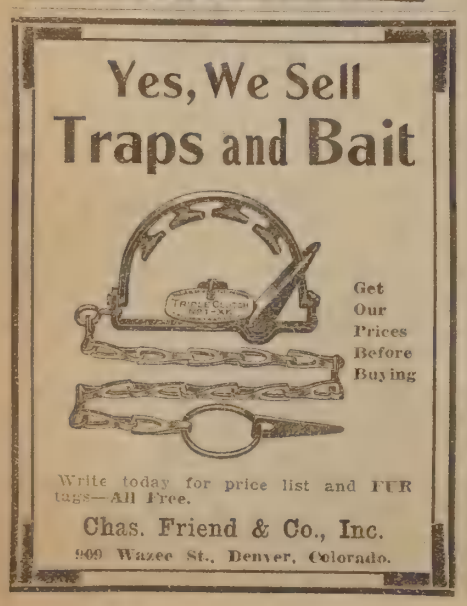
Try Out Vetches

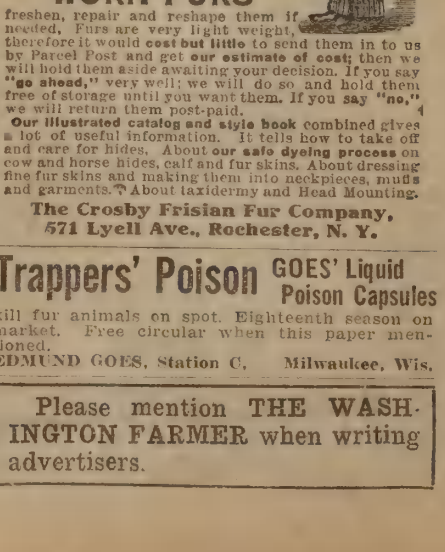
J. D. Sanford and Earl Dibble of Sequim, under the direction of County Agent A. W. Holland, tried out six varieties of vetch. The trail was made to determine the best kind of vetch to seed for growing in Clallam county. In the six varieties they found a difference in yield of from 1206 pounds per acre with Tangier peas to 6090 pounds per acre with Pearl vetch. Monanthos vetch yielded 4900 pounds per acre, Hungarian vetch 3228 pounds per acre, while winter hardy vetch and common vetch averaged 1750 pounds per acre. Cliff Wilson of Forks reports that vetch is growing well in his community.

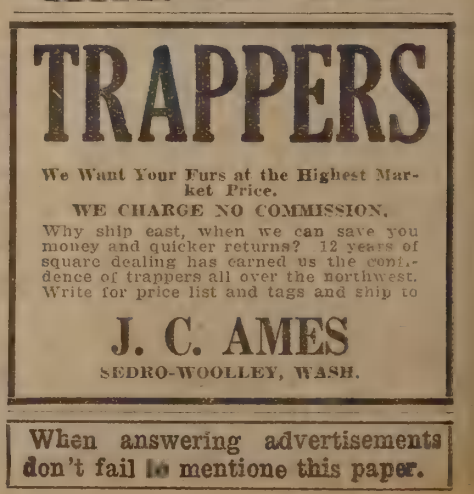
NEXT YEAR'S LAMBS.

For a larger lamb crop turn your breeding ram with the flock at night. Feed him a pound daily of oats and bran.









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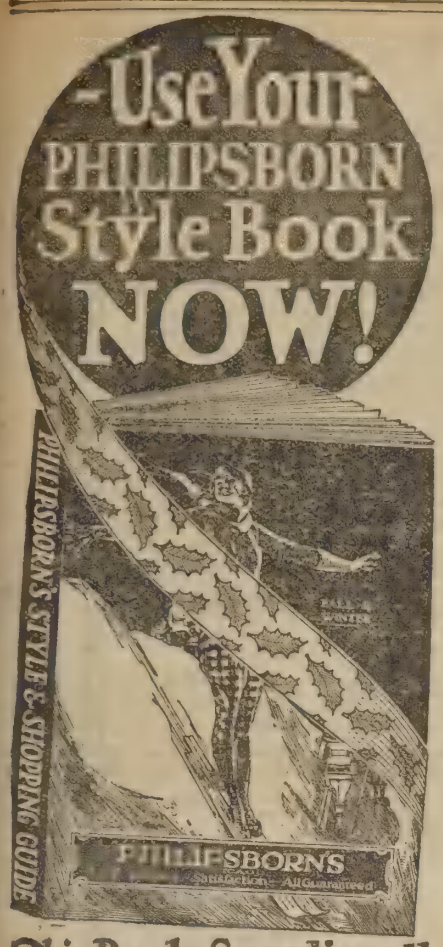

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Drainage Pays

Those Who Try It Increase Areas

By A. B. CRANE, Specialist in Drainage.

One encouraging feature in the development of drainage in the various counties of the state is the fact that many who put part of their lands under drainage come back for an extension of the work on the rest of their lands. They have found that drainage pays.

J. F. Dilling, living near Port Angeles, in Clallam county, is one of the men who sings the praises of drainage on his farm. On May 26, 1920, he had the specialist visit his farm and plan for about 10 acres which at that time was so wet teams could not drive over it and the specialist himself sank more than ankle-deep while planning out the drainage. Mr. Dilling put tile in here at once and, though it was late when planted, sowed it to oats. In the fall he harvested 70 bushels per acre. Previous to that he got about 35 bushels. He laid 1660 feet the first year. The results were so marked that he put in 900 feet more the next year, 1921, following it in 1923 with 700 feet more, now having about 13 acres tiled. He expects to continue with another 1000 feet in the near future.

Mr. Dilling freely commented on several interesting points relative to the advantage he derived from the drainage of this field. He says, "My tile being all covered, I lose no land, as I would with an open ditch and its attendant bank growing up to weeds, but, on the contrary, my crop is better and cleaner over the tiles than in any other place. Neither do I have to clean them out every year, as I had to do with open ditches."

Mr. Dilling has been demonstrating the advantage of manure on his drained field. He is putting on barnyard manure supplemented with 100 pounds of phosphate to the acre. "I think my fertilizer is worth about 100 per cent more on my drained land than on the undrained," is his answer to that question.

Results such as Mr. Dilling reports should be a great encouragement to others to make the necessary improvements on their lands. One hundred per cent increase in crops, with practically no increase in the cost of production per acre, will, in most cases, change the balance of the account from the debit to the credit side of the ledger.

The Farm Flock

Some excellent suggestions on the selection of breeding ewes is given by Eugene L. Harms of Pullman, who has had several years' experience in raising Hampshire, Shropshire and Oxford sheep.

"In selecting our foundation farm flock," said Mr. Harms, "we picked especially for a uniform lot of ewes of balanced mutton conformation, dense fleeces, good teeth and good udders. We prefer black-faced ewes, because they have, as a rule, a blocky conformation, and the market lambs, sired by black-faced rams, are of the same type. The buyers like them. Their black or dark faces appeal to the buyer as well.

"We also prefer the black-faced ewe of Hampshire, Shropshire or Oxford breeding for the wheat section because they carry a finer quality of wool, which brings a higher price per pound than do the long wool breeds of sheep. We always use high-class purebred rams of the same breed from year to year. Lambs by good purebred black-faced sires are worth from $1.75 to $3 more than those by scrub or ordinary grade rams."

In speaking of Mr. Harms' success, C. M. Hubbard, live stock specialist of the state college, also suggests that 20 to 25 bred ewes may be sufficient for the inexperienced farmer. If unbred ewes are secured, then have 50 head.

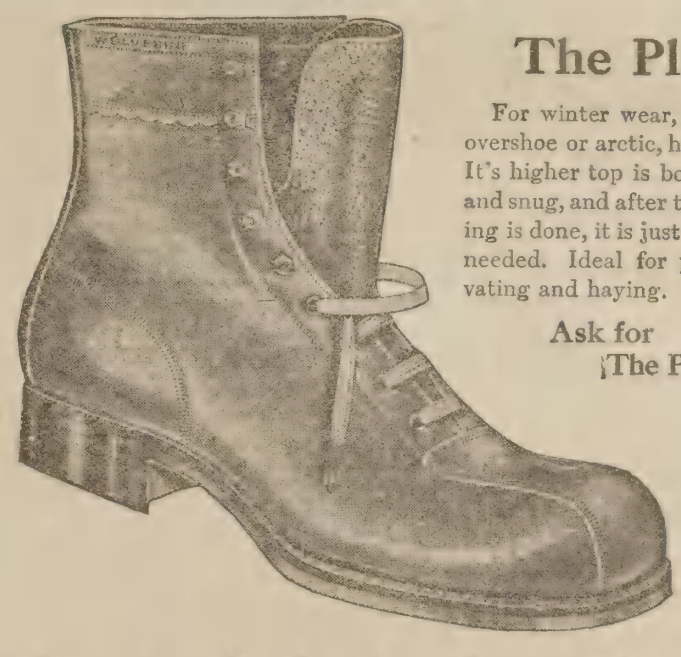
"Select uniformly short-legged, deep-bodied, dense-fleeced ewes, carrying broad chests and well-filled rear quarters," says Mr. Hubbard.

"Do not select coarse, overly-developed, long-legged ewes, but rather the compact type carrying quality. Examine the mouths carefully, eliminating any broken-mouthed ewes (those which have lost teeth). However, if older ewes are being selected at a lower price this does not apply.

"Examine closely for spoiled udders on ewes which have lambed previous seasons. Their udders should be soft and pliable, like a cow's, not hard or lumpy. Old ewes of high grade may be taken, but not those which are failing in health. If the ewes are bred be sure it was to a good purebred ram; if not bred be sure to purchase a good purebred sire of any of the black-faced breeds."

ADOPT IMPROVED METHODS.

Poultry management practices, advocated by extension workers to increase economically the quality and quantity of poultry products, were adopted in 1922 on over 259,000 farms, according to reports to the department of agriculture.



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LIVESTOCK AND DAIRY

Feeding Suggestions

Here are a few suggestions for the live stock man that were found at some of the smaller fairs this year in a college extension service booth:

A good mineral mixture for hogs can be made by mixing 25 pounds of salt, 50 pounds of bone meal and 50 pounds of charcoal or wood ashes. For larger or smaller amounts these ingredients may be mixed in the same proportions.

A good ration for developing a litter of pigs for breeding purposes is made of 30 pounds of ground barley or ground corn, 30 pounds of ground oats, 30 pounds of mill run or bran and 10 pounds of tankage or fish meal.

A good ration for fattening hogs for the market, when they are placed on feed at 100 to 125 pounds weight is made as follows: Sixty pounds of ground barley or corn, 20 pounds of shorts or mill run and 10 pounds of tankage or fish meal.

A good program for fattening steers is to utilize during the first part of the fattening period alfalfa stubble, corn stalk or beet-top fields; the second period give them alfalfa hay and a good silage; the third period add five to 10 pounds of corn or barley to the daily ration of alfalfa and silage.

Warns Against Diseases

"Cholera is by far the most deadly and dangerous of all hog diseases," says Brick Burford, secretary of the Whitman County Farm bureau, who reports some loss in the western part of that county. "It must be remembered that it is a highly contagious disease and may be transmitted quickly and easily to sound herds either by contaminated water and foods, or farm animals, such as horses, dogs, cats and birds carrying the disease germs. If there are diseased hogs in your neighborhood, stay away from these diseased premises and be careful about visitors coming to see your swine. Disinfect before and after leaving these areas. If you note symptoms of sickness, isolate immediately and call a veterinarian. The same may be said with all other farm animals. There are instances of whole outfits of teams having become diseased with laryngitis and distemper by carelessly letting horses sick with these diseases run at large with sound horses. Pneumonia many times follows both of these diseases. Save yourself time, money and valuable stock by isolating these cases and getting a veterinarian after them."

Carrots as Feed

By R. T. SMITH,
Department of Animal Husbandry,
Washington State College.

Can carrots be fed successfully to a horse that is being fed on alfalfa hay, doing just enough work for exercise? If so, in what quantities? Also are carrots good for young growing pigs and, if so, should they be cooked and what grain ration would be fed with the roots? C. C. P.
Port Orchard, Wash.

Carrots can be fed in quite large quantities to horses without ill effects. In fact, horses relish them very much. Their chief value lies in that they keep horses in a thrifty, healthy condition. It is customary to feed horses just a few carrots along with their other feed.

Carrots have a very slight value for young growing pigs when fed with balanced rations. In experiments at the Wisconsin station, roots had a value of $4 per ton when fed to fattening pigs. At this price it would hardly pay to feed carrots to pigs.

There is no advantage gained in cooking carrots, and unless they are very cheap in price or culls, I do not advise feeding them to pigs.

VETERINARY

By DR. S. B. NELSON.

Distemper—I have had several of my dogs die from distemper. Is there any remedy for it? J. H. C.
Hoquiam, Wash.

I would suggest that you have the dogs vaccinated with dog distemper vaccine against this disease.

Poll Evil—I have a mare that has a swelling back of her left ear that is about a foot long and larger than a man's hand laid lengthwise of her mane. It terminates in a running sore over her eye or rather near her ear—they call it poll evil. O. T.
Odessa, Wash.

Your animal has a poll-evil, as you say. She should be operated and the operation would include the removal of part of the bone on top of the head so as to give drainage down over the face. You can not get thorough drainage in any other way. Any competent veterinarian can operate your horse for you.

Loss of Appetite—I have a cow that seems to have lost her appetite. Last January she was sick with pneumonia, but freshened in April in good shape and gave a good flow of milk. She does not eat like the other cows. She is thin, but seems to feel all right.
Yelm, Wash. J. H.

Suppose that you try putting the cow on a tonic, such as compound tincture of gentian—one tablespoonful in a pint of water, night and morning. Try this treatment for 10 days or two weeks. Also give her on her feed either at noon or at night a half teaspoonful of powdered iron sulphate mixed with one-half teaspoonful of powdered ginger.

Lumpy Jaw—I have a bull that has a bunch on his lower jaw. It has been coming about one year. It is as hard as the bone. If it should turn out to be lump jaw will it do to use him as a breeder? J. H. S.
Hunters, Wash.

Your bull probably has big jaw or lumpy jaw. This is an infectious disease, being caused by a fungus which is discharged from the lump either through the mouth or through the skin after the lump becomes an abscess and breaks. Other animals, including calves, should the fungus enter their body would become infected. It is dangerous to have him about the place.

Hop Poultice.—I have a cow that came fresh a month ago. She is a big milker but got one of her teats badly cut so that I had to use a milk tube. She seems to be slowly drying up in that quarter and the milk in that teat is getting a little ropy. There seems to be a lump high up in her udder and a little fever. T. K.
Woodland, Wash.

There is hardly any remedy that you can use for the cow at the present time, unless you can stop using the milking tube. You have probably gotten infection into the udder. If you can milk out the udder three or four times daily and put a poultice on the udder, this probably would give relief. The poultice should consist of hop leaves retained in place by a bandage around the body and then should be kept hot with hot water four or five times daily. By using a poultice three or four times daily you may get relief for the cow.

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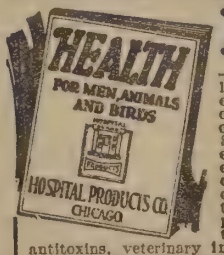

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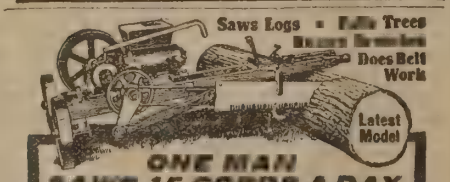

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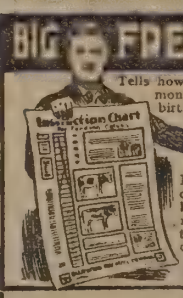

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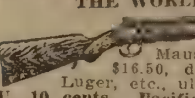

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Everett Live Stock Show

Shows Good Growth and Expresses Ambition to Spread Out

The second annual live stock show at Everett was held at Elliot park, October 11 to 14, inclusive, and was operated under a new name, a new plan and a greater determination to put on a real show that will establish itself as one of the northwest's important events of the year. The show is now known as the North Pacific Live Stock show. Next year the directors expect to hold the show on the 80 acres of new ground near Silver lake, where they will erect permanent buildings for the purpose.

And it was truly a live stock show. The location of the temporary buildings were such that the visitor passes out through the barns and can watch the judging before going out to the arena where the afternoon and night horse show was held as an entertainment feature. The latter was made up mainly of local horses, ridden by prominent townspeople, and the draft horses were also from Everett stables.. A showing of trained shetland ponies was entered by F. H. Divan & Son of Monroe, Wis.

"The whole thing is partly an experiment on the part of the directors, in order to ascertain if the people of Everett and the towns of the adjoining country want to turn out to see good live stock," explained Dr. H. K. Stockwell, president of the show, as he told of the plans for the future of the institution. "We were criticised last year for having a number of concessions that were not the desirable kind and we have made an emphatic ruling that no questionable concessions are to be allowed on the grounds. We have turned away several thousand dollars from these people. If the people desire and will support a clean show we will give them one."

As to the attendance, T. C. Simmons, secretary of the show, stated that the turnout was reasonably satisfactory. "We are not playing up Everett only, but are including all of northwest Washington and we intend to draw both the crowd and the animals from other parts of the state as well as Snohomish county."

It was but natural that the greater part of the cattle division should be made up of dairy cattle, although there were good representations of the beef breeds. All of the cattle were judged by W. T. McDonald of Victoria, B. C., commissioner of live stock. The hogs were placed by Hugh Nisbet of Chimacum. The horse show was managed and the placings made by F. H. McCoy of Yakima, while the poultry was judged by C. H. Burnett of Hollywood.

The Dairy Cattle.

There was some keen competition in the Holstein classes. Although the showing was made up entirely of local animals there were some fine individuals and plenty of quality. The exhibitors were: Herman Steffen of Monroe, Martin Treosti of Snohomish, Ed Hoem of Snohomish, K. Hodges of Everett, P. D. Hillis and Alex Wheeler of Snohomish and Dr. H. K. Stockwell of Monroe.

The senior and grand champion bull was Segis Pontiac De Kol Mead, the senior herd sire and sire of the seven daughters shown as his get. The senior and grand champion female was Tyee Peggy Fayne.

The three local herds of Guernseys met some real competition in the Fircrest herd from Lynden. Their splendid little show cow, La France of Bralee, was made senior and grand champion in spite of the fact that she was showing dry. Kulshan Hays May King was made senior and grand champion bull. An interesting class in this breed was the aged cow class, in which there were eight entries. The other breeders were Valley Gem farms and C. E. Entzminger of Arlington and H. J. Weiser of Everett. The herd bull, Weiser's King Tom made a close run for first place in the aged bull class. As the catalog called for a prize for the best dairy animal in the show, Mr. McDonald placed the ribbon on the grand champion Guernsey cow. One of the milk goats competed against the 11 head of cows.

The Jerseys were shown by Donald McRae of Lakewood, who entered nine head. His senior herd bull, Lady Slipper's Oxford Lad, the grand champion bull, was recently sold to Berton Brothers of Arlington, but he was exhibited as the head of the herd to show what the combining of the Oxford Lad and Hood farm blood lines have done in his herd. The grand champion female ribbon was placed on Quilceda Glory, an 18-months-old heifer that had just freshened and showed a very typy udder and splendid dairy conformation. She is sired by a son of Rinda Lad and out of a Hood Farm Pogis cow.

The Ayrshires came from the Van Tassel herd at Wenatchee, but met no competition from the local dairymen. The herd bull, Queen's Scottish Cavalier, was made senior and grand champion and Empress Lady of Wenatchee, a 3-year-old, senior and grand champion female.

A herd of six Brown Swiss cattle was shown by H. M. Hillis of Snohomish. The 3-year-old herd bull, Velva's St. Patrick, from an imported dam and sire, was made grand champion. Mr. Hillis was formerly a Jersey breeder in British Columbia, but has purchased a start of 13 head of Swiss and will obtain all of his new blood from eastern breeders. He won all awards offered in this breed.

The Beef Cattle.

Aberdeen Angus and Herefords comprised the beef cattle breeds and were shown by Congdon & Battles of Yakima and O. A. Boggs & Sons of Daysland, Alberta. Alberta Panama, that has been Hereford champion wherever shown on the circuit, won again, and Panama Lady 2d was senior and grand champion female. The Aberdeen Angus champions were Prizemere 10th, the 5-year-old bull, and Barbara C. B. 2d the female.

The Hog Show.

There was an unusually good showing of hogs, most of which came from local herds, with the exception of one exhibitor from Yakima, I. J. Oder, who exhibited Tamworths and Poland Chinas. There were six breeds represented which included all of the better known breeds except the Yorkshires. Dr. Stockwell was heard to remark that if he knew of one animal of this breed in the county he would have gone after it to make the show complete.

Most of the Berkshire classes were filled by Donald McRae of Lakewood, who took both of the grand champion ribbons, but was beaten in the senior gilt class by three animals of his own breeding that were shown by club members from Arlington. Dick Palmer of Arlington won first; Robert Erving of Lakewood, second, and Ruth Miller of Arlington, third. The first placing among the four club entries won a special prize of $15, donated by Mr. McRae to encourage the club work.

There was a showing of white hogs from the A. E. Jewett herd of Arlington and Otto E. Schwartzmiller of Hartford. Jewett had the senior and grand champion sow and the junior and grand champion boar, while the junior champion sow and senior champion boar were in the Schwartzmiller herd.

Perhaps the most interesting breed shown was the Hampshires. There were three breeders: The Valley Gem farm of Arlington, who only recently purchased the Dr. H. K. Stockwell herd from Monroe; E. O. Green of Monroe, and William Joyce of Burlington.

The senior and grand champion boar was O. U. R. Chief Lookout and the grand champion sow was Tipton Lalla, both of the Valley Gem herd.

The Duroc Jerseys were shown by A. Turley of Monroe and W. O. Kuhn of Alderwood Manor. Turley had the champion boar, Great I Am 7th, and the champion sow, Pinkie of Orion 21st. The sow was of his own breeding, sired by Crescent's Orion 21st. Kuhn had the junior champion sow, Nora's Chieftain Lady 3d.

All of the Tamworth awards went to the Oder herd. His herd boar, Marker, a 2-year-old animal, was grand champion and Sunnyside Belle was the senior and grand champion sow.

The Poland China grand champions were also in the Oder herd. Cedar King, the boar, is a son of Cedar Lady, the grand champion sow. Ole Thompson had the junior champion sow, Nellie's Hope, an animal from the J. H. Hulbert herd of LaConner, sired by Big Joe's Wonder.

The Sheep Show.

There were 59 head of sheep displayed by two Canadian breeders, who made up a carload with five breeds. A. C. Stewart of Aldergrove, B. C., showed Shropshires, Southdowns, Lincolns and Rambouillets, while G. F. Brown of the same town won all the placings in the Romney classes, of which he had seven head. The whole showing made a fine addition to the hog and sheep department and had some of the local breeders brought out their animals

(Continued on page fourteen.)

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Old Buildings

May Be Converted Into Good Poultry Houses

Many farms have old-style closed-up poultry houses, with poor light and ventilation, or old sheds and other buildings of little use for other purposes, that can be remodeled or built over with little difficulty into satisfactory poultry houses for the flock this winter. The size and the shape of the buildings is comparatively unimportant, say poultry experts. Essential factors are dryness, good ventilation, freedom from drafts, plenty of sunshine and room enough to allow the birds to move about with freedom and comfort.

If new houses are to be built or old buildings converted into poultry houses, locate them on high or sloping ground if possible, but always on dry and well-drained soil. The amount of floor space to be allowed each fowl varies somewhat with conditions, but on a farm or where the birds can be out of doors nearly every day the department has found that about 2½ square feet of floor space per bird in flocks of 20 is enough. In a village or city, where there is a good deal of snow, making it necessary to confine the birds closely, four or five square feet per bird is needed. The interior of the house should be simple, convenient and easy to clean.

The converted poultry house may or may not have a floor. If the house is on dry, sandy soil a dirt floor is usually quite satisfactory, although often more damp than board or cement floors. Fresh gravel and sand must be added from time to time to keep them sanitary. If board floors are used, make them tight and smooth so as to make them dry and easy to clean. If possible, build board floors eight or ten inches from the ground to allow a circulation of air and to prevent rats from harboring under them. Cement floors, especially for large houses, are quite satisfactory, as they keep rats out and last much longer than board floors. They must be kept well covered with litter, however, department workers say, to make them warm and comfortable for the flock.

Poultry Problems

By R. T. PARKHURST.

What is the matter with my turkeys? They all acted and died in the same way. At first they seemed stiff in their legs, then the next day they stood with their heads under one wing or stretched straight out with their bills close to the ground. I opened one, but could find nothing. He had a few spots on his liver and there was hardly any blood. His liver was about the size of a man's two hands and his intestines were badly bloated. His crop was empty and he was poor. I have been feeding about four gallons of wheat per day to 25 turkeys, 4 geese and 18 chickens. Could it be I am not feeding enough or too much, or what was the trouble? They have been herded on grasshoppers. They have a clean house to roost in. How does salt act on turkeys?

MRS. W. F. B.

I believe that from the symptoms you have given that the turkeys have been poisoned. The actions are very similar to those that result when birds have received too much salt. The same actions, however, may result from ptomaine poisoning, due to the birds eating decomposed meat of some kind or other.

I suggest that you give the birds epsom salts at the rate of one pound per 100 birds. I believe that this will help to prevent further loss.

The cause of the poisoning should, of course, be discovered and removed.

What is the matter with my chickens? They start picking at one another's tails and keep that up until they draw the blood, then they just keep at that until they kill a hen. I shut these pullets up on September 28, fed them scratch feed of wheat, whole corn and some sunflower seeds. I keep beef scraps, granulated bone, oyster shell, alfalfa meal and mash before them all the time. They also have another bad habit of eating feathers. What causes this? I give them all the milk I get from two cows. I keep them in a half-monitor henhouse 24x40. Have about 350 pullets in building. I get 50 eggs a day. E. O'L.

I believe the trouble is that your pullets are overcrowded. Instead of having 350 pullets in a house 24x40 you should have not over 275 Leghorns or birds of the lighter varieties and not over 250 birds of the medium or heavy birds.

It will be necessary for you to remove immediately any of the birds that are bleeding from the others. It may also be necessary for you to isolate some of the worst offenders as far as the picking is concerned.

It will help considerably to induce exercise by having at least six to eight inches of straw litter and to hang up green feed such as cabbage and mangles.

Chickens Have Worms

By B. T. SIMMS.

What treatment should chickens have that are infested with worms? MRS. J. W.
Weston, Ore.

The most satisfactory method of treating birds which are infested with worms seems to be the tobacco dust treatment. This is given by mixing it with the dry mash at the rate of one pound of the tobacco dust to each 50 pounds of mash. This is kept before the birds continuously for a period of about 10 days. Then the tobacco is taken away from them for about 30 days, when the treatment is repeated.

Birds get intestinal worms from the infested soils or yards and pens. The nature worms which are in the intestines of the birds lay eggs which pass out and hatch in the soil. These are picked up by other birds. If young chicks are incubator hatched and then placed on soils where birds have not been kept for four or five years they will usually be practically free from worms.

Feed Parrot Oyster Shell

By J. S. CARVER.

My parrot keeps pulling out her feathers and eating them, until she keeps her breast and legs all bare. I have examined her for lice, but can find nothing on her. I have used insect powder, greased her with olive oil, used pepper and everything. She is very hearty and eats lots of sunflower seeds and things from the table. Can you give me any information regarding her? MRS. E. H. V.
Grandview, Wash.

I would say that the difficulty was caused by lack of calcium, ash and phosphates in your ration. The parrot is eating feathers to acquire these elements. By feeding your parrot some oyster shell with its other daily feeding I think that you will find this trouble will be cured.

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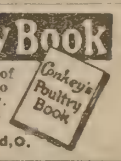

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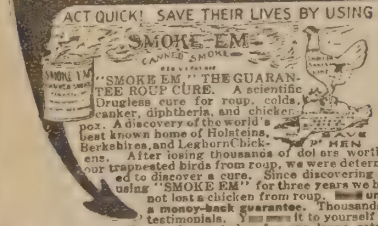

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This is an offer no reader of this paper who keeps chickens can afford to ignore.

Henry Trafford, famous poultry expert and breeder, for nearly eighteen years editor of "Poultry Success," is said to have developed a new and remarkable system of rearing, breeding and feeding chickens for heavy egg productin that seems certain to revolutionize the poultry industry and give five eggs or more for every egg produced today. This plan or system is explained in Mr. Trafford's "1000 Egg Hen," a free copy of which will be sent to any person who keeps six hens or more.

Poultry keepers following my directions, said Mr. Trafford, learn how to start young pullets laying early; make old hens moult quickly and resume heavy laying during entire winter season. Most any hen will lay in spring when eggs are cheap. I tell how hens lay four to seven eggs a week during coldest winter days when eggs sell at a dollar a dozen or more. His system shows how any breeder, with ordinary care, may get 1000 eggs or more from nearly every hen in four to six years' time at a net profit of $25.00.

There is big money to be made with chickens this winter by the man or woman who gets the eggs. The time to get the hens ready for heavy winter laying is now. My "1000 Egg Hen" system tells how and arrangements have been made whereby any reader of this paper may receive one copy absolutely free by using the coupon below. Send no money, but cut out the coupon and mail it with your name and address and a free copy of "The 1000 Egg Hen" will be sent by return mail.—Henry Trafford, Suite 1104 C, Herald Bldg., Binghamton, N. Y.—Adv.

W. F. Nov. 1.

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ORCHARD AND GARDEN

Fall Garden Work

A few good licks in the garden now will mean much when you come to harvesting your vegetables next spring, summer and fall. One can not get the best results in gardening when preparation is left until the warm days of spring. At that time everything should be ready for the planting.

Before it freezes up this fall the vines, leaves and so on in the garden should be carefully raked up and burned. There are two reasons for this—to destroy sources of disease and to get rid of insects that are wintering over in the egg or pupa stage. Many a garden is greatly reduced in value because of the presence of various pests or diseases, and much can be accomplished toward the elimination of these adverse features by careful fall cleaning.

It is not a bad plan to plow or spade the garden plot once or twice during the winter. This exposes certain of the pests that winter in the soil, and they are destroyed by the freezing. This is a good way to reduce the damage from cutworms.

If your garden is so located that the poultry can be run on it after the vegetables are harvested, they will render a two-fold service. They will pick up many a bug or worm that is one of next year's potential pests. They will add greatly to the soil fertility. It is well to provide fertility in the form of henhouse or barnyard manure, for in nearly all cases vegetables flourish best in a rich soil. If the henhouse manure is used there should be something put into the soil to provide humus. Nothing is better for this purpose than rotted bedding from the barn or from the strawstacks.

Now is the time to prepare the soil for spring planting; that is, up to the point of final seed bed preparation. Then in the spring those seeds that require early planting may be put in at the first thaw-up. How many weeks do we do without fresh vegetables every spring merely because we did not get our garden in shape to plant early vegetables early? How much have we lost because we did not fertilize in time to have the fertility in form for plant food when the plants need it? How much have we lost because we have allowed pests or disease to stunt or destroy some of the things that we liked best?

Another virtue in fall garden work is that it enables us to plan next year's garden at a time when the present one is still fresh in mind. If the arrangement this year was not the best we should plan now to rearrange it next spring and should till the soil and fertilize accordingly. Not all plants require the same kind of tillage or the same degrees of fertility. Where we made mistakes along this or other lines the season just past we should plan right now to do otherwise for the coming season.

Also it is soon going to be time to order that seed catalogue, for the winter evenings are the time to figure and plan and make out the order. Many a garden has been only half a success because the seed ordering was not done till the seeds should have been put into the ground.

The value of gardening is something that too many farm families underestimate. Vegetables are not only essential to the best health, but when home-grown they greatly reduce the cost of living. And what is more delightful and altogether satisfying than good fresh vegetables in plenteous variety and quantity as a part of the home meals?

Let's begin to plan and work for next year's garden now.

Evergreen Blackberry

By C. E. SCHUSTER.

Can you tell me of some way to get rid of the evergreen blackberry? W. A. C.

There is only one way to get rid of the evergreen blackberry so far as we know, and that is to cut them off and keep them continually cut off.

The idea of cutting them off and keeping them cut off is just simply a matter of starvation. If the shoots are cut off as soon as they appear above the ground it will mean that in time the root system will be completely starved out, as the root system is dependent upon the elaborated food formed by the tops above the ground. If this top is kept cut off and there is no leaf formation and consequently no elaboration of plant food, the roots will finally be starved out and the blackberries killed.

It is, of course, of some additional help if the patch after being cut down can be burned over and then plowed deeper. The roots that are brought to the surface can be gathered up and burned. This will in many cases start a large mass of small shoots coming up, but they can be quickly hoed or cut off and the consequent growth following this will be greatly reduced. In any case it will simply be a question of starvation of roots. So far as we know, there is no other satisfactory method of eradicating this pest from the ground once it gets established.

Apple Pomace for Cows

Thousands of tons of apple pomace are going to waste annually which might profitably be turned into food for wintering cattle. Studies to determine the food value and best methods of utilizing this by-product from commercial cider and vinegar mills have been made by the department of agriculture. When the moist apple pomace can be used fresh or ensiled it yields a succulent cattle food comparable with corn silage. The quantity that can be used in this way is limited, however, because of the relatively high cost of transportation for material having such a high water content. Its most profitable utilization depends upon its preservation by dehydration and producing it as a commercial food. In feeding trials with dairy cows dried-apple pomace proved to be a palatable feed and appeared to be equal, pound for pound of dry matter, to good corn silage. The material was fed wet and replaced the corn silage in a ration including grain and hay.

Sheep in the Orchard

Philip S. Moore, one of the largest and most successful orchardists in western North Carolina, gives an interesting experiment with sheep.

When Mr. Moore settled at the head of Clear creek on a farm of about 200 acres he found a considerable number of apple trees and he set out a great many more. The undergrowth was enormous and the saw-briars so large and stubborn that one would get entangled in them and find it difficult to get out. He decided to place sheep in this area, as it was too expensive to grab it out. He fenced in 25 acres, and buying 10 sheep placed them within the "jungle." Neighbors laughed and called him impracticable. Two years later the sheep had done a good job, and the harvest of wool and the offsprings brought $240, which more than covered the cost of fencing in the 25 acres. Since then Mr. Moore has kept sheep in his orchard.

THE EARS TO CHOOSE.

In selecting corn for seed pick ears from stalks which yield well in competition with others, are free from disease, and hang at a height convenient for husking, says the department of agriculture. Drooping ears which shed rain readily usually will give the best seed. Care in selecting and handling seed will be more than repaid in increased corn yields next year.

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One man with a K can rip out any stump that can be pulled with the best inch steel cable. No Digging—No Expense for Team or Power. Works by leverage—same principle as a jack. Made of the finest steel—guaranteed against breakage. Endorsed by U. S. Government experts. Write today for free booklet on Land Clearing.

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Runs so easily, bowl spins 25 minutes after you stop cranking unless you apply brake. No other separator has or needs a brake. Bowl chamber is porcelain lined.

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Best Time to Market Poultry

(Continued from page three..)

prices in other months show much stability.

In view of the normal downward trend during the fall months, it would seem advisable to sell well finished spring chickens in late September and October instead of glutting the market in the early winter when the peak of receipts normally arrives. At this time packers are storing the surplus of dressed poultry and will attempt to keep quotations for both live and dressed stock on the lowest possible level. Greater weight may be obtained by holding poultry until late in the season, but against this must be weighed the lower price, and the change from broiler to fryer or roaster prices, to say nothing of the labor and feed involved. Spring roasters are classified as stags, beginning around the first of the year, and sell at a lower price.

Leghorns, which are in a class by themselves as producers of fine white eggs, have long been discriminated against in the poultry market all along the line from shipper to consumer. The discount may be as much as six to eight cents a pound. Since the breed is small and does not yield readily to fattening, those of the usual broiler size are older than the more meaty breeds and their large combs make the consumer think they are older than they really are. They often dress out dark also. The best way of handling them appears to be to sell the surplus roosters as squab broilers weighing three-fourths to one and a fourth pounds. Up to that weight they grow well, but become too "scrappy" thereafter. The demand is for fat yellow-skinned birds, such as are produced by the general purpose breeds which predominate in farm poultry flocks. Strangely enough, European consumers are partial to white-skinned birds.

Turkeys for Holiday Trade.

Turkeys are marketed mostly during November and December. It has been estimated that 95 per cent of the turkeys are killed, dressed and marketed during these two months and that about 75 per cent of all the turkeys consumed in the United States are sold for the Thanksgiving and Christmas trade. A comparatively small quantity is stored. Many turkeys are not fully grown or fat at Thanksgiving time, and all such should be held back for a later market. The middle of September is not too early to begin feeding turkeys in order to have them in the best condition for the holiday trade. Ducks and geese also find an active demand at the holiday season.

In general chicken prices do not respond so strongly to the holiday trade as do other classes of poultry for which the demand is more partial. Also, extremely large receipts of chickens at those seasons largely offset any increase which does occur in the demand. One advantage of selling direct to consumers is that the producer can sell the year around and is in better position to average his returns.

Capon production offers excellent possibilities for enterprising farmers as the market for them is never overloaded. They should be made to weigh at least seven pounds. The best time to market them is in January or February just after the turkey season, and they sell on about the same price level as turkeys.

Holidays Affect Prices.

The best market days in the large cities as a rule are from Tuesday to Friday inclusive. In the case of an approaching feast day, however, there is a demand every day in the week. Jewish holidays, of which there is a series along in September and October and again during the spring, create a special demand for fat live poultry, which is then slaughtered according to certain Jewish regulations. The exact time of these holidays varies from year to year. If the producer wishes to strike this market his poultry should arrive two or three days before the holiday.

Another question involved in marketing this year's surplus is whether poultry production generally should be expanded further. The increase in the last few years has been more rapid than the increase in the demand. The saturation point of the egg and poultry market has not been reached and moderately lower prices could prevail before production would be at a loss. But, for the good of all, it is probably desirable to slow down the process of expansion to a rate more nearly equal to the annual increase in the consuming population.

Land-Clearing is Cheaper and Easier this Fall

THE fall months between harvest-time and winter is the time to add more productive acres to your farm.

It's easier and cheaper this fall! The reason is Pacific Stumping, the new du Pont explosive. It doesn't freeze—no bothersome and dangerous thawing necessary. You get ½ more sticks for your dollar than with any standard stumping powder—and Pacific Stumping does even better work, stick for stick. Ask your local dealer.

Write for free booklet, "Clearing Logged-off Lands," many pages of practical information regarding explosives for land-clearing, ditching and tree-planting.

½ More per Dollar

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Davis Quits

Presidency Reclamation Association

D. W. Davis, former governor of Idaho, for four years president of the Western States Reclamation association, has announced his resignation as president of that organization, according to the Salt Lake Tribune. Davis, who was elected president while governor of Idaho and who is now commissioner of reclamation in the United States department of the interior, says he finds it impossible to devote enough time to conduct the affairs of the association in the proper manner. A call for a meeting of the association to be held in this city, November 19 and 20 has been issued.

A Record Silage Crop

A world record for ensilage corn production is claimed by S. D. Cornell of Yakima county, who harvested and weighed under the eye of County Agent A. E. Lovett 28 tons and 985 pounds from one acre on his ranch near Grandview. The plot selected for measurement consisted of 20 rows 709 feet long and two feet apart. Alternate double rows were from eastern and Yakima seed, the eastern variety averaging 18 feet high all over the field and yielding considerably higher than the other. One average row of this variety cut and weighed immediately tipped the scales at 4500 pounds—45 tons to the acre had it all been like this. However, in addition to the western corn producing a shorter stalk, most of the corn lay on the ground from one to 24 hours before weighing, thereby losing much of its moisture content. Lovett estimated that had it all been weighed promptly, even the mixed varieties would have yielded 35 tons or more to the acre. The land used had been in alfalfa for three years, and was manured last spring at the rate of 18 tons per acre. Twenty-four tons to the acre, a record made in Idaho, is the highest previous authentic production known in Yakima. Cornell is a breeder of pure Holstein-Friesian cattle and Duroc-Jersey swine.

Go to Pacific International

The Washington State college live stock judging team will be at the Pacific International Live Stock exposition at Portland, Ore., November 3 to 10.

On the trip the W. S. C. students will compete against students from most of the western states and British Columbia for honors in judging beef cattle, sheep, horses and hogs.

In the past the Washington boys have won their share of the honors. This year the school will be represented by William Killmore and Edward Birkmaier of Kittitas county; Fred Olson of Whitman county, Leo Quirk of Lincoln county, R. C. Ward of Yakima county and C. Anderson of Iowa, who is one of the wounded soldiers taking training in this state.

The state college will ship a car of cattle to be exhibited at the exposition.

Live stock from the college has been exhibited at most of the northwest stock shows and fairs. These shows are the one place where the efficiency of one animal can be measured against that of the other.

Everett Live Stock Show

(Continued from page eleven.)

there would have been some interesting competition.

Toggenburg milk goats were shown by two breeders in King and Snohomish counties. M. P. Eggers of Woodinville entered some of his best stock and showed against six head from the Westwold farm at Edmonds.

The Poultry Department.

Comparing this part of the show with what was exhibited last year, there was a great improvement. There were more than 1000 birds in the show and if the coops could have been provided in time there would have been 500 more. As it was, there was plenty of room for those that were shown even though the wire coops could not be secured.

There was an unusually large class of Rhode Island Reds and the White Leghorns were second in numbers. The Barred Rocks and Buff Leghorns were also shown in strong classes and there were good representations of Columbian and Partridge Wyandottes, and White Plymouth Rocks. The turnout of turkeys, geese and pigeons was first class.

Tries Argentine Alfalfa

A new alfalfa, the Argentine common, has just been introduced for trial at the irrigation branch experiment station at Prosser. "So far it has proved to be only an ordinary grade of alfalfa, though its seeding properties may help the farmers in the irrigated sections to grow more alfalfa seed," according to H. P. Singleton, agronomist at the station. "If we can find some crop of this kind which will go to seed after the first two crops of hay have been removed, it may be something worth while, and we intend to give it a thorough trial."

Farmers' Want Ads

MONUMENTS F

COMPLETE STOCK. WRITE FOR DESIGNS and prices. Inland Monument Co., N1001 Monroe, Spokane.

HELP WANTED—Female 1

GIRLS DESIRING WORK FOR HALF BOARD and room, while attending school, write Gooding College, Gooding, Idaho, today.

SITUATIONS WANTED—Male 21

POSITION WANTED AS RANCH MANAGER; experienced in dry farming, irrigation, dairying, alfalfa grinding, mixing. George Heller, Box 186, Lewiston, Idaho.

SCHOOLS AND COLLEGES 26

EARN $110 TO $250 MONTHLY; EXPENSES paid as railway traffic inspector; position guaranteed after completion of 3 months' home study course or money refunded. Excellent opportunities. Write for free booklet G-157. Stand. Business Training Inst., Buffalo, N. Y.

FRESH FOOD PRODUCTS 51-3

FISH—4 LBS. SMOKED SALMON, $1; 4 LBS. Alaska salmon bellies, $1; 4 lbs. black cod, $1; 3 lbs. best codfish, $1; delivered by mail. Coffin Fish Co., Seattle, Wash.

MERCHANDISE 51-5

YOUR ANNUAL OPPORTUNITY—FOR QUICK disposal we offer salesmen's samples of woolen goods, underwear, hoisery, blankets, sheep-lined coats, mackinaws, leather vests, etc., at one-third to one-half less than regular prices. Our price list of sample goods is now ready. Send for it today. Minneapolis Woolen Mills Co., Dept. 23, 612 1st ave. North, Minneapolis.

SPECIAL—ONE-POUND TIN "SATISFACTION tobacco" and pipe for $1. Smoking, chewing tobacco, cigars, cigarettes and complete line of pipes. Wholesale and retail. Peter M. Jacoy, 3 Washington st., Spokane.

HONEY 53

KING CLOVER'S ALFALFA-SWEET CLOVER honey; 60-lb. can, $7.50; two cans, $14.50; 60-lb., prepaid, second zone, $8.29. King Clover, Sunnyside, Wash.

ALFALFA, SWEET CLOVER HONEY, PREpaid second zone, 3 10s, $5; 60 lbs., $8.30; two cans, $14.50, not prepaid. Harry Fisher, Prosser, Wash.

HAPPY HOME HONEY — ALFALFA AND clover; 60-lb. can, $7.50; two cans, $14.50; case six 10-lb. pails, $8.50. H. N. Paul, Mabton, Wash.

PURE WATER-WHITE SWEET CLOVER honey; 60-lb. can, $5.50; two, $10.75. H. R. Bowen, Roberts, Idaho.

EXTRACTED HONEY FOR SALE—WELLS D. Rose, Sunnyside, Wash.

MISCELLANEOUS—FOR SALE 60

SASH AND DOORS—O. B. WILLIAMS CO., 1943 First ave. So., Seattle. Chicken house sash, 20" wide by 25" high, 80c; a dozen different sizes in stock for immediate shipment. Skylights for chicken houses, 36"x40"; price, glazed, $2. This is the size recommended by the Western Washington experiment station. We carry them in stock for immediate shipment. Sash and doors for all purposes at lowest prices. All orders receive prompt attention. Our large illustrated catalog No. 35, showing full line of building material and built-in fixtures for the home, free on request. O. B. Williams Co. Established 1899.

PIPE—GET PARTICULARS ON OUR SPEcial flue pipe, 1¼, 1½ and 2 inch. Big saving on it. We also have all sizes second-hand and new standard pipe at low prices. We also save you on roofing, belting, pumps, engines, cables, etc. Alaska Junk Co., S120 Adams, Spokane, Wash.

WALL BOARD—WRITE FOR SAMPLE OF Washington plaster wall board; won't warp, won't burn. Manufactured by Washington Building Products company, 6851 E. Marginal Way, Seattle, Wash.

NATURAL LEAF TOBACCO—CHEWING, 5 lbs., $1.75; 10 lbs., $3; smoking, 5 lbs., $1.25; 10 lbs., $2. Pay when received; pipe and recipe free. Farmers' Tobacco Union, D19, Paducah, Ky.

KENTUCKY LEAF TOBACCO—5 LBS. CHEWing, $1.75; 10 lbs., $3; 5 lbs. smoking, $1.25; 10 lbs., $2. Pipe and recipe free. Pay when received. Cooperative Farmers, Paducah, Ky.

FREE SAMPLES HOME TANNED LEATHER tanning recipe and instructions through correspondence during tanning process. Wm. Marston, Fortine, Mont.

TOBACCO—KENTUCKY'S PRIDE: EXTRA fine chewing; 10 pounds, $3; smoking, 10 pounds, $2; 20 pounds, $3.50. Farmers' Club, Mayfield, Ky.

ALL WOOL KNITTING YARN FOR SALE from manufacturer, 95c up per lb; golf and plain socks. Free samples. H. A. Bartlett, Harmony, Maine.

ARMY GOODS BARGAINS—WRITE FOR catalogue. Simon's Army Supply Store, 309 Riverside ave., Spokane.

50,000 SACKS FOR SALE. INLAND HIDE & Junk Co., W21 Main, Spokane.

MISCELLANEOUS. 61

ELIJAH COMING BEFORE JESUS, FREE book. N. Megiddo Mission, Rochester, N. Y.

MISCELLANEOUS—Wanted 63

LEARN BEEKEEPING—READ "YORK'S Bees and Honey" monthly; $1 year; sample free. York Honey and Bee Supply Company, Spokane.

AUTOMOBILES—FOR SALE 112

SEE CHEVROLET FIRST—NEW AND USED cars at prices that will surprise you; stop in or write Inland Empire Chevrolet Sales Corp., 916 2d ave., Spokane. Open evenings. Open Sunday.

(Continued on the following page.)

MACHINERY—For Sale 93

FOR SALE—90 H. P. STEAM TRACTION ENgine suitable for sawmill, also other heavy second-hand engines. Nampa Tractor Co., Nampa, Idaho.

HAY PRESSES, TRACTORS, FEED MILLS. Exchange Machinery Co., W20 Riverside, Spokane.

AUTO ACCESSORIES AND PARTS 119

NEW AND USED AUTO PARTS, NEARLY ALL cars. Our low prices and prompt service will convince you. Money refunded if not satisfied. C. & D. Auto Salvage & Supply Co., 1904 Grand ave., Kansas City, Mo.

SATISFACTORY SERVICE—THE MOST COMplete stock of new standard make automobile repair parts. Pacific Gear & Auto Parts Co., 1022 First ave., Spokane, Wash.

MOTORCYCLES AND BICYCLES 127

INDIAN MOTORCYCLE; GOOD CONDITION; price $45. Write E208 Fairview ave., Spokane.

STOVE REPAIRING 128

WRITE MYER RUBENS, SPOKANE, ABOUT stove repairs, welding broken parts, nickel plating.

RABBITS and HARES. 173

RABBITS, TOULOUSE GEESE HAVE MADE my living for 10 years. Prize winning blue Flemish Giants, New Zealand Reds, Himalayans, at utility prices. Agnes Brenner, R4, Box 49, Tacoma, Wash.

POULTRY 174

CERTIFIED WHITE LEGHORN QUALITY chicks from selected free-range, heavy-laying, utility hens, mated to double pedigree cockerels with authentic trapnest records. Our breeding flocks are inspected and accredited by the Sonoma county farm bureau. Safe arrival and full count of live, vigorous chicks guaranteed. Booking orders now for the spring season of 1924 delivery. Send for catalogue and attractive prices. Must Hatch Incubator Co., Inc., the world's largest electric hatchery, 445 Seventh st., Petaluma, Cal.

ACCREDITED CHICKS—ALL OUR CHICKS for 1924 will be from accredited flocks mated with certified cockerels sired by hens with 225-egg record. A limited number of chicks from cockerels sired by our $1000 champion cockerel and our world's record pen of hens. Write for special prices for those who order early. Queen Hatchery, 1430 1st ave., Seattle, Wash.

"HENACRES" BABY CHICKS FOR 1924—Booking orders now. Early orders get delivery when wanted. We never have enough February, March or April chicks to meet the demand. Strictly high grade chicks at common chick cost. $22 per 100; $200 per 1000. Free catalog. "Henacres," Box A, Prosser, Wash.

S. C. WHITE LEGHORN CHICKS, 100 PER cent live, delivery guaranteed; 20 per cent books order. 100, $16; 500, $75; 1000, $140, postpaid; hatch only eggs from my own flock; no lights; trap records to 292. Absolutely only one grade. Catalog free. Roy S. Hands, B614, Cottage Grove, Ore.

WHITE LEGHORN BABY CHIX FROM flocks mated to males having sire's dam record of 240 to 297 eggs per year. Full particulars and interesting literature on request. We are accredited by Sonoma county farm bureau. The Pioneer Hatchery, 422 Sixth street, Petaluma, Cal.

1924 WHITE LEGHORN CHICKS FROM FAmous egg strains; Corvallis bred; low price, high quality; enlarged capacity to care for large orders as well as small. Oregon-Corvallis Hatchery, Corvallis, Ore.

PUREBRED S. C. RHODE ISLAND REDS, pullets and cockerels; beautiful color; good laying strain, $3, $5 and $10 each. Send your order now. Mrs. L. Wham, Double Diamond Ranch, Omak, Wash.

PUREBRED BABY CHICKS AT REASONable prices. Leghorns, Reds, Barred Rocks, White Rocks, Minorcas, Anconas. Booking orders now for '24. Postal secures free catalog. Salem Chickeries, Salem, Ore. C. N. Needham, Mgr.

DANIEL'S "IDEALS"—WHITE ROCKS AND White Leghorns; 100 per cent trapnested stock used; place your 1924 baby chick orders now. Our capacity, 2000 chicks every seven days. Free list. Ideal Poultry Yards, Hoquiam, Wash.

FOR SALE—S. C. RHODE ISLAND RED cockerels from a noted exhibition strain of heavy winter layers; flock averaged 61 per cent through the winter months, $5 each. Shipped on approval. Mrs. Earl Day, Colfax, Wash.

IMPERIAL PEKIN DUCKS, PRIZE WINNING, long bodied, heavy kind; large, choice young drakes, $3; eggs and baby ducklings, Mammoth Bronze turkeys. Low prices. H. L. Moody, Parkland, Wash.

"FRESHLAID" WHITE LEGHORN CHICKS for 1924 will produce results. Thirteen years production of real chicks. World's largest electric incubator. Free catalog. Freshlaid Farm, Colfax, Wash.

PULLETS—CHOICE W. L. PULLETS, APRIL hatch; husky, free range birds of Hollywood strain; heavy laying stock; ready for the laying pens; $1.85 each. Pulletpens, Prosser, Wash.

HUNT'S BARRED ROCKS, UTILITY COCKerels from the best egg producers, Imperial Ringlets, both matings. Prices right, satisfaction guaranteed. W. A. Hunt, Lebanon, Ore.

ANCONAS—BACKED BY OFFICIAL CONTEST records and splendid list of winnings in the west's leading shows. Booking chick and egg orders. Oscar Dunlap, Junction City, Ore.

SPECIAL PRICES ON GUARANTEED DAYold pullets; fall and winter delivery. Write for particulars. Eureka Hatchery, Petaluma, Cal.

ONE, TWO AND THREE YEAR OLD BRONZE turkey hens, $6 each; toms, $15; May hatched toms, $6. Mrs. Roy Watkins, Olex, Ore.

BOURBON RED TURKEYS—150 CHOICE young toms and hens; large and well marked. Mrs. A. H. Yates, Parma, Idaho.

S. C. BROWN LEGHORNS, PEDIGREED stock. Write your wants to E. H. Rosenkranz, Colfax, Wash.

ROSE COMB BLACK MINORCAS—COCKERels, $2; pullets, $1; hens, $2. Mrs. Carley, Carley, Wash.

TO MAKE ROOM, WILL SACRIFICE ROCK and Leghorn breeders. D. W. Allen, Laconner, Wash.

24 PUREBRED ROCK PULLETS, $1 EACH; also cockerels at $2. J. R. Moon, Oakley, Idaho.

JERSEY BLACK GIANTS, FIVE MONTHS old, $2.50 and $3. E. M. Chambers, Bovill, Idaho.

PRINTING FOR POULTRY MEN. EMPIRE-Pacific Printing Co., Auditorium bldg., Spokane.

BROWN LEGHORN HENS, PULLETS AND cockerels for sale. B. Campbell, Freewater, Ore.

BLUE ANDALUSIAN COCKERELS FOR SALE. Mrs. Dan Calbreath, Monmouth, Ore.

FARMERS' WANT ADS

This is the farmers' "want," "sale" and "exchange" department for small advertisements of farmers, including live stock and poultry.

Advertising rates for ads running 1 to 3 times, 10c per word per insertion, with a special rate to Farmer subscribers, as follows: Ads running 4 to 12 times, 9c per word per insertion; ads running 13 times or more, 8c per word per insertion.

All commercial and land advertising, 10 cents per word per insertion. Open also to nonsubscribers.

In using these columns advertisers must observe (1) No advertisement will be accepted for less than $1.00 per insertion. (2) Every word, number and initial, including name and address, must be paid for. (3) New advertisements, changes of copy or cancellations must reach general office, Spokane, Wash., 10 days in advance of publication date. (4) Cash must accompany order.

Above rates include insertion in The Washington Farmer, The Idaho Farmer and The Oregon Farmer, which constitute the Pacific Northwest Farm Trio, 46 Review building, Spokane, Wash.

POULTRY (Continued) 174

WHY DELAY?—PLACE YOUR ORDER FOR 1924 chicks with the White Hatchery, the hatchery with a reputation for good chicks. Safe arrival, full count guaranteed. Member Accredited Hatcheries, Sonoma county, "A" and "AA" stock. Price right. Send for catalog. White Hatchery, Petaluma, Calif.

POULTRY AND LIVESTOCK WANTED 175

WE GUARANTEE TO PAY THE HIGHEST market price for your poultry and live stock. Owing to the constant changes in the market we are unable to quote prices in this paper from week to week. We will furnish tags and prices when you are ready to ship. Write us what you have to sell. Prompt returns. John Lewis & Co., Spokane, Wash.

DOLLARS FOR YOUR EGGS—WE PAY THE top market prices for your eggs and poultry. Daily cash remittances. McClintock-Trunkey Co., produce department, Spokane.

WE PAY TOP PRICES FOR YOUR LIVE OR dressed veal, hogs and poultry. Your check by return mail. Shipping tags on request. M. & J. Packing Co., Spokane.

TOP PRICES PAID FOR CREAM, EGGS, poultry, turkeys, geese, ducks. Inland Products company, Second at Cedar. Dept. E, Spokane, Wash.

LIVE POULTRY WANTED—WE REMIT promptly at market prices. Commercial Creamery Co., 1327½ Railroad, Spokane, Wash.

WE WANT YOUR TURKEYS, GEESE, POULtry and eggs; highest prices, Hotchkiss Produce company, Spokane.

SHIP YOUR POULTRY AND EGGS TO THE Washington Meat & Poultry, Spokane, Wash.

LIVE STOCK 177

NOTICE TO SHEEP MEN—I HAVE 50 RAMbouillet yearling bucks for sale. They are large, smooth, heavy, tight fleeced and very heavy shearers. Two bucks from this bunch have completed the fair circuit of the northwest. They took first and champion at Spokane, Yakima and Salem fairs. The decision of the judges is to the effect that these are the best Rambouillets in the northwest. I will price these sheep to you at a reasonable figure. Order promptly as no reservations will be made. Orders will be filled as received. E. C. Burlingame, Walla Walla, Wash.

FOR SALE—FULLY ACCREDITED HERD OF one hundred registered Holsteins, 70 cows, yearling heifers and calves; herd in hands of assignee and must be sold; a real bargain to purchaser of entire herd. Mark Hunt, Route A, Helena, Mont.

JERSEY BULL FOR SALE—BIG BOY'S ARMistice No. 222764, dropped November 11, 1922. Solid dark color, first prize junior bull class, Twin Falls county fair, 1923. A bargain for this particular individual. $100. Filer Seed company, Filer, Idaho.

25 REGISTERED GUERNSEY FEMALES FOR sale; imported and American bred young cows, heifers and heifer calves of correct type and blood lines. Leslie G. Perry, Wendell, Idaho.

HAVE TOO MANY REGISTERED POLAND Chinas, and for quick sale will make attractive price on boars, sows and some shoats. T. I. Robinson, Carlton, Ore.

SUSY'S ST. MAWES 2D YEARLING GRANDson for sale; backed by highest producers; registered Airedale puppies and matrons. Wiley, Kent, Wash.

FOR SALE—HOLSTEIN BULLS, COWS AND heifers, sired by senior champion Washington state fair. D. F. Nugent, Granger, Wash.

FOR SALE—CHESTER WHITE BOARS. Write for prices. Booking orders for bred gilts. H. S. Curtis, Palouse, Wash.

JERSEY BULLS FOR SALE—GOLDEN CICEro's breeding; prices reasonable. Alex Harold & Son., Salem, Ore. Route 8.

CHOICE DUROC JERSEY SERVICE BOARS, open and bred gilts; priced to sell. Geo. De Bok, Oregon City, Ore.

MILK GOATS—REGISTERED SAANENS AT prices that will please you. Ferd. H. Dietzel, Portland, Ore.

REGISTERED HAMPSHIRE BREEDING bucks and ewe lambs. Far Niente Farm, R2, Bothell, Wash.

REGISTERED POLAND CHINA BOAR, price reasonable. Henry P. Carstensen, Almira, Wash.

FOR SALE—20 YOUNG FEMALE HOLSTEINS, about ¾ purebred. H. E. Westby, Newport, Wash.

HOGS—REGISTERED SPOTTED POLAND China. Howard Tucker, Route 1, Boise, Idaho.

REGISTERED SHROPSHIRE RAMS AND ewes. Write McK. Edwards, Valley, Wash.

REGISTERED ANGORA BUCK GOATS, $15, crated. C. D. Hartman, Silverton, Ore.

FOR REGISTERED DUROCS, WRITE F. L. Stocking, Caldwell, Idaho, R4.

MILK GOATS, BRED DOES, $10 TO $25. Fannie Branson, Dallas, Ore.

HARNESS and SADDLERY 189

SEND FOR FREE HARNESS AND SADDLE catalog today; cut out the middleman, buy direct from the manufacturer. Lowest prices in the west; satisfaction guaranteed. Established 1881. Write Pierce Harness Co., Dept. T, Spokane, Wash.

HAY FOR SALE. 200

ALFALFA, GRAIN HAY, TIMOTHY AND straw; guaranteed quality; prompt shipment. Prices upon application. Richard Nyman, Walla Walla, Wash.

HOTELS 300

WHITE'S HOTEL AND RESTAURANT. ROOMS $1 and up; special weekly rates. Stevens and Sprague. Right on the corner; 5 minutes from all depots. In heart of the business district, Spokane.

JOB PRINTING. 372

WEDDING ANNOUNCEMENTS AND INVItations, catalogs, booklets, high school annuals, letter heads, envelopes, cards, butter wrappers, etc. Union Printing Co., 412 First ave., Spokane, Wash.

JOB PRINTING (Continued) 372

LETTERHEADS, ENVELOPES, BUTTERwraps, special prices; 500 letterheads, $4.25; 500 envelopes, $3.25; 1000 letterheads, $5; postage paid. Gazette, Kendrick, Idaho.

CLEANING, DYEING, Etc. 420

FRENCH DRY CLEANING BY PARCEL post. Ladies' and gents' suits, furs, hats, etc., prompt service. Address City Dye Works (Dept. A), E422 Sprague ave., Spokane, Wash.

TANNING 425

WE WILL TAN YOUR COW OR HORSE HIDE for robes or coats, and guarantee our work. We are custom tanners, manufacturers and taxidermists. Write for prices. Spokane Fur Tanning Co., 7 Pine st., Spokane.

ANY KIND OF HIDE TANNED WITH HAIR on, or for leather. Fur and taxidermy work done to order. M. R. Mohr Co., 321 Sprague, Spokane, Wash.

TAXIDERMISTS 426

DEER HEADS AND BIRDS MOUNTED, HIDES tanned and made into rugs and robes. Withers Bros., 913 Sprague ave., Spokane.

BEAUTY CULTURE 450

50C JAR VANISHING CREAM FREE—SEND only 75c for bottle of toning lotion for complexion and get 50c jar cream free, postpaid. XL-O Chemical Co., Inc., 12 Riverside, Spokane.

KODAK FILM DEVELOPING 472

FREE ENLARGEMENT WITH 75C ORDER high gloss print. Spokane Film Co.

FILMS DEVELOPED FREE—KODO, THE PICture King, 815 Stevens, Spokane.

MATERNITY HOMES 497

MATERNITY HOSPITAL; STRICTLY PRIvate; doctor in attendance; prices reasonable. Mrs. Elizabeth Peel, matron. W1324 Broadway, Spokane.

BUILDING MATERIAL 588

TO PATCH A HOLE OR BUILD A HOME use Perfection Plaster Wallboard. Easily handled with hammer and saw; fireproof, waterproof. Western Wallboard Co., Seattle, Wash.

SEEDS 620

FOR CLOVERSEED, PASTURE GRASSES, vetch, gray oats, etc., get latest prices, stating amount wanted. Lee Hershberger, Hubbard, Ore.

1923 CROPS GROWN MIXED TIMOTHY-ALsike, 9c; germination, 94; pasture grades less. Meador, Norwood, Idaho.

NURSERY STOCK 621

GROW NEW PEDIGREED WASHINGTON asparagus; best in the world. Roots now ready. Ask for circular. Cherries, pears, peaches, apricots, soy beans for silage and soil building. For lumber, shade, windbreak plant Siberian elm. Special prices on berries, grapes and asparagus for commercial planting. Home Nursery, Richland, Wash.

RELIABLE TREES AND PLANTS—PRUNES, apples, pear, cherry, peach, apricot, grafted walnut and filbert trees, gooseberries, currants, etc., at attractive prices for early orders. Send your want list today for quotations. Benedict Nursery Co., 185 E. 87th st. N., Portland, Ore.

ISLAND BELLE GRAPE PLANTS FOR SALE—Write for the grape book, giving directions how to grow them successfully, etc. Issued by E. H. Urban. Box 777, Bremerton, Wash., grower of Island Belle grape vines.

TREES—NOW BOOKING MAIL ORDERS AT reduced prices for limited time only. Apples, pears, peaches, nut trees, prunes, cherry, small fruits, etc. Live agents wanted. Lafayette Nursery Co., Lafayette, Ore.

NURSERY STOCK—PRUNES, WALNUTS, FILberts, fruit trees of all kinds, gooseberry and small fruits. Buy direct and save 50 per cent. Brooks Nursery, Lafayette, Ore.

TREES—CHERRY, PEAR, PRUNE, APPLE, walnut, filbert. Mazzard cherry seedlings. Prices based on production costs only. Homer R. Brixey, McMinnville, Ore.

NURSERY STOCK SOLD DIRECT TO PLANTers; apple trees a specialty; no agents employed; can save you money. Write for prices. Lawson Nursery, Gates, Ore.

FILBERT AND WALNUT TREES, THE BEST paying crops for the northwest. Write for prices on the different grades. Villa Nurseries, Route 1, Portland, Ore.

EVERYWHERE TO SELL OUR COMPLETE line of fine nursery stock. Cash weekly. Kimberly Nurseries, Kimberly, Idaho.

GOOD, THRIFTY APPLE AND PRUNE TREES at reasonable prices. R. B. Porter, Forest Grove, Ore.

TIMBER LANDS FOR SALE 645

FOR SALE—3½ MILLION FT. OF GOOD FIR timber; good location for sawmill. Lee Barker, Drain, Ore.

FARM LANDS FOR SALE 651

CLEARED MEADOW LAND; FINE FOR POtatoes, poultry, berries; few feet to paved highway; near several thriving towns; half mile to railroad, store, sawmill, schools; $100 per acre in 5, 10 and 20 acre tracts. Easy down payment, balance long time, 6 per cent. The finest land in Western Washington at the price. Full information from Carter, MacDonald & Miller, 208 Columbia st., Seattle, Wash.

HARRINGTON DISTRICT — 540 ACRES good wheat land; 100 acres pasture; creek; good buildings; macadamized road; two miles from Harrington; main line Great Northern; good schools, churches, stores; small payment will handle, balance easy terms; bargain; no trades. Owner, W. E. Shrader, Harrington, Wn.

20 ACRES GOOD HEAVY SOIL, SUITABLE for alfalfa, asparagus, strawberries and all garden truck; half under cultivation; adjoining irrigation canal and railway depot; four-roomed house. Write owner, E. A. Helps, R1, Kennewick, Wash.

FOR SALE—GOAT RANCH, 161 ACRES; IN Lincoln county, Ore.; outrange for 1000 goats. Chas. Fair, 2121 Temple st., Los Angeles, Cal.

FARM LANDS FOR SALE (Continued) 651

CUTOVER LANDS, EASY TO CLEAR; $8 TO $20 per acre; 25 miles north of Spokane; on hard surfaced highway; Great Northern and Milwaukee railways; excellent opportunity for dairying and stock raising with Spokane markets and creamery near at hand. Will help the man who will live upon this land and agree to clear a part each year by giving lumber to help start his buildings, and a purebred Jersey bull to groups of farmers. Interest and payments low. Write Milan Farms Development company, Dept. T, Old National Bank bldg., Spokane, Wash.

GET AN IRRIGATED FARM IN SUNNY Southern Alberta and assure yourself of a steady income. Favorable climate, rich soil and ample moisture mean good crops every year; low priced land; easy terms. Alfalfa, corn, wheat, oats, barley, vegetables, small fruits, etc., all yield heavily. Wonderful country for livestock. An opportunity to make a real attractive farm home near railways, town, good schools. Write for descriptive booklet to the Irrigation Council of Alberta, 12 Provincial building, Lethbridge, Alberta.

PUGET SOUND WATERFRONT FARM, THIRty acres, all cleared; 1-3 well drained marsh, balance good upland; 1000 ft. beach frontage; good house and barn, with water piped into both; hog house, poultry house; well settled neighborhood; school, cream, phone route; 3 miles from live trading center. This farm splendidly adapted to dairy and poultry; owner has business in town; will include some personal property and sacrifice on price if taken soon. D. W. Packard, Oak Harbor, Wash.

IRRIGATED LAND FOR SALE—THE STATE of Washington, through its division of reclamation, is completing the construction of the Whitestone project, in the Okanogan country. Mild winter climate, long growing season, smooth, level lands; no stumps or rocks; gravity water supplied by well-built canal; fifty-five dollars per acre and less. Extremely easy terms. Excellent chance for real farmers to make good. Jay Morrison, Postoffice Box 711, Wenatchee, Wash.

5000 ACRES, NEWAUKUM RIVER VALLEY; highest type level farming land; all rich, productive soil. No gravel. No floods. No crop failures. Well developed district. Near Chehalis, Washington, 20 acres up, $15 to $50, easiest terms. Settlers can get steady employment years to come; good wages; and live at home. See local representative, St. Helens hotel block, Chehalis, or write Graham Land company, American Bank bldg., Seattle.

IDEAL DAIRY OR STOCK FARM—80 ACRES; 1½ miles from best town Colville valley; 40 in cultivation; 30 alfalfa; family orchard; large creek; good house, chicken house, spring water in house; good schools, market; $7500; $3000 cash; would lease. F. A. Yeomans, Chewelah, Wash.

BIG OPENING SALE OF YAKIMA VALLEY farm land, under an assessed state and government approved irrigation project; best, deep soil; close to town and good roads. Price $25 per acre and up. Very easy terms. Western Lands, Inc., owners, 918 Green bldg., Seattle.

SPLENDID OPPORTUNITY—POULTRY FARM with hatchery; five-room plastered house, five chicken houses, waterworks, garage, outbuildings, orchard; on Columbia highway, McNulty station, near St. Helens and Portland; part cash, balance easy. A. B. Larson, Warren, Ore.

BIG LUMBER COMPANY LAND SALE—IN Skagit county; 40-acre tracts, $1400; $200 cash, balance easy. Lots work for the settler. Splendid district, roads, schools, towns. Information free. H. C. Peters, 726 3d ave., Seattle.

SELL YOUR PROPERTY QUICKLY FOR cash; no matter where located. Particulars free. Real Estate Salesman company, 501 Brown ll, Lincoln, Neb.

157 8-10 ACRES, 35 MILES FROM SPOKANE; partly improved; buildings, spring water; near lake. Ida Frantz, Elk, Wash.

40 ACRES, RUNNING WATER, BUILDINGS; $8000; TERMS. Helen Zumsteg, Route 1, Hubbard, Ore.

FARM LANDS—Wanted 654

NO COMMISSION—SELL YOUR FARM through Washington Farm Bureau Exchange, represented in 45 states. Lists of farms for sale by owners mailed free. 312 Lindelle bldg., Spokane, Wash.

I HAVE INQUIRIES FOR FARMS IN NORTHwest. Describe fully and state price. R. A. McNown, 310 Wilkinson bldg., Omaha, Neb.

WANT TO HEAR FROM OWNERS HAVING farm for sale; give particulars and lowest price. John J. Black, Chippewa Falls, Wis.

WE HAVE BUYERS FOR SEVERAL FAIR priced farms and ranches. Central Land Bureau, New Franklin, Mo.

FARM LANDS FOR RENT 657

80 ACRES IRRIGATED LAND, IN YAKIMA valley, suitable for alfalfa, grain or truck farming. Also Colville valley diversified ranch, equipped. The Big Bend Land Company, 212 Symons bldg., Spokane, Wash.

IRRIGATED LANDS—For Sale 663

FARMERS AND STOCK MEN—THE COLUMbia irrigation district has several tracts of irrigated lands of various sizes, in the famous Kennewick valley, with plentiful water supply. The district wishes to get these tracts into the hands of good farmers who will put them to work, and will make very low prices and long terms to such men. No speculators need apply. One tract 580 acres, especially suitable for stock or dairy ranch. Write the secretary, Columbia Irrigation District, Kennewick, Wash.

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Cattle Ranch To College

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CHAPTER XVIII.

A Midnight Stampede.

On a wide flat the round-up outfit commenced working the big bunch. As the cutters-out dart here and there, whirling, dodging and following, the small individual bunches slowly increase in size, while the main bunch correspondingly dwindles.

John and his Lightning work away with other riders until only the nucleus of the herd remains, and in five minutes this too has vanished. Each outfit pauses to rest a few minutes before the counting and branding begin; in the meantime Jerry is coaxing the fire in which the branding irons are heating.

"What'll you give for the buckskin now?" said John with pardonable pride, as he drove in the last animal bearing the XXX brand.

"He'll do; but I want to see you rope with him before I take back all I've said," answered Jerry. "He cuts out pretty well, but you get a calf on your string and the string under his tail and he'll dizzy you," and Jerry began to poke the fire, chuckling the while.

"Oh! you're jokin'; I can ride him now without stirrups. I tell you he's a broke horse."

"The iron is hot now," broke in Jerry, as he rolled up his sleeves. "Let's see what your horse can do. Bring in your calves."

It was John's duty, with two other men, to rope the calves belonging to his ranch by the hind legs and yank them along the smooth grass to the branding fire, where Jerry applied the hot iron. He started Lightning on a run to rope the first calf, eager to prove his horse's ability.

One sleek little fellow stood on the edge of the XXX bunch, gazing in wonder at the horse and his rider. Doubtless the calf thought this a strange creature, able to separate into two parts and reunite without the slightest inconvenience. John went straight for it and broke off its cogitations suddenly by whirling his rope and throwing it under the little fellow. The calf started and jumped into the loop, and John quickly drew the rope tight, pulling its hind legs from under it and throwing the little animal heavily. Lightning was checked and the calf rolled over and began to struggle and bleat piteously. A green horse is nearly always frightened the first time he pulls on a rope; he does not understand it, and Lightning was no exception to the rule. The rope touched his shifty hind legs and he kicked out with all his might; it rubbed harder as the calf struggled, and the horse began to whirl and plunge viciously in his efforts to get rid of the line that scraped his sensitive sides.

Fortunately the little creature got loose at this juncture and escaped. True to prediction, the rope got under "Lite's" tail and now the fun commenced in earnest. He bucked as he had never bucked before, and all but stood on his head. The other outfits stopped work for the moment to see the sport.

Lightning fairly foamed in his rage and fear; he bucked continuously, and every time he struck the ground he gave a hoarse squeal—shrill and wicked. John's strength was sorely tried; but after his boasting it would never do to be "piled up," so he set his teeth and vowed he would stick, no matter what happened. The fury of the effort made it a short one, but it seemed to John plenty long enough, for during the five minutes the saddle was like unto a hurricane deck in a raging sea. But through it all John came out triumphant. In the words of a bystander: "The little horse bellered and bucked and the kid never pulled leather" (did not hold on to the horn of his saddle). Which was high praise from a cow-puncher to a cow-puncher.

"What'll you take for him?" called Jerry, as John dismounted to untangle the rope from "Lite's" heels.

"Money can't buy him," was the reply. John was bruised and stiff, but his pride was not broken and his faith in his horse was undiminished, though it must be confessed it had received a severe shock. "He'll bring that calf in or I'll kill him tryin'," he said sturdily, and he mounted "Lite" again and went back. He found the same calf, roped it, and "Lite," after a few futile plunges, dragged it up to the fire, where he stood with heaving, sweat-covered sides while the iron was applied. The hard lesson had been taught and learned for all time.

"He's got the making of a good cow-horse," admitted Jerry. "But, oh Lord! such a making!"

The way John worked the little horse that day would have seemed cruel to a novice, but he intended that he should never forget the experience of the morning, and he never did. The last calf was branded at dusk, and by the time this necessary torture was completed poor "Lite" was about done up.

The bunch was allowed its freedom for another year and the cattle began at once to wander off, the old cows licking the disfigured sides of their offspring, the calves shaking and writhing with pain, failing utterly to understand why they should be tortured thus. The wound soon heals, however, and though the soreness disappears the scar remains always.

The day's work was over; the coolness of evening succeeded the heat of the day; the men stopped work and rode slowly into camp by starlight.

John and Jerry unsaddled their tired horses and turned them over to the care of the night herder.

"I'm dead tired, stiff and sore tonight," said John, as he and his companion hustled for cups and plates in the dish box.

"It's a dog's life," returned Jerry, taking the cue. "If I'm ever caught on a round-up again I hope they'll tie me on a broncho and turn him loose." He grumbled on as he sipped his steaming coffee.

The two ate heartily and then strolled over to the main camp fire, where perhaps 50 men lay sprawling upon the ground smoking, talking and resting.

"Hullo, there's the three X kid!" some one shouted. "How's the legs, kid?" "How d've like astronomy?" said another.

And so the bantering went round, but John took it good-naturedly and even responded in kind. Soon a song was started, but the men were too tired to listen, and the singer stopped for lack of encouragement. About two hours after the day's work had ended all hands were rolled up in their beds and asleep, Jerry ending this first day on the round-up as he began it—grumbling.

"Cow-punching is a job for a Chinaman," said he, dropping off to sleep. It was the most scathing condemnation his imagination could frame.

This was but the first of a succession of days much alike, some easier, some harder, some full of incident and narrow escapes, others less exciting. The long dry spell had given way to a series of rainy days that were harder to bear than heat and dust. The wind-driven rain had a penetrating quality that nothing could withstand. The rider, after being in the rain all day, came into camp to find his bed saturated. The trying weather affected tempers, not only of the men, but of their charges, the cattle, as well; they were nervous and restless, and this was especially true when electricity was in the air. As Jerry had said, it was "regular stampede weather."

John had seen small bunches of stock break and run, and had followed them over ticklish country, but a big stampede had not yet been numbered among his experiences. He had often sat listening to some old veteran of the range tell of the horrors of a midnight stampede, when the great herds became an irresistible torrent of animal life driven on by unreasoning terror.

He knew that some time he would become an actor in such a scene and dreaded it in anticipation.

The sky was threatening when the riders were sent out one day to make the "big circle," as the gathering of cattle was called, a week or so after the organization of the round-up. By the time the bunch was collected it was raining heavily, and at intervals hailstones pelted man and beast viciously. The bunch was large that day, and as the storm continued the ground became too slippery and the cattle too crazy to attempt to work them. Nothing could be done but hold them together until things dried up a bit. The nervousness of the cattle was such that this required the activity of all hands.

John and Jerry were out in all this stress of weather, and, strange as it may seem, the older cowboy was almost happy; he had a really new and good chance for grumbling. "Even a coyote can hunt his hole and keep dry, but a cow-puncher has to sit up straight and take his medicine," said Jerry, almost triumphant in his feeling of just resentment. "The worse the weather the more he has to brave it," he continued. "If I'm ever caught on a roundup——"

"That's the tenth time you've said that today," said John, laughing in spite of his own discomfort. Jerry made a queer picture. His long, yellow oilskin slicker reached to his heels and was just running with water; the felt hat that almost entirely obscured his woebegone features dripped water down his neck. He looked as forlorn as an equestrian statue decorated with cheap bunting and paper flowers and thoroughly water-soaked.

Everybody was out of humor and no opportunity was lost to register a "kick."

"Say, you three X men," said the foreman, "scatter out there; d'yer take this for a conversation party?"

"The horses is stupid and the cattle is worst. If I don't miss my guess there'll be trouble tonight. If ever I get caught in a——" Jerry's voice died away in a mere growl as he rode off to his post.

Left alone, John turned his eyes to the sea of backs swirling up and down and around like an eddy in a troubled sea. Even now the half-crazed animals threatened to break through the frail line of men and scatter to the four winds.

And still the driving rain continued. A night in the saddle was inevitable—a dreary enough prospect. As evening drew near, flashes of lightning and peals of thunder added to the terror of the almost unmanageable cattle.

"Look at 'em steam," said John to himself, as he noted the vapor that rose from the acres of broad backs. "That's bad," said Jerry, as he came within earshot on his beat. "Steam brings down the lightning, men are high on horseback; steel saddles, metal spurs, six-shooters, and buckles make a man liable to catch it," and he disappeared in the mist, droning out as he went a verse of "The Grass of Uncle Sam" to quiet the cattle. It seemed futile to attempt to soothe the creatures by the sound of the human voice—they were in a tumult, and the slightest thing would set them off. For an instant there was a lull, and not only Jerry's but the voices of other riders could be distinctly heard singing and calling quietly to the cattle.

Suddenly there came a fearful flash directly overhead and streams of liquid fire seemed to flow in every direction. This was followed immediately by a tremendous clap of thunder. The effect was instantaneous. Each animal seemed to be possessed of a demon and rushed headlong in whichever direction its head happened to be pointed. In an instant the orderly herd was changed to a panic-stricken rout, and the riders were swept irresistibly with it. The lightning flash was blinding, and the darkness which ensued was intense; through this man and beast rushed pell-mell without a pause, recklessly.

John was with the other riders, was in the very midst of the mad, surging creatures, their eyes rolling in a perfect frenzy of fear, their very breaths in his face, their horns rattling together close beside and in front of him. It was every man for himself, but even in the midst of this frightful chaos the cow-puncher's sole thought was for his stock. John looked for a bunch to follow—to follow to death if need be, but if possible stop it. That was the plan in John's mind, but it seemed utterly impossible of fulfilment. There was no bunch; each animal for once went off on its own hook and the confusion was fearful.

"I'll follow one then," said John to himself. Then to his horse: "Stand up now, old 'Lite.' If you fall you're a goner."

One big steer alongside ran strongly, and John let "Lite" know that it in particular was to be followed. He couldn't be seen in the darkness, but "Lite" could smell him and kept at his flank. Away they went through mud and sage brush, over badger holes and boggy places. What lay in their path was a mystery, but "Lite" stuck to his leader like a leech. There was no time to reckon chances, if such a thing were possible.

As vapor forms into raindrops, the running cattle began to draw together into groups which enlarged momentarily. John was now following one of these groups, but in the pitchy darkness he could not tell how many it numbered. As pursued and pursuers rushed on, the smooth, rolling prairie was left behind, and rough, broken country was encountered. Up steep-sided gullies they struggled and down slippery hillsides they scrambled after the terror-stricken cattle. "Now's our chance," said John, speaking, as was his wont under strong excitement, to his horse and patting his neck in encouragement for the supreme effort that was to come. He spurred to the front and began to turn the leaders around. He struck them on the nose with his quirt, slapped them with his hat, and yelled at them.

Slowly one leader, then another, turned; others immediately behind followed, until the leader caught up with the tail of the bunch and round they went in a circle. "They're milling beautifully now, 'Lite,'" said John to his horse again. "We'll keep 'em at it till they're too tired for funny business."

The circle gradually slowed to a trot, then a walk, then stopped altogether. The cattle were utterly exhausted, heads down, sides heaving and steaming.

John leaned over in his saddle and patted his little horse affectionately. His feeling was one of fondness mixed with gratitude for the pony whose wiry limbs, sure feet, good bottom and intelligence had carried him safely through a difficult and dangerous duty. He thought of what had passed, and marvelled that he was alive. To make such a journey amid the tossing horns and thundering feet of the cattle, over treacherous ground, in total darkness, seemed an impossible feat, and yet here were horse and rider covered with mud, saturated with water, almost unbearably weary, it is true, but without a scratch. John began to realize the danger, now it had passed, and appreciated the fact that to his game little horse was his safety due. "Lite" received the caressing pat on his nose and the words of praise his master gave him with commendable modesty.

The cattle were willing now to stand and rest; they all were trembling with fear and exhaustion and seemed in no condition to continue their flight. "Lite," too, was pretty well done up, so John dismounted and unsaddled him; then, after putting one blanket over him, he wrapped himself in the other and lay down in the mud to sleep. It was cold and sopping wet, but John's inward satisfaction made outward discomfort trivial.

The hours were long before daylight—longer, the boy thought, than he ever knew them to be before. He was glad enough when the sun came and he was able to size up his capture. They numbered 50 head, and proud enough he was.

"Lite" was feeding near; at John's call he came up and, without his usual capers, allowed himself to be saddled. The two started the bunch toward camp—weary, hungry, sleepy, wet and cold, but triumphant.

"My first stampede and back with 50 head," said John to his horse. "Not bad work, and I couldn't have done it but for you."

The storm had spent itself during the night and morning broke gloriously fine. John and Lightning kept the cattle going as fast as their strength would allow, which was all too slow for the boy, who was anxious to show his work to Jerry—his chum, his friend and counsellor—Jerry the grumbler, the good-hearted. He knew

Bits of Fun For Everyone

On Sister and Sister's Chum.

Mazie—What do you think of Patricia?
Peggy—Well-er-she's a very nice girl——
Mazie—No, but cat to cat, what do you think of her?—American Legion Weekly.

We Know Her.

There was a young lady named Maud;
A very deceptive young fraud.
She never was able
To eat at the table,
But out in the pantry—O Lawd!
—Ohio Sun Dial.

The Only Way.

"Johnny," said the teacher sternly, "I want you to tell me where you learned to swear!"

"Aw, I just picked it up, teacher," said Johnny. "But if you wanta learn I can't teach you none. You gotta go out where it's bein' done an' listen until you get it!"—Richmond Times-Dispatch.

Now You Tell One.

An Irishman, an Englishman and a Scotsman were all out of work. They traveled together in search of employment, and came to a farmer's house and applied. The farmer said whoever could tell the biggest lie could have a job. The Englishman said he went to the North Pole in a tub. The Scotsman said he swam to the South Pole. The farmer then asked Pat, "Well, Pat, what is your lie?"

"Begorra, sir," said Pat, "I believe these lads." Pat got the job.—Winnipeg Tribune.

Mistaken Identity.

"As I was crossing the bridge the other day," said an Irishman, "I met Pat O'Brien. 'O'Brien,' says I, 'how are you?' 'Pretty well, thank you, Brady,' says he. 'Brady!' says I, 'that's not my name,' 'Faith,' says he, and mine's not O'Brien.'

"With that we again looked at each other, an' sure enough, it was nayther of us."—Shevlin Equalizer.

After Thought.

A lady who kept a little curly poodle dog lost her pet and called on the police to find it. The next day one of the force came with the dog very wet and dirty.

The lady was overjoyed and asked a lot of questions, one being:

"Where did you find my darling?"

"Why, ma'am," said the officer, "a fellow had him on a pole and was washing windows with him."—Selected.

that he would appreciate it, though he might joke.

As the bunch appeared on a little rise a short distance from camp, a horseman galloped out to meet them and to help drive them into camp. "Hullo, kid!" said the man, when he got within earshot. "You've done pretty well; biggest bunch that's come in yet."

"Oh! I've had a great old time," John began jubilantly, feeling as if he had not seen a human being for a month and must talk. "See that big spotted steer there, leadin'? Well, I follered that feller eight miles in the dark last night an' he set me a red-hot pace, you bet—but the buckskin here," patting "Lite's" mud-spattered shoulder, "followed him close all the way."

"Well, you look it; got enough mud on yer to weigh down a team of iron horses."

"How many cattle back?" asked John.

"Only 'bout half the bunch."

"That's too bad," sympathized the boy.

"That's not the worst."

The man stopped, and John noticed for the first time a peculiar expression on his face.

"What's the matter?" said he.

"One of your men——" he hesitated.

"Well?"

"One of your men," he repeated, "went down last night."

"It wasn't Jerry?" cried John anxiously, having a premonition suddenly of something dreadful. "Say it wasn't Jerry!"

"Yes, it was Jerry." The man spoke the words slowly and solemnly. "Horse's leg went into a badger hole and the cattle trampled him."

(To be continued.)

Your Health

By Royal S. Copeland, M. D., F. A. C. S.

When your stomach begins to "go back" on you and you find your food resting heavily, you should find out what is wrong. It is probable the cause is trifling and will be removed without difficulty. But if you neglect the condition you may wake up some day to find out you are in serious trouble.

Dr. Copeland.

To be hungry is natural and desirable. To have gnawing or aching pains in the stomach an hour or two after eating or an hour or two before meal time is a bad sign.

Nausea in the morning after eating, or, for that matter, at any time of day, is a symptom which should not be disregarded. Belching of gas, eructation of food and vomiting give evidence of a disability worthy of your attention. Indigestion and all the symptoms I have suggested are grouped under the common title—"dyspepsia." Dyspepsia is a term which means little more now than a general inclusion of a lot of symptoms relating to the stomach. It was formerly used as the name of a disease. Today doctors recognize that these common symptoms may be sifted and with the aid of the X-ray and various laboratory tests the exact disturbance may be located and defined.

Ulcer of the stomach causes pain, nausea, vomiting and the familiar chain of dyspeptic symptoms.

Disease of the kidneys may have various dyspeptic symptoms.

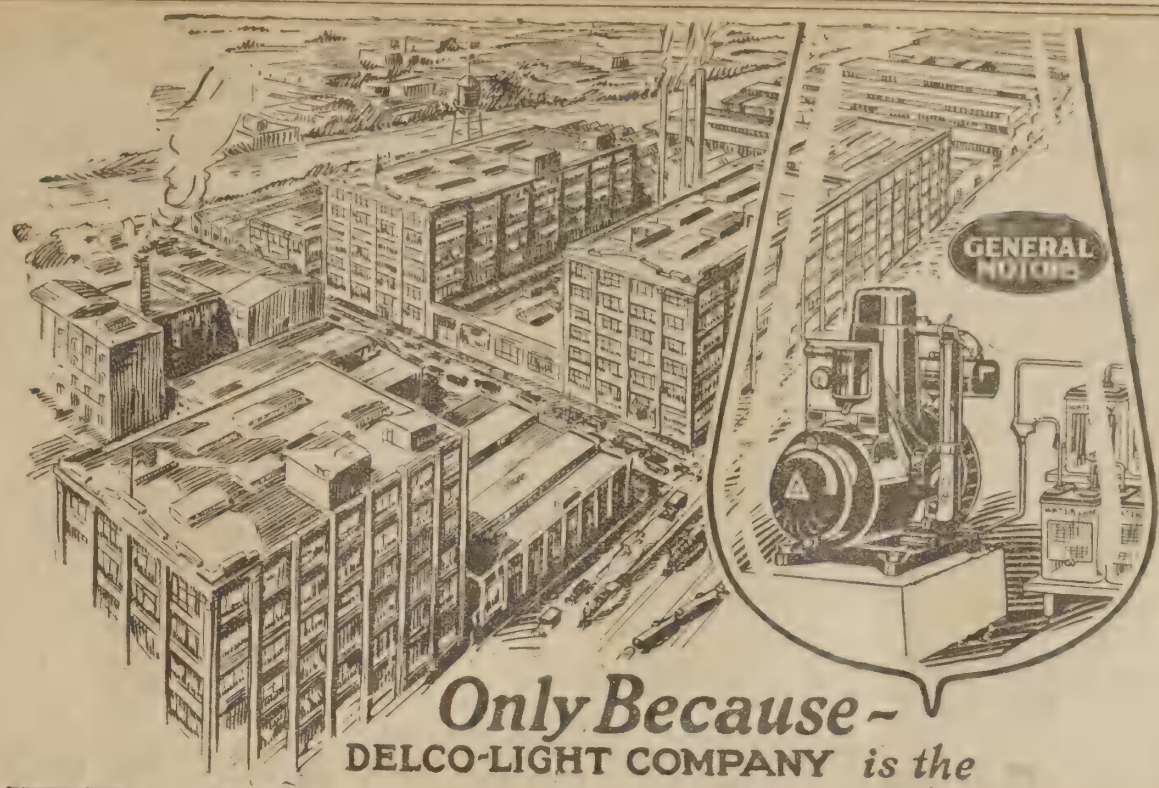
Cancer of the stomach is another of the serious diseases which may upset digestion and produce pronounced symptoms of dyspepsia.

These three conditions—ulcer, Bright's disease and cancer—are capable of discovery by the careful tests I have suggested. It is by early recognition and early treatment that satisfactory methods of remedying the trouble can be applied.

There is another form of dyspepsia, due to anemia, overwork, habitual loss of sleep or nervous exhaustion. This type is usually called nervous dyspepsia, because it seems to be the effect of a failure of the blood and nerve supply of the stomach, its muscular walls and lining membrane.

It is useless to attempt a cure of nervous dyspepsia by taking soda tablets or other drugs intended to neutralize the excessive acidity of the stomach contents. Such treatment will give temporary relief, but, of course, the trouble can not be removed until the ultimate causes have been reached.

Before going to your doctor to worry him with your troubles, give yourself and your habits a careful survey. Everybody should know enough about foods, beverages and the simple rules of personal hygiene, to discover where the fault is in his manner of living. Put your life on a higher physical plane and see if the dyspepsia does not disappear.



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FAMILY CIRCLE

ALICE W. BARLAND
EDITORIAL CONTRIBUTOR

Oh, mothers whose children are sleeping,
Thank God by their pillows tonight,
And pray for the mothers now weeping
O'er pillows too smooth and too white!
Where bright little heads have oft lain,
And soft little cheeks have been pressed,
Oh, mothers who know not this pain,
Take courage and bear all the rest.
—Selected.

Dear Family Circle: The time has come when I think it appropriate to give you a resume of the questions we have dealt with for many weeks, and we will from this time have no further discussions on these questions.

I have received many hundreds of letters and have tried to give you those which have presented the subject from different angles. I have received very many letters which were well worth publishing, but because they didn't differ in ideas I haven't used them.

You have noticed, I am sure, and several have written to ask why the girls who are classed as "flappers" have not written. Some have, but never could I be sure that they gave their right name and address, even if they gave any at all, which was very seldom. Only about one in a hundred have written who classed themselves with the drinking, smoking kind. Some boys have written who seem to belong to the "male flapper" class, but very few, and not one ever gave any sort of clew as to who he is. This makes me think that these old young people who would make us believe that they have already learned all there is worth while in the art of living, are not, down in their hearts, quite so cock-sure as they would like to have us believe.

Some have written that their parents do not approve of their going out nights on the wild rides, but that they are determined to have a "good time," so they sneak out without permission.

As you read these lines, my dear parents, let me urge you to keep the confidence of your children at any cost of personal comfort to yourself. Allow them to have their company at home. Do not forget that it is as natural for girls to want to dress up in becoming clothes and have young people about them as it is to breathe. When boys come to the age where they take pains to scrub up and pay some attention to brushing their clothes and arranging their neckties they are old enough to enjoy picnics and parties where girls are in attendance. Remember this and also remember that if you don't provide the entertainment they will find it. This wild dash for a "good time" seems to be the main business in life of the flapper type of both girls and boys.

Here are a few extracts from some of their letters. This is from a girl of 16, who says she lives near Portland, Ore., but seldom attends dances there, as she prefers to go to the "country places which some call rough and wild." She continues: "I do not hesitate to walk six and seven miles to attend a dance. I believe young people should enjoy their young days the best way they know how, and if smoking, drinking and 40 miles an hour car rides are enjoyments for them, why, let them indulge, like myself. I am engaged to be married, as my four brothers are my only guardians and they approve of early marriages. They all smoke and are fond of drinking liquor." These wonderful words of wisdom (?) fall from the pen of a girl only 16. Here is a picture of a whole family who have no regard for the law of our country, the greatest and most wonderful on the globe. They have no regard for the 18th amendment to the Constitution and seek what they call pleasure in open defiance of it.

To disregard the Constitution of our country is not good citizenship and those who so disregard it are not loyal Americans.

This wild dash after a "good time" turns the heads of too many of the young people. They breathe restlessness, for it is in the air. Many of the girls begin their careers in the public dance halls at the age of 12 years. They should be in bed at the time the parties begin. I have had letter after letter from girls who tell me they have been going to dances and smoking since they were 14 years old and the swagger and bravado noticeable in their statements is enough to make one weep. They have lost the fine sense of womanly refinement, which is the heritage of every woman and which is like the velvet on a peach, which once removed by harsh rubbing can not be restored. And the pity of it is the girls are not conscious of the loss to their characters. I have said the excitement and restlessness is in the air and it is felt and given way to by all ages. The old-time quiet home life is almost unknown. Well do I remember the old living room at home where of winter evenings, the long table held two and sometimes three big kerosene lamps, for heat and light were things that my father always insisted upon having.

I can see the picture of that room as plainly as if I were there this moment. There was father with his weekly paper or very often his "account book," for he was about the only man in that neighborhood who ever had more grain than was necessary to have for immediate use, and it was a very common thing to see a neighbor's wagon in front of his granary borrowing grain. Father faithfully made note of the item, but seldom was the grain all returned and many times none of it.

Mother would have her knitting or mending and the older children would be leaning over the table with their favorite papers spread out before them. Every one was happy and contented and when it was 9 or 10 o'clock we were all in our beds and the house quiet.

There were no movies to lure us away and no autos to make "going" an easy matter. We had time to read and an opportunity to get acquainted with our parents and with each other. And we had our pleasures outside the home, too. There were the neighborhood picnics and parties; there were the preaching services in the schoolhouse and the Sunday school and the singing classes and the fun-provoking spelling bees.

And we had good times in our own home, too. Many were the big sleighride parties we had, where it took four horses to haul the load of joyous young people who came tumbling out of the long sleigh at our door to enjoy a good oyster supper and nice doughnuts and chocolate.

Then there would be games where the head was exercised instead of the feet and father and mother enjoyed it all as much as the young folk. Our home was typical of many, though I knew too many people at that time also who were not so considerate and who never opened the home for innocent fun. But it paid our parents for any cost of personal comfort, if there was any, to make the home attractive.

There were four boys and two girls. Three of the family took degrees in various colleges, all grew to be men and women, all were members of churches and respected in their communities, and the boys were all successful business men. The younger girl is a happy wife and mother of four fine children; the next younger you should begin to know very well by this time. She has tried to be a friend to all of you for years and has a deep desire to aid in making all the homes of the Circle readers happier and more dear to the young people.

Two girls of 14 wrote me a joint letter and said they were good girls, but that their brothers and parents, especially their father, were so strict with them that they went away for good times when they would have been glad to have fun at home. The girl writing says: "Parents don't seem to realize that young people will have entertainment in their leisure hours. It appears to us that a girl can be perfectly decent and respectable and yet mingle with young people, both boys and girls. And when a father is so strict that he will not allow his girls to go riding to make a call, on horseback, the girls are pretty apt to yield to temptation and accept an auto ride from a young man when they would otherwise have gone on horseback and enjoyed it more." She goes on to say: "This lack of trust sours and discourages girls and they often leave home to seek work elsewhere while so young that it would be better for them to remain with their parents." She closes the letter with these words: "Therefore, we say to the parents, allow your children to have company at home and mingle with them and help to entertain the young folks. Treat them the same as if they were your company and as if you enjoyed having them there. We are glad of an opportunity of expressing our ideas.
PAT AND MIKE.

I don't want my message so long that you will tire of it, so I shall make it continued in the next number. Your friend,
ALICE W. BARLAND.

A Few Good Ideas

A teaspoon of vinegar beaten into boiled icing will keep it from breaking.

Will some one tell how they save their geraniums over winter? If put in the cellar, do you hang them up or give them a little water in the pots? A sister wants to know.

One ripe banana sliced and beaten with the white of an egg with a little sugar added makes a good substitute for whipped cream, as the banana dissolves. This will make a good filling for a cake, too.

Good Fences Pay Profits

One of the most profitable investments you can make on the farm is building strong, effective, hog-tight fences. This enables you to pasture fields, rotate crops and farm on a modern scientific basis. Make sure of honestly constructed fences of full gauge, heavily galvanized wire by using Pittsburgh Steel Company's

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Read the "Want Ad" page this week for good offers of all kinds.

Just Folks

Manhood and womanhood are the basic requirements of farming.

That which adds to manhood and womanhood on the farm is the largest and best contribution which can be given by agricultural extension workers. Having made this contribution, the ways and means of better farming and better home making on the farm will be much more eagerly sought.

Only consider two virtues and see how they can be of inestimable value to the farmer and his wife.

Courage is about all there is to life, anyway. With courage comes the smile that makes for soul satisfaction, under most trying circumstances. Courage gives hope. Courage is eager for the good fight. At its best, courage becomes triumphant as difficulties multiply.

Then there is acceptance of the situation. This is not weak-kneed fatalism. It is the acceptance of the fact that night follows the day and the morning follows the night; that age creeps on to youth, and in short that the pendulum is the method of all life.

There is no such thing as following the even tenor of your way. You are either swinging to the end of so-called prosperous days or returning to the so-called days of adversity.

Loss of friends, loss of health, loss of money are a part of life just as much as happy days with friends, health and money.

The interplay of these forces are marvelous to those who have learned to accept them. Now and then a friend may stay by you when your money is gone. Now and then money may stay by you when your friends are gone. A single indiscretion in health may ruin your life, and a series of bodily indiscretions may follow you to the end of coveted years.

Many of these things in life we make poor headway in trying to understand. Having tried according to our ability to understand, there is nothing to be done but accept the situation and move away from Growler's Hill.

Having accepted the situation, courage is given an opportunity to point the way to new worlds to conquer, and there is scriptural authority for the belief that the biggest of all worlds to conquer is to rule your own spirit.

E A S

Latest High Class Patterns for the Home

Please order the patterns you desire at least two or three weeks before you wish to use them. Desiring to obtain the latest high-class patterns for its readers, THE FARMER has made arrangements to have them sent direct from the east, and under present mailing conditions it takes about that time for them to reach you.

4516. Ladies' Dress. Cut in 6 sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. A 38-inch size requires 5 1-8 yards of 40-inch material. The width of the dress at the foot with plaits extended is 2 3-8 yards. Price 10c.

4202. Juniors' Dress. Cut in 3 sizes: 12, 14 and 16 years. A 14-year size requires 2 1-2 yards of 54-inch material. Price 10c.

4137-4513. Ladies' Costume. Waist 4137 cut in 7 sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. Skirt 4513 cut in 6 sizes: 25, 27, 29, 31, 33, and 35 inches waist measure. To make the costume for a medium size requires 6 1-4 yards of 40-inch material. The width of the skirt at the foot is 3 1-4 yards. Two separate patterns 10c for each pattern.

4514. Ladies' Coat. Cut in 6 sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. A 38-inch size requires 3 7-8 yards of 54-inch material. Price 10c.

4268. Ladies' Apron. Cut in 4 sizes: Small, 34-36; medium, 38-40; large, 42-44; extra large, 46-48 inches bust measure. A medium size requires 3 3-4 yards of 36-inch material. Price 10 cents.

4534. Girls' Dress. Cut in 4 sizes: 6, 8, 10 and 12 years. A 10-year size requires 2 1-8 yards of 54-inch material. Price 10c.

4523. Lady's Morning Dress. Cut in 7 sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. A 38-inch size requires 4 1-4 yards of 40-inch material. The width at the foot is 2 yards. Price 10c.

4531. A Smart Costume: Cut in 5 sizes: 6, 8, 10, 12 and 14 years. A 12-year size requires 4 7-8 yards of 36-inch material. If upper flounce is omitted 1-2 yard less is required. The hat alone requires 1-2 yard. Price 10c.

4540. Child's Dress. Cut in 4 sizes: 4, 6, 8 and 10 years. A 6-year size requires 3 yards of 32-inch material. Price 10c.

3711. Boys' Suit. Cut in 4 sizes: 3, 4, 5 and 6 years. A 6-year size requires 3 3-8 yards of 27-inch material. If made as illustrated trousers and collar will require 1 7-8 yards of material and blouse 1-2 yard. Price 10 cents.

4532. Girls' Under Garment. Cut in 5 sizes: 6, 8, 10, 12 and 14 years. A 12-year size requires 2 1-8 yards of 36-inch material. Price 10c.

4093. Child's Coat. Cut in 4 sizes: 6 months, 1 year, 2 and 3 years. A 2-year size requires 1 5-8 yards of 40-inch material. Price 10c.

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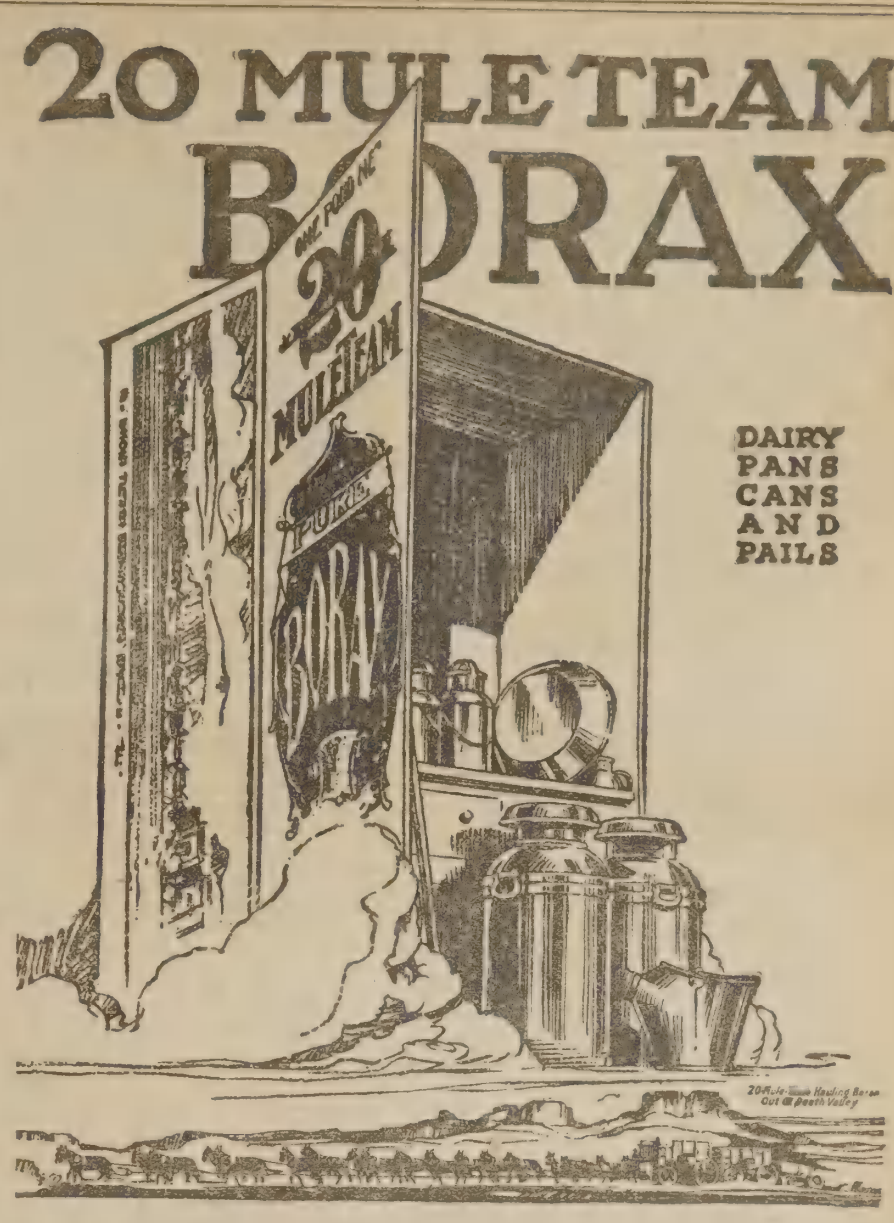

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High Points in News of the Week

A bad state of affairs has existed in Germany during the past week. The separatists, led by Leo Deckers and Dr. Guthardt, proclaimed a Rhineland republic at Aix-la-Chapelle on Sunday, October 20. Not a drop of blood, however, was shed, but the separatists took possession of the city hall and public buildings and control of the police services. The regular police finally ranged themselves on the side of the republic. Deckers informed the Associated Press correspondent that he planned to put all the cities in the French and Belgian areas, plus Elberfeld and Barmen, in the unoccupied territory, in the hands of the republicans within five days. Deckers said he had no thought of stealing a march on Joseph Matthes to get glory for himself. They all had the same aims, he explained.

Violent incidents occurred in Aix-la-Chapelle Monday night. The police decided to oppose the separatists and tried to tear down the Rhineland colors from public buildings. Several persons were killed in fights that followed.

Tuesday the loyalists recaptured the buildings in Aix-la-Chapelle held by the separatists, except the provincial government building. The separatists also were defeated at a number of places where they established themselves during the previous days. Twenty-one persons were killed and 22 wounded at Hamburg on Tuesday. The outbreak of rioting began when communists attempted to storm the police stations in the city.

Tuesday night found the separatists having a precarious hold on Coblenz and Duisberg, being fairly well settled in Duren and Treves, and having divided authority with the French in Weisbaden and Bonn.

The flight of Joseph Matthes, a member of the separatists' directorate for the Rhineland republic, on Wednesday put a further crimp in the Rhineland republic. On Thursday Berlin reported the situation in the Rhineland still far from clear. German accounts of the latest events there allege that the allied occupation authorities, including the French, now are actively opposing the separatists.

Saturday open and active French support is said to have enabled the Rhineland republic to extend its hold over a number of smaller towns and villages and that Joseph Matthes and his supporters in the separatist movement still held Coblenz. In the meantime, France, Belgium and Italy have accepted the British invitation for a reparations conference with the understanding that it shall take the form of a committee of experts under the authority of the present allied reformation commission. America's decision to lend her advice and cooperation in the conference seems to have lifted Europe out of the slough of depression. Secretary Hughes' prompt and decisive response to Marquis Curzon's plea for America's assistance has given impetus to the situation, which has heretofore been almost hopeless.

Lord Curzon's request was for American participation in any form, either official or unofficial, to participate in an inquiry by a special commission appointed by the reparations commission. In his reply to Lord Curzon Secretary Hughes desires again to express the deep interest of the United States in the economic situation of Europe and of her readiness to aid in any practical way to promote recuperation and reestablishment of economic stability, further declaring that "the government of the United States is therefore entirely willing to take part in an economic conference in which all the European allies chiefly concerned in German reparations participate for the purpose of considering questions of the capacity of Germany to make reparations and an appropriate financial plan for securing such payments.

It is also important to note that the French government has accepted the British proposal for an examination into the German capacity to pay reparations. It is also to be noted that since the United States is not a party to the treaty it can not participate officially in the activities in the reformation commission, in Secretary Hughes' opinion.

* * *

Intrigue, debauchery and corruption in connection with contracts for the veterans' bureau hospital were charged before the senate committee investigating the bureau. Elias H. Mortimer of Philadelphia, formerly a representative of the Thompson-Black company of Chicago, was the witness. He testified that when securing a hospital contract in 1922 he loaned $5000 to Charles R. Forbes, then director of the bureau; that on another occasion he advanced him an additional $1000 or $1500, and that none of the money has been repaid. Mortimer testified also that he had paid Forbes' expenses on trips about the country, official and unofficial. Disgraceful parties at Hayden Lake, near Spokane, in which Forbes participated, were also the subject of Mortimer's testimony.

More or less denials have been made by Forbes and others implicated in the testimony of Mortimer, Forbes himself issuing a statement denying as utterly and absolutely false the statement of Elias H. Mortimer of Philadelphia of alleged bribery and corruption in contracts for the veterans' bureau of hospitals.

* * *

President Coolidge and Secretary of Agriculture Henry C. Wallace are reported as taking a deep interest in a proposal of northwestern and central western bankers, grain dealers and farm land owners for relieving the crisis in the grain belt through the sale of 50,000,000 bushels of wheat to Germany. There is even some talk in this connection of donating the wheat to starving people in Germany, a precedent having been established when millions of dollars were voted by congress to furnish food for the Russian people two or three years ago.

* * *

Dr. C. P. Steinmetz, electric wizard, age 57, died at his home in Schnectady.

"The world has lost one of its greatest mathematicians and the electric industry will miss one of its shining lights," said Thomas A. Edison when informed of the death of Dr. Steinmetz. A recent feat which attracted attention to the work of the electric wizard was the production of the artificial indoor thunder storm, including a bolt of lightning.

Market Outlook

(Continued from page five.)

LATEST QUOTATIONS.

The Live Stock Market.

PORTLAND, Ore., Oct. 27.—Cattle—Beef steers, good grade, $6.75@7.25; medium grade, $5.50@6.75; common, $4.25@5.50; beef cows and heifers, good grade, $4.50@5.25; medium, $3.50@4.50; common, $3@3.50; canners and cutters, $1.50@3; bologna and butcher bulls, $2.75@3.75; feeder steers, $5@5.50.

Calves—Medium to choice, 190 pounds down, $8@8.50; 190 to 260 pounds, $6.50@8; 260 pounds up, $5@6.50; cull and common, $3@5.

Hogs—160 to 200 pounds, medium, good and choice, $8@8.50; 200 to 250 pounds, $7.50@8; 250 pounds up, $6.50@7.50; packing hogs, smooth, $6@7; packing hogs, rough, $4.50@6; slaughter pigs, $7.75@8.10; feeder pigs, $7.75@8.

Sheep and lambs—Lambs, 84 pounds down, medium, good and choice, $9.50@10.75; cull and common, $7@9.50; yearling wethers, medium to choice, all weights, $6@9; wethers, $5.50@7.50; ewes, medium to choice, $3.50@6.50.

SPOKANE, Oct. 27.—Cattle—Prime steers, $6.75@7.25; good to choice steers, $6.25@6.75; medium to good steers, $5.50@6.25; fair to medium steers, $5@5.50; common to fair steers, $4.25@@5; choice cows and heifers, $4.50@5; good to choice cows and heifers, $4@4.50; medium to good cows and heifers, $3.50@4; fair to medium cows and heifers, $3@3.50; canners, $1.50@2.25; bulls, $3.25@4; light veal calves, $8@9; heavy veal calves, $6.50@8; stockers and feeders, $4@5.25.

Hogs—Prime mixed, $8@8.25; medium, $7.75@8; heavies, $5@7.25; fat pigs, $7.75@8; stockers and feeders, $6.75@7.

Sheep—Prime lambs, $9.25@9.75; fair to medium, $8.50@9.25; yearlings, $6.50@7.50; wethers, $5.50@6.50; mutton ewes, $3@5.

The Grain Markets.

PORTLAND, Ore., Oct. 27.—Wheat—Hard white, Bluestem, Bart, soft white, western white, $1.05; hard winter, northern spring, western red, $1.02.

Today's car receipts—Wheat, 178; barley, 2; flour, 13; corn, 2; oats, 2; hay, 14.

Grain futures: Wheat—Bluestem and Bart, October, November, December, $1.05; soft white, western white, October, $1.05; November, December, $1.04; hard winter, northern spring, western red, October, November, December, $1.02.

Oats—No. 2 white feed, October, November, December, $33.50; No. 2 gray, October, November, December, $33.50; 44 pounds, October, November, December, $30.

Corn—No. 2 eastern yellow, for shipment, October, $39; November, $36; December, $32.50; No. 3 do, October, $38; November, $35; December, $32.

Mill run—October, November, December, $24.50.

Hay—Unchanged.

SEATTLE, Oct. 27.—Wheat—Bid: Hard, soft and western white, Big Bend Bluestem, $1.05; hard and soft red winter, northern spring, western red, $1.03.

Yesterday's car receipts—Wheat, 42; hay, 9; flour, 9; oats, 3; barley, 1.

DAYTON, Wash., Oct. 27.—Club, 90c; red, 89c.

COLFAX, Wash., Oct. 27.—Red, 83c; Forty-Fold, Club, Bluestem, 86c. Oats and barley, $27 ton.

DAVENPORT, Wash., Oct. 27.—Bluestem, 85c; Gold Coin, 85c; Club, 85c; Turkish red, 82c; northern spring, 82c.

RITZVILLE, Wash., Oct. 27.—Bart, 88c; red, 84c; Fife, 82c.

LEWISTON, Idaho, Oct. 27.—Red, 83c; white, No. 1, 85c.

WALLA WALLA, Oct. 27.—Bluestem, 92c; Club, 90c; Turkey red, 87c.

Hay and Feed Grain.

PORTLAND, Oct. 27.—Millfeed—City delivery prices: Mill run, $31 per ton; middlings, $43; scratch feed, $50; rolled barley, $42@44; cracked corn, $53; rolled oats, $42.

Hay—Buying prices f. o. b. Portland: Alfalfa, $16.50@17 ton; cheat, $12@13; valley timothy, $18@19; eastern Oregon timothy, $20@22; clover, $13@14; oats, $14@15; oats and vetch, $15@16; straw, $8 per ton.

SPOKANE, Oct. 27.—Wheat—Feed wheat, $36 ton. Oats—$38 per ton; rolled, $40. Corn—$50 per ton; cracked corn, $52 per ton. Barley—$38 per ton; rolled, $40. Bran—$39 per ton. Bran and shorts—$30 per ton. Shorts—$34 per ton.

Alfalfa—$22 per ton in ton lots; $19 carload lots; new timothy, $20 in ton lots, delivered.

General Produce.

PORTLAND, Ore., Oct. 27.—Butter—Cubes, extra, 46@47c lb; prints, parchment wrapped box lots, 51c; cartons, 52c. Butter fat, 54c, delivered Portland.

Eggs—Buying prices, white hennery standards, 55c; mixed color standards, 48c. Selling prices: Front street, selects, 60c; candled ranch, 52c; storage, processed, 43c; No. 1 white storage, 39c; No. 1 mixed color storage, 36c. Association selling prices, cash at store: Extras, 57c; pullets, 44c.

Cheese—Price to jobbers, f. o. b. Tillamook: Triplets, 30c; longhorns, 31c; loaf, 32c per lb.

Poultry—Hens, 15@23c; springs, 21@22c; ducks, 17@20c; geese, young, 15c; turkeys, live, young, 28@30c; dressed, 38@42c.

SEATTLE, Oct. 27.—Eggs—Select local ranch, white shells, cases included, 55c per doz f. o. b. Seattle; mixed colors, 54c per doz; pullets, 42c per doz; pewees, 23c per doz; checks, 28c per doz; cases returned to shippers, 1c less; do to country stores, f. o. b., 52c per doz, loss off.

Butter fat—F. o. b. Seattle: A grade, 52c per lb; raw milk, $2.30 per cwt.

Poultry—Hens, 4½ lbs and up, 24c per lb; do 3½ and under 4½ lbs, 16c per lb; springs, 2 lbs and heavier, 22c per lb; do 1 to 2 lbs, 28c per lb; hens, 3 to 3½ lbs, 12c lb; do dry picked, 2c above live; fryers, roosters, 2½ to 5 lbs, 22c per lb; capons, live, fat, 6 to 10 lbs, 33c per lb; do dry picked, fancy, dressed, 36c per lb; old roosters, 11c per lb; Belgian hares, 3½ lbs and heavier, live, 12@13c per lb; do dressed, 17c per lb; geese, fat, live, 16c per lb; ducklings, live, 3½ lbs and up, 17@18c per lb; ducks, old, over 3 lbs, 15c per lb; turkeys, fat, dry picked, 12 lbs and heavier, 37c per lb; do 8 to 12 lbs, 35c per lb; do live, 30c per lb; squabs, large, dressed, $4 per doz; pigeons, $2; guineas, live, $8 per doz.

SPOKANE, Oct. 27.—Poultry, live weight—Hens, 4 lbs and over, 18c; light hens, under 4 lbs, 14c; springs, 20@22c; old roosters, 8c.

Fresh ranch eggs—$11@13; fancy poultry farm, $15; pullet eggs, $10.50@12.50.

Butter fat, 49c.

Hides, Pelts, Etc.

PORTLAND, Oct. 27.—Hides—Salted hides, all weights, 3c; green hides, all weights, 4c; salted bulls, 4c; green bulls, 3c; salted or green calf, 10c; salted or green kip, 7c; hair-slipped hides and pelts, half price; flint dry hides, 11c; dry salted hides, 7c; culls and damaged, half price. Horse hides, green or salted, each $1@1.50; colt hides, each, 25c; dry horse with tail and mane on, 50c.

Pelts—Flint dry sheep pelts, long, 20c; flint dry sheep pelts, short, 10c; flint dry sheep pelts, pieces, 10c; dry salted pelts, 15c; salted pelts, short, each, 50@$1; salted pelts, shearings, each, 10@30c; salted goats, long, each, $1@2; salted goats, short, each, 50@$1; dry goats, long, per lb, 12c; dry goats, short, each, 20@30c; goat shearings, each, 5@10c.

Tallow—No. 1, 5c; No. 2, 4c per lb; grease, 3c per lb.

Fruits and Vegetables.

The principal consuming centers were heavily supplied with potatoes last week and carlot shipments from producing sections continued heavy. Prices were weak, with northern round whites quoted at 90 cents to $1.15 per 100 pounds sacked and bulk in the Chicago market. The peak of shipments probably has been reached, but receipts at the leadig markets will continue heavy for another month or six weeks.

Range of Live Stock Prices for Week Ending October 24

	Chicago.	Spokane.	Portland.	N. Salt Lake.
CATTLE.				
Choice and prime heavy steers (1100 lb. up)	11.15@12.60			
Good heavy steers	10.00@11.40			
Medium heavy steers	7.75@10.50			
Common heavy steers	5.60@ 8.25			
Choice and prime light steers (1100 lb. down)	11.25@12.60			
Good light steers	10.15@11.60			
Medium light steers	7.85@10.75	6.25@ 7.25	6.50@ 7.50	7.00
Common light steers	5.35@ 8.25	4.25@ 6.25	4.50@ 6.50	4.00@ 6.50
Common to choice butcher heifers	3.75@10.90	3.00@ 5.25	3.25@ 5.50	2.85@ 4.35
Common to choice butcher cows	3.10@ 8.35	2.50@ 4.75	3.00@ 5.50	2.35@ 4.00
Bologna and beef bulls	3.00@ 7.00	3.25@ 4.00	3.00@ 4.25	2.00@ 3.25
Canners and cutters, cows and heifers	2.25@ 3.35	1.50@ 2.25	1.50@ 3.25	2.50@ 3.50
Canner steers	3.25@ 5.50			1.00@ 1.50
Medium to choice light veals	7.50@12.50	8.00@ 9.00	9.00@11.00	6.50@ 7.50
Common to choice heavy veals	3.00@ 8.25	6.50@ 8.00	5.50@ 7.00	5.50@ 6.50
Common to choice feeders (750 lb. up)	5.00@ 8.15			
Common to choice feeders (750 lb. down)	4.25@ 7.65	4.00@ 5.25	4.50@ 5.50	4.50@ 5.50
Common to choice stocker cows and heifers	2.75@ 5.15			2.50@ 3.50
HOGS.				
Top of market	8.00	9.10	9.35	7.15
Bulk of sales	6.50@ 7.90	7.75@ 9.00		6.00@ 7.00
Heavy (250 lb. up)	6.95@ 8.00	7.75@ 9.00	7.00@ 7.75	
Medium (200-250 lb.)	7.00@ 8.00	8.50@ 9.10	7.75@ 8.80	5.10@ 6.15
Light (150-200 lb.)	6.50@ 7.95	7.75@ 9.00	8.80@ 9.35	6.15@ 7.15
Light lights (130-150 lb.)	6.00@ 7.50	7.75@ 8.50		
Smooth packing sows (250 lb. up)	6.25@ 7.00	6.25@ 7.00	6.50@ 7.50	4.10@ 5.10
Rough packing sows (200 lb. up)	6.00@ 6.75	5.75@ 6.50	5.00@ 6.50	
Medium to choice pigs (130 lb. down)	5.00@ 7.00	8.50@ 8.75	8.50@ 9.00	6.50@ 7.25
Stock pigs		7.25@ 7.75	8.25@ 8.75	6.50@ 7.00
SHEEP AND LAMBS.				
Medium to prime lambs (84 lb. down)	10.50@13.00	9.25@10.35	9.50@10.75	9.75@10.75
Culls and common lambs	8.25@10.75	7.00@ 9.50	7.00@ 9.50	7.00@ 9.75
Medium to prime yearling wethers	8.00@10.75	7.00@ 8.00	6.00@ 9.00	
Medium to prime wethers	5.00@ 9.00	5.50@ 7.00	5.50@ 7.50	5.50@ 7.00
Common to choice ewes	3.75@ 6.50	3.00@ 5.00	3.50@ 6.50	3.00@ 4.00
Culls and canner ewes	1.00@ 3.75			
Feeder lambs	11.25@13.10			9.75@10.75

Public Utility Ownership

The electric light and power companies in Washington are not owned by a few wealthy capitalists living in the eastern states, as is so often claimed by the uninformed politician.

As a matter of fact, the stock and securities are owned by tens of thousands of small investors.

Over 5000 citizens of the State of Washington own stock in the light and power companies operating in their district and this number is rapidly increasing.

On the other hand municipally owned plants are financed by the sale of bonds and since they are exempt from the surtax under the Income Tax Law they are purchased in large blocks by wealthy investors.

The light and power companies of Washington are in fact more publicly owned than are the municipal plants.

NORTHWEST ELECTRIC LIGHT AND POWER ASSOCIATION

A very interesting letter comes from Dora Grace Urquhart, a Grant county, Wash., cousin. Dora says she likes to read and has read a number of books. She is in the seventh grade at school and takes seven subjects. Dora is 9 years old. For a pet she has a black pup called Walfe.

Through her friends, Eva and Stella Slade, Ruth Sharp learned of The Junior Farmer, and after reading her friends' paper thought she would like one, too. (Welcome to the Corner, Ruth; we are pleased to hear from you.—Aunt Nellie.) This new cousin is 11 years old and in the sixth grade. She has one sister. Ruth has a birthday on the 1st of February.

Walla Walla county, Wash., is the home of Jessie Manis, a 10-year-old Corner cousin. Jessie has been quite busy lately and, although she did not forget the Corner, she could not find much time to write. We were glad to hear from Jessie again. Her teacher is very nice, she says, and she is in the seventh and eighth grades, taking different subjects. Jessie says all her flowers have gone to seed now. We are sorry to hear her grandfather is ill and hope by now he is quite well.

Allen Davis, a Washington boy, became a Corner cousin and we shall expect to hear from Allen real often now. Allen was 13 September 26. He is in the sixth grade at school, has a horse named Prince, a dog named Towser and two cats.

From the Canal Zone we have a letter from Stella Newbold, who is 16 years old. Stella says she finds The Junior Farmer very interesting and hopes to find her letter in a copy of it in the near future. Her birthday is August 24.

"Dear Aunt Nellie: We have moved to a different state. There are about 400 pupils attending my school now. There are 38 in my room. I am in the eighth grade. I like school fine," writes Rosa Pierson, a little cousin from Cowlitz county, Wash. Aunt Nellie was pleased to receive your letter, Rosa.

"I am 10 years old," writes John Branton, a new Corner cousin, who lives in Washington. John is in the fifth grade at school and likes Mrs. Alldredge, his teacher, very much. He has one horse, a cow and 14 sheep to take care of. Aunt Nellie is pleased to receive John's letter and will look for another some time again.

Birthday Greetings

THURSDAY, November 1—Willard Decker, 10 years old; Bertha Enroth, 10.
SUNDAY, November 4—George Jones, 9 years old.
MONDAY, November 5—Virginia Frances Littell, 11 years old; Vivian Mirosh.
TUESDAY, November 6—Wayne Britton, 10 years old; Warner Brittain, 10; Ina Charlotte Cole, 11; Estella Felmley; Doris Elaine Wright, 10.
WEDNESDAY, November 7—Violet Dickson; Mamie McCoy, 11 years old.

LETTERS WELCOMED BY AUNT NELLIE.

Among recent letters received by Aunt Nellie were those from cousins whose names follow. A few of these will be published each week in the regular edition of THE FARMER and others will appear from time to time in The Junior Farmer:

Viola Taylor, Olive Pershall, John Lincoln Larren, Bessie Cyran, Anna Gesler, Ernest Sigren, Marguerite Edline, Alma Bessie Tarr, Cleia Taylor, Pearl Amburn, Ione Anderson, Gertie Rehn, Mayme Kynse, Lucile Keck, Lee Owens, Eva Paavola, Raymond Lerback, Emile Manson, Viola Rinell, Ethel Gordan, Fona Johnson, Irene Bernice Beardslee, Lola Allenshead, Letha Sims, Floyd William Beardslee, Vina McGrew, Lillian Kunz, Leslie Ann Beardslee, Clara Mary Beardslee, Jennie Victor, Sigrid Moe, Averil Boyes, Jennie Mae Beardslee, Lillian Abrahamson.

BEDTIME STORIES

By THORNTON W. BURGESS.

MRS. TINY THINKS OF A WAY.

Think and keep thinking, and keep your heart stout,
There's a way in, there must be a way out.

That is the only way to keep out of trouble. If you keep thinking hard enough and hopefully enough sooner or later you will find the way. It was so with Mrs. Tiny the warbler. She just couldn't make up her mind to hatch out that strange egg in her nest, and then have to feed and care for the young stranger. She knew that the size of the egg that the baby who would batch out of it would be twice as large as her own babies and need twice as much food.

She couldn't think of any way to get rid of that hateful egg out of the nest, and she couldn't bear to think of building a new nest somewhere else. You see when she had picked out that particular place for her nest she had felt that it was the very best place in the old orchard. In fact, she knew it was, because she had hunted through every tree before she had finally decided to build in that particular spot. So she kept thinking. She thought so hard that she almost forgot to eat. At last she called to Tiny.

"Tiny, my dear," said she, "hurry as fast as you can and bring grasses and cotton from the ferns and any other nice things for a nest which you may find."

Tiny stared at Mrs. Tiny very hard. "Are you going to build a new house?" he demanded.

Mrs. Tiny smiled. "Not exactly," she replied. "You fly away and get the things and you'll see."

Tiny looked puzzled, but he did as he had been told to do, for he always lets Mrs. Tiny have her own way. It was she who chose the place for their home and who did most of the building, so he felt that it was quite right and proper that she should say what was to be done now. When he returned with some nice silvery threads he found Mrs. Tiny already at work with some grasses which she had found. Tiny almost dropped his threads he was so surprised by what she was doing. She was building the walls of the nest higher.

"What are you doing that for?" he demanded.

"Don't ask questions, but work. I want some material right away," she replied.

So Tiny left his threads and hurried away for more. Mrs. Tiny worked with might and main. She made a roof over

"Are you going to build a new house?" he demanded.

the nest and then built up the walls. The roof over the old nest was really the bottom of a new nest. Perhaps we shouldn't call it a new nest, but a new part of the old nest. In fact, Mrs. Tiny was building a two-story house. It took several days to finish it, but when it was done the second story was quite as dainty as the first had been, and once more Mrs. Tiny was quite happy. The strange egg and her own two beautiful eggs were in the lower part, quite out of sight, and now they would never hatch into little birds. Tiny had felt very badly about giving up those two beautiful eggs, but Mrs. Tiny had promised that she would lay some more.

"Then we'll never, never leave the nest unguarded, and so there will be no more strange eggs laid in it," said she. "We've had to give up those two eggs, but we haven't had to give up our nice home, and we haven't got to take care of somebody else's child," she added triumphantly.

"That's so," replied Tiny. "My, how smart you are, my dear! I never should have thought of such a clever plan. Do you think we will have some eggs soon?"

"I think there will be one tomorrow morning," replied little Mrs. Tiny. And sure enough, the next morning there was a beautiful little egg in the new part of the nest.—(Copyright.)

HOMEMADE LEATHER GOODS.

A club woman in northwest Oklahoma recently made herself a very beautiful horsehide coat which she believed would have cost at least $50 if she had bought it ready made. She spent only $9 for tanning and a small additional amount for the sateen lining. Every one in the club assisted in planning the garment and in applying the principles of cutting and designing learned from the extension agent.

Extension agents of the department of agriculture and of the state agricultural colleges are endeavoring to aid in the profitable utilization of the hides of animals butchered on the farm.

Most useful and attractive coats and sleeveless jumpers, with hats to match, can be made from veal skins, which can be tanned without the hair at a reasonably low cost. Many useful and marketable articles are also made from lamb, sheep and goat skins.

Crop Records Smashed!

Bigger Yields Make More Money

This year Canada's crops are bigger than any previous year. Big yields on low cost fertile farm lands together with good average prices for products offer you your chance to enjoy prosperity and real independence. Thousands who shared in Canada's biggest crop this year were struggling just a few years ago to overcome the handicaps you face now. By the plan they followed, you too can get ahead. Along the Canadian National Railways' lines unusual natural advantages really repay you for your work!

$20.00 Per Acre Average Price

Easy Payments—Low Prices and Taxes—Increasing Values

You can buy land unsurpassed for fertility along the lines of the Canadian National Railways for an average of $20.00 an acre. Such land yields abundantly and is suitable for grain growing and mixed farming. Our booklet shows the yields per acre. Easy terms place it within reach of all. You make only a small first payment, usually 10% or less—the balance being spread over a term of years, with low interest rates and small land tax. No tax at all on buildings, improvements, animals, machinery or personal property.

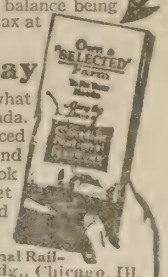
Special Excursion Rates

Reduced railway rates are in effect for landseekers and their effects to encourage inspection along the lines of the Canadian National Railways. Personally conducted excursions also be arranged.

CANADIAN NATIONAL RAILWAYS

Get Free Book Today

Our free illustrated book tells what others have gained by going to Canada. Read the book. You'll be convinced there is a better chance for you. Send your name and address for the Book now—today—before it's too late. Let us help you—our advice is free and without obligation.



DeWITT FOSTER Supt. of Resources, Canadian National Railways, Dept. 2678, Marquette Bldg., Chicago, Ill.

BULBS

Direct importation from the best growers of Holland, consisting of Hyacinths, Tulips, Crocus, Narcissi, Daffodils and others.

New Crop

Sand or Winter Vetches and Rosen Rye direct from Michigan. Samples furnished on request. State amount needed.

Our fall catalog of Bulbs, Nursery Stock, Seed and Grasses is now ready and will be mailed to you FREE on request.

"INLAND SEEDS ARE QUALITY SEEDS."

THE INLAND SEED CO.

913 First Ave. Spokane, Washington

Hotter Sparks
Steadier Power
Less Trouble
Longer Life

What $2.00 Buys for a Ford!

EXPERIENCED Ford owners have quit cheap-price and doubtful-quality timers to buy the Milwaukee Timer at $2. Their reward is great — more power, quicker pick-up, steadier pulling, easier starting, longer life. Their cars climb hills better, travel faster through mud, sand and snow, and are free from ignition troubles for thousands of miles.

Milwaukee Timers are sold in every village, town and city—at garages, auto supply and hardware stores. Get one today—and you'll have a better Ford! The Milwaukee also fits the Fordson tractor.

Over 18 years of building fine ignition units are back of this timer. It is known wherever Fords are driven.

MILWAUKEE MOTOR PRODUCTS, Inc.
Milwaukee Wisconsin

MILWAUKEE TIMER for FORDS

Retails at $2.00

The 1924

THREE big improvements make the 1924 Harley-Davidson even better than ever for the farmer. You have never felt such a surge of smooth power as the new *alloy pistoned* Harley Davidson delivers. And the new side car with its *ful-floteing, semi-elliptic springs* — you won't have to worry about the case of eggs you're taking to town. Another great improvement is the *Alemite Lubrication* (first on any motorcycle). Use a Harley-Davidson for business errands—50 miles for a dollar (gas, oil, tires and all) and leave you car in the garage. Thousands of farmers save money this way.

Ask your dealer about his Pay-as-You-Ride Plan. Write us for free literature.

HARLEY-DAVIDSON MOTOR CO.
Dept. W. F., Milwaukee, Wis.

Harley-Davidson
The Motorcycle

Money-making sales opportunities in open territories. Write for particulars.

Write for 1924 Catalog to
HIRSCH CYCLE CO.
HARLEY-DAVIDSON DISTRIBUTORS.
SPOKANE, SEATTLE AND TACOMA.

"The Rainy Day Pal"
TOWER'S FISH BRAND REFLEX SLICKER
Make every day count.
Dealers everywhere

A. J. TOWER CO. BOSTON
TOWER'S FISH BRAND

WRITE OUR ADVERTISERS
It will pay you to write for free booklets and information offered in the advertising columns; and when you DO write, please mention THE WASHINGTON FARMER.

In writing advertisers, be sure to say you saw their advertisement in The Washington Farmer.

Glance over the bargains on the "Want Ad" page.

Ingersoll

Dependable Time-keeping

THE mechanism in Ingersoll watches is simple and strong. That's why they stand hard knocks better than expensive, delicate watches, and why they are ideal watches for farmers and other outdoor men.

The name "Ingersoll" is known everywhere to mean *reliable, low-priced watches.*

Models $2.00 to $10.00

THIS LOG AND TREE SAW $21.95

Fitted with Atkins Silver Steel Guaranteed Saw

Cords in [illegible] by one man. It's King of the woods. Catalog Y64 Free. Established 1890.
Folding Sawing Machine Co., 1005 E. 75th St., Chicago, Illinois

Why Not Be Sure of a 100% Calf Crop?

SAV-A-CALF

(TRADE MARK REGISTERED)

Is Guaranteed to Get Results

Staggering losses of valuable calves are turned into satisfying profits by those who feed their cows SAV-A-CALF. Hundreds of well known farmers, breeders and dairymen throughout the northwest have eliminated calf loss from their herds by using this tried and proven abortion remedy.

Cows that have refused to breed, or fail to come in heat or catch with calf, bring strong, healthy calves every time if treated with SAV-A-CALF. It insures better service from your bulls, improves the health of the entire herd, keeps them free from disease, and increases production.

SAV-A-CALF is simple and easy to use. Just mix it in the salt or use it in the feed. YOUR MONEY BACK if not satisfied.

READ WHAT USERS SAY.

Nampa, Idaho, 10-8-'23.

Gentlemen:

"My trouble was shy breeders and I had considerable calf loss. I treated my cows with SAV-A-CALF and every one has caught with calf regularly. I have one 2-year-old Jersey heifer which I was told would not breed, but she, as well as the rest, are with calf. I heartily recommend SAV-A-CALF to all breeders."

CLARK SHALLENBARGER.

EVERY COW CAUGHT WITH CALF.

Nampa, Idaho, 5-25-'23.

Dear Sirs:

"After feeding SAV-A-CALF to nine of my cows that would not breed, every one of them caught with calf after the first treatment. I had used different bulls at times without success."

F. A. BURLINGAME.

TESTIMONIALS BASED ON FACTS.

Nampa, Idaho, 10-11-'23.

Babbitt Bros:

"In reply to your suggestions regarding testimonials as to your remedy will say that I am personally acquainted with the Nampa men named and can assure you of their reliability. Their testimonials are based on facts. Whatever they state can be relied upon."

W. W. DEAL,
Idaho State Grange Leader.

BABBITT BROTHERS

BOISE, IDAHO.
Manufacturers and Distributors.

..... Cut Here .....

BABBITT BROTHERS, (Check what
Box 1095, Boise, Idaho. you want below.)

( ) Please send pamphlets and other information regarding SAV-A-CALF.

( ) I enclose $5 for which send 5-lb. can of SAV-A-CALF.

Name .....

Address .....

Glance over the bargains on the "Want Ad" page.

News for Breeders

HEADS MAYVIEW FARM HERD.

Earl F. Harper, Johnson, Whitman county, is building up a strong herd of Duroc Jerseys on his Mayview farm. He has as his senior herd sire a good boar, Mayview Great I Am 1st, and junior sow champion-sire, Great I Am 1st. His junior sire is a senior pig, Lookout Sensation, from the J. D. Waltmeyer herd of Iowa. Mr. Harper showed 17 head in the hog show at the Lewiston-Clarkston fair at Lewiston in September, among his winnings being the sow senior and grand championship on Mayview Orioness I Am, also a get of Great I Am 1st, and junior sow championship on Mayview Double Orioness 2d. Mayview farm also breeds purebred Shorthorn cattle.

NEW STATE BUTTER CHAMPION.

Washington's new full-age champion Holstein butter cow for 10 months' production is Konnybrook Cornucopia Clothilde, owned by the state hospital at Fort Steilacoom. Her record as announced by the advanced registry department of the Holstein-Friesian Association of America is 22,042.4 pounds milk containing 766.26 pounds butterfat, equivalent to 957.8 pounds butter.

As a consequence of this record this cow displaces the former champion in her class, Cascade Blossom of the William Todd & Sons herd, Yakima, whose record is 24,043.7 pounds milk and 762.59 pounds butterfat—equal to 953.2 pounds butter.

YIELDS WELL UNDER HANDICAP.

Though born with only two teats, Steilacoom Fayne Cascade, a junior 4-year-old Holstein in the Western State hospital herd at Steilacoom, Wash., made 17.58 pounds of butterfat from 497.7 pounds of milk in seven days and will close her year with around 20,000 pounds of milk and 640 of butterfat—five times the production of the average cow with full lacteal equipment. She came to producing age with only half of her udder developed, but she was so well bred that Superintendent V. M. Richards decided to give her a trial. She is out of one of the high producing daughters of Sir Johanna Ruth Fayne, foundation sire in the herd of William Todd & Sons at Yakima.

BUYS WASHINGTON JERSEY.

John T. Cain of Salt Lake, Utah, who judged Holsteins and Jerseys at the Southwest Washington fair, purchased a Jersey bull calf from A. T. Flagg of Chehalis, to take to his own Jersey breeding farm in Utah. Mr. Cain is on the staff of the extension service of the Utah Agricultural college and his brother is head of the department. He has judged Jerseys and traveled over a considerable portion of the west and has observed the type and studied the blood lines of the Jerseys he has seen. The calf won first in his class and was placed as junior champion by Mr. Cain before he had any idea of buying him, and this was done in strong competition. In fact, he tried to buy the sire of the bull, and also tried to buy the senior herd sire of N. C. Sears of Winlock, that is by the same sire, but both the older bulls were held at prices he felt he could not afford to pay. Professor Cain noted the get of this sire exhibited by Mr. Flagg and the grandsons and granddaughters in the Sears herd and decided that was the blood he wanted to improve his herd. The sire, St. Mawes of Oak Springs, was bred by Ed Cary of Carlton, Ore. Before making the purchase Mr. Cain visited the Flagg farm and studied the conformation and breeding of the dam, which only confirmed his first opinion that he had found a bull to suit him.

Wheat Conference Called

Congressman John W. Summers has sent out a call to heads of organizations, farmers, bankers, war finance corporation officials and county agents of the wheat growing counties for a meeting at Colfax November 7, to work out details of cooperative marketing of wheat.

Ten Cents Premium on Hogs

Farmers of Hillsdale county, Mich., have had proof in the form of actual cash that it pays to clean out tuberculosis from all their herds. This county was one of the 17 included in the first list accredited by the bureau of animal industry, United States department of agriculture, as practically free of the disease, and a Hillsdale county farmer was the first to receive the premium of 10 cents a hundred on hogs offered by the principal meat packers at the various markets for all hogs bred and fed in counties accredited as being practically free of bovine tuberculosis. Since hogs contract the disease from milk or the droppings of cattle, healthy cattle means healthy hogs.

Breeders' Department

LAST CALL
Pacific International Combination Duroc Jersey Sale
North Portland, 1 P. M., Nov. 7

Note the consignments of service boars, bred and open gilts, of the grandest blood lines of the breed—Pathfinder, Sensation, Orion Cherry King, Pathmaster and others. Note the number of prize winners and close kin of prize winners consigned.

If you have no catalogue, come early and secure one at the ringside. If you have one and can not attend, send your bid to B. R. Evans, editor Duroc Bulletin, Des Moines, Iowa, or Horace Addis, field editor Oregon Farmer, both of whom will be present. It will be the opportunity of years to secure the best of Duroc blood and individuality.

Consignors:
H. C. COMPTON, Boring, Ore.
L. S. BERRY, Troutdale, Ore.
W. F. BARTLETT, Camas, Wash.

COL. J. W. HUGHES, Auctioneer, Forest Grove, Ore.

LAST CALL GUERNSEYS AT AUCTION
Pacific International, November 7, 1923

Champion show cows and A. R. cows. Bulls from world record producing families. Forty head from leading breeders.

Sale Starts at 1 p. m.

Sales Committee.
C. L. HAWLEY, Portland, Ore.
H. R. TAYLOR, Chehalis, Wash.
MRS. MINNIE MILLER, Wendell, Idaho.

E. A. RHOTEN, Sale Manager, Salem, Ore.

First Annual Shropshire Bred Ewe Sale, Friday, Nov. 9--11 A.M.
In the Pacific International Exposition Bldg., Portland, Ore.

Breeders will consign from one to four head of their extra choice stuff. Many will be taken from their show flocks, a total number of about 30 head. They will be bred to the best rams and sold single and in pairs. The main object of the sale is to give new breeders a chance to get the right kind of foundation stock at the right price.

Sale held by the Oregon Purebred Shropshire Association.

For further information, write **Secretary J. J. THOMPSON, or F. A. DOERFLER, both of Macleay, Oregon.**

COL. J. W. HUGHES, Auctioneer.

HOLSTEIN
Production, Individuality and Type
OUR HERD SIRE
SIR WALKER INKA HOMESTEAD

has all of them, having won first prize at the Oregon State Fair this year.

His sire, **Sir Walker Segis Homestead,** has 22 Advanced Register daughters. His sire is Piebe Laura Ollie Homestead King, the sire of May Walker Ollie Homestead, butter record, 365 days, 1523.23 lbs., American champion.

His dam, Inka Bess Johanna, a show cow, has a butter record of 964 lbs. in one year. Her daughter, Lashbrook Inka Segis, a full sister to our herd bull, has a butter record of 19.9 lbs. butter, 422 lbs. milk, in seven days, at 2½ years old.

For further information write us.

Meadow Lawn Dairy Farm
F. W. DURBIN & SON, Salem, Oregon.

Holstein Bulls---Duroc Boars

The breeding season is here. If you want a Holstein bull or a Duroc boar, ready for service, splendid individuals, best of breeding, then write us for picture, pedigree and price, delivered at your station. Our herd is clean and we guarantee to please you or no sale.

Holsteins and Durocs.
GARFIELD STOCK FARM, Garfield, Wash.

Mt. Vernon Accredited Holsteins

especially. Buy purebred baby bulls and heifers from the most productive dairy district in entire northwest.
R. E. WAUGH, Burlington, Wash.

Brown Swiss Stock Farm

Breeders of Brown Swiss cattle, the farmers' dairy cow. Young stock for sale.
THEO BRUGGER, Route 3. Gresham, Ore.

Imported and American Bred Jerseys

Blood lines of phenomenal production and most perfect Jersey type.
CRANDALL & LINN, Salem, Ore.

Richly Bred Young Jersey Bulls

Sired by Gertie's St. Mawes and out of tested dams with good records.
C. F. BATES, Rt. 5. Salem, Ore.

Gold and Silver Medal Jersey Breeding

Heifers and bulls, offspring of the great gold and silver medal bull, Silver Chimes of S. B.
DEL PERKINS, Carlton, Ore.

Graymere Jersey Heifers Bred and open, from 6 to 18 months old. Myra's Missionary, Plymouth Lad and Oxford Majesty breeding.
WARREN GRAY, Box T, Jefferson, Ore

Midway Farm Jerseys Herd headed by St. Mawes Lad of Midway, son of St. Mawes Lad and Lad's Little Pauline, 941 lbs. fat.
W. H. McCONNEL, Shedd, Ore.

Maple Ridge Jersey Farm

offers strongly bred St. Mawes bull calf; bred for production and type. Reasonable.
J. C. BROWN & SONS, Shedd, Ore.

Have you glanced over the farm bargains on the "Want Ad" page?

Jersey Announcement

I have purchased entire Ladd herd of Jerseys at rock bottom prices. This gives me more cattle than I can comfortably care for at Oreglow, hence have placed a price on each animal which is but little above grade cattle price and will sell until I have left the number I wish to keep. I will be at the Pacific International, Nov. 3 to 10, every day but Sunday. Oreglow is not far from the show grounds and I will gladly take any one looking for purchases out to the farm where they may inspect all the cattle in their "every day clothes."

Oreglow Farm
D. BROOKS HOGAN, Boring, Oregon.

Royal Ranch Durocs

We have the best boars we ever raised for sale at less money than you ever bought them for. The type and breeding you want, including the 1923 junior champion of Idaho. The strongest Duroc show of the northwest. 26 herds competing. Write us your needs.
ROY SHUTWELL, R. F. D. NO. 3, Boise, Ida.

Turner's Durocs

For sale—Registered spring boars and gilts, sired by grand champion boar. Also booking orders for fall pigs. Prices reasonable.
H. W. TURNER, Sunnyside, Wash

Duroc Jersey Boars Spring boars sired by my Jr. yearling boar Gun Sensation Leader, the boar that weighed 700 lbs. at 18 months, and was Sr and grand champion in 1923 at Idaho's greatest hog show. These boars are priced to sell. Let me write you about them.
J. P. Hunt, Route 1, Buhl, Idaho

Duroc Jersey Boars

By Gem Sensation Leader, champion a Idaho state futurity.
BEVINGTON BROS., Gooding, Idaho

Entermille's Polands

Sired by Giant Liberator and out of a Bl Buster sow, win first and third junior sow pigs at state fair in class of 42. Have a few choice spring pigs and some wonderful fal stock for sale.
FRED D. ENTERMILLE, Baker, Ore

Big Type Poland Chinas

Young boars ready for service. Also weaned pigs at bargain prices. Best breeding o the times.
H. J. STILLINGS, Hermiston, Ore

Pioneer Herd Hampshire Swine

10 head choice boars; 10 head of sows an gilts, backed by show records.
J. M. FRUITTS, Cambridge, Idaho

Weanling Hampshire Pig

and service boars. Most popular blood lines good individuals, reasonable prices.
J. W. PARKER, Yamhill, Or

O. I. C. SWINE

Herd headed by Western Prince, N 103084; he by Ohio's Best. Winners, size, qual ity and true type. Breeding stock for sale.
J. H. WEST, Ringgold Farm, Centralia, Wa

When answering ads, please don't fail to mention this paper.

HOLLYWOOD FARM HOLSTEINS

SIR BEETS CORNUCOPIA NETHERLAND

First Prize Senior and Grand Champion Minnesota State Fair 1910, 1911, 1912, 1913. Grand champion National Dairy Show 1910. The only really undefeated champion of the breed.

Grandsire of North Star Daisy Johanna.

In 1922 the Hollywood Herd was the highest record herd in the highest record cow testing association in the United States

NORTH STAR DAISY JOHANNA

A monderful outstanding individual. At 3 years 4 months, 365 days' milk 22,360 lbs., butter 1039 lbs. At 4 years 6 months 365 days' milk, 24,823 lbs., butter 1072 lbs.. strictly official test.

JOHANNA BONHEUR CHAMPION

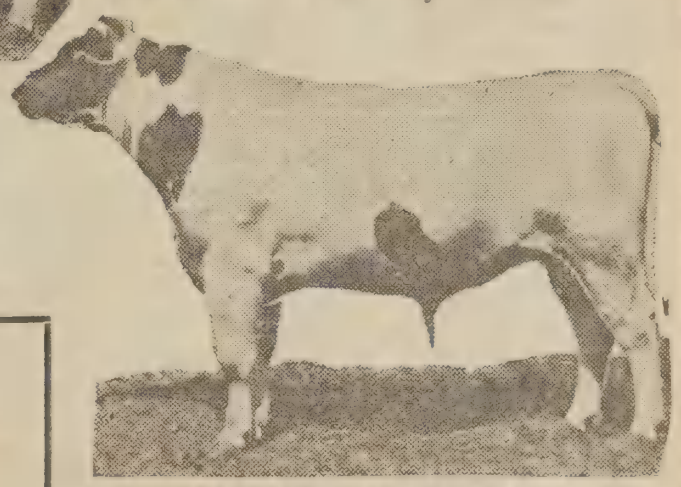
Grandson of Johanna Bonheur. Sire of second prize cow at the Minnesota State Fair 1923, also second prize get of sire. Sire of Junior Champion Bull at the New York State Fair 1921.

Sire of North Star Daisy Johanna.

NORTH STAR DAISY OAK

305 days' milk 15,244 lbs., butter 661 lbs. at 2 years old. A better record than her dam made at the same age. A full sister to Goliath of Hollywood.

Daughter of North Star Daisy Johanna.



GOLIATH OF HOLLYWOOD

Junior herd sire of the Hollywood herd. He traces back directly to a long line of National Grand Champions. His daughter won Junior Champion at the S. W. Washington Fair, the Washington State Fair and the Oregon State Fair. His son won Junior Champion at the S. W. Washington Fair and Grand Champion at the Washington State Fair. His "get" won first at the Washington State Fair and at the Oregon State Fair.

Son of North Star Daisy Johanna.

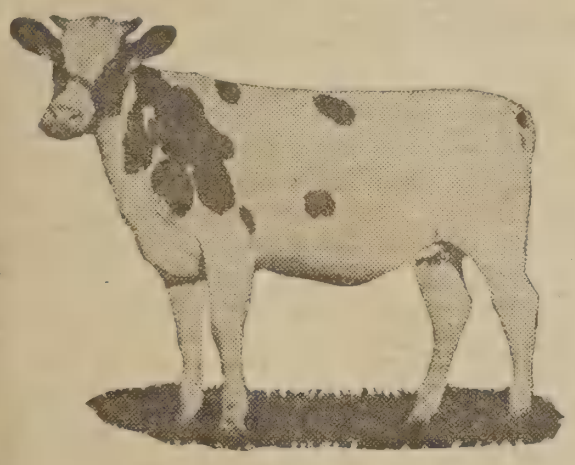
SEE OUR EXHIBIT

AT

PACIFIC INTERNATIONAL LIVE STOCK EXPOSITION

NORTH PORTLAND
OREGON

November 3 to 10
1923



A DAUGHTER OF GOLIATH OF HOLLYWOOD

that has won several Junior Champion ribbons on this year's fair circuit. She is out of a daughter of Judge Segis that made 835 lbs. of butter in a year as a two-year-old, and has milked over a hundred pounds in a day. Another combination of type and production.

A SON OF GOLIATH OF HOLLYWOOD

with a long list of show ring records. His dam is a daughter of the famous Judge Segis, former herd sire of the Hollywood herd. She is a State Champion Butter Producer and has a record of 702 lbs. butter in 305 days. This calf combines to a marked degree the best of type and production.

Write for list of heifer calves for sale. We have some that are closely related to the heifer and bull calf shown above. Some excellent bull calves out of yearly record dams, priced to meet the means of any one that wants herd improvement. Herd under federal supervision.

HOLLYWOOD FARM

(Near Seattle)

HOLLYWOOD — A CALF OR A CARLOAD — WASHINGTON

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EXPERIMENT STATION
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We are ready now to handle all Christmas orders. Our stocks of Christmas goods are now complete. Everything is ready. So order now.

Get out your Ward Catalogue today. Don't put it off till Christmas time. Don't wait till some things are gone.

Start today making up your Christmas list. Order early.

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THE WASHINGTON FARMER
ESTABLISHED 1894
SPOKANE. SEATTLE.

Figuring Profits From the Dairy Herd

Snohomish County Cow Testing Association Succeeds in Adapting Rations to the Herd and to the Individual Cow

By RALPH ERSKINE

DAIRY HERD PROFITS vary according to the cost of production, yet every dairyman knows that if he can increase the production of milk from his cows he will also increase the profits. Feeding can greatly affect this increase even in some low producing herds. There are many cases where better feeding also will prevent the loss of much work in constructive breeding, thereby returning a better profit to the owner.

The Snohomish County Cow Testing association, under the supervision of Donald L. Saunders, the tester, has demonstrated what can be accomplished by better feeding methods. This was one of the first cow testing associations to be organized in the state of Washington and has been operated successfully even during the time when it was difficult to get testers. It was at one time known as the Stillaguamish Cow Testing association, since a large part of its members were then in the Stillaguamish valley, which is a fertile dairy section. There are still many of the original members in the organization and the striking feature is that the older members feel that they are getting more than their money's worth and their herds average higher than the average of the newer members.

The membership is about what is desired for the ideal testing association. In August, 1923, there were 34 herds tested which made a total of 604 cows, and in September, 678 cows. The average production per cow per month was at that time 789 pounds of milk and 33.4 pounds of butter, a good average, but it is not the present production that is the outstanding feature of the work of this association.

As many association members know, the records kept in the herd books are not always taken advantage of by the herd owners, although they can be made the basis of much improvement in the herd. It remained for Saunders to dig into this record as he took up his work early in the summer of 1922. A graduate of Washington State college, he secured a good foundation in the feeding of farm animals and saw his opportunity to put it into practice. He began slowly, but it was not long until he had established a name as being able to suggest rations that would increase the milk production.

(Continued on page sixteen.)

Donald L. Saunders Caught by the Camera on His Way to Work.

Kitsap County Boys' and Girls' Club Activities---Page 3

The Flower Garden

By RUTH GIPSON PLOWHEAD.

Shrubs are among the most useful of all plants for home ornamentation, requiring perhaps the least care of all forms of floral growth. While they respond to careful treatment, they will stand much neglect and still produce favorable results. Shrubs are desirable, both as a background for perennials and annuals, and as a screeen for hiding unsightly buildings.

While fall blooming shrubs are not as common as spring blooming, they may be had; yet if we choose our shrubs for succession of spring blooms, tall growing perennials, such as hollyhocks or golden glow, planted in the foreground, will furnish the color for late summer and fall and look all the better for a thick green background.

Forsythia is one of the earliest of the spring blooming shrubs; it might be followed by early and late tartarian in shades of rose, pink and white, by lilacs, spirea, syringa, in fact, there are any number from which to choose, according to your own desires.

Most shrubs are easily started from cuttings, and if your neighbor has varieties you would like to grow, you may easily propagate as many plants as you choose. The nursery way would probably be to take cuttings of the ripened wood in the fall, cut into six-inch lengths, tie into bundles and bury them in damp sand to form callouses, and then root them in the spring. But one can plant them in the garden in the fall. Dig a trench which is deep enough to hold all the cutting except one eye, which should extend above the ground. Pack the earth well down about the cuttings, protect them with a box or leaves and branches, and a number of your cuttings are sure to grow. I have found syringa and spirea easily started in this manner. If you are planning to buy or move shrubs, November is a good time in which to plant them, especially the spring blooming varieties.

Many kinds of roses are also easily started from cuttings, and as few of us ever have too many roses we can increase our stock in this manner. Climbing roses, especially the rambler type, are very easily rooted. They also may be cut in November and buried in sand until spring, but a good method for the amateur to try is the following:

Take cuttings of the current year's wood late in October or November. One very successful grower said that he always tried to take the cuttings where the branch joined the main stem, and tear, not cut, it off, leaving a little bark from the stem adhering. These cuttings are then planted in trenches of sandy soil, with one bud or eye exposed. Fruit jars or other glass containers are then placed over the cuttings, firmed down well around the edges with earth, and left undisturbed until the weather is warm and settled in the spring. Among others in my garden raised by this method are Paul Neyron, a lovely salmon pink hybrid tea, unnamed, Dorothy Perkins and Virginia R. Coxe.

It is very easy to protect a few of the blooming plants in your yard from the first severe frosts. One may often prolong the blooming season several weeks, for in our northwestern climate we often have several sunny weeks after a spell of frost. A number of things may be used, but several newspapers wrapped about each plant is as good a protection as any, and easy to work with. Don't forget that the same thing applies to the vegetable garden, and a few tomatoes and cucumbers may be also protected.

Our Friend--The Toad

By DON B. WHELAN.

When you see a toad in the garden, in a field of growing crops or among the flowers you can just make up your mind that it is a real friend. Many people have appreciated this fact, but they did not know how, or to what extent, this squatty, warted amphibian rendered its aid. He is an insect eater of the first magnitude and has an insatiable appetite. On his bill-of-fare are many of our most injurious insects. Investigations have proven the fact, in 24 hours, the insects consumed by the toad equals in quantity four times the capacity of the toad's stomach. In other words, the stomach if filled and emptied four times during a day and night.

One investigation, in order to find what the toad's diet was composed of, examined the stomachs of 149 toads during the months of April, May, June, July, August and September. As a result of this investigation he found that the toad's meal was composed mostly of insects, many of which were injurious. The following list

(Cintinued on page eighteen.)

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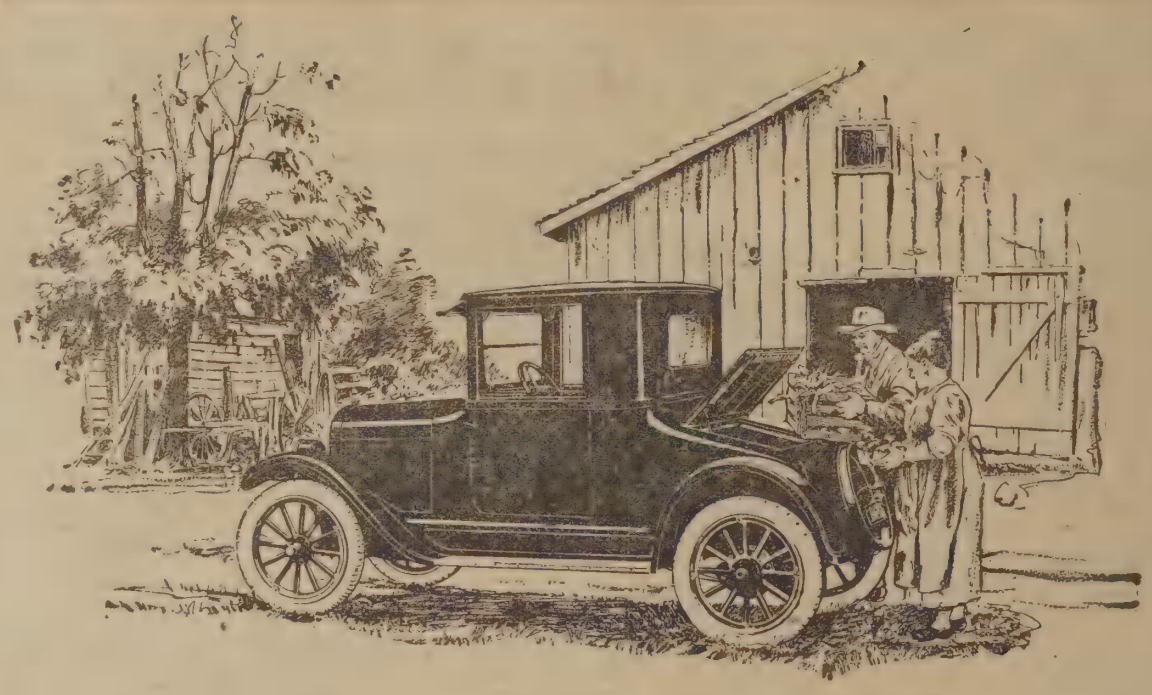
Every Farm Needs Two



EVERY farm needs two automobiles, one of which should be a closed model Chevrolet.

The open touring car is best for general farm use, carrying passengers or perhaps miscellaneous bulky produce or merchandise, but for cold or rainy weather, and for church or social use the family needs a closed car, either a 2-passenger Utility Coupé, as illustrated, or the 5-passenger Sedan. The extra large rear compartment is a feature of the Coupé.

These closed cars are very finely made, furnished, upholstered and trimmed. The windows are of plate glass and can be lowered, providing as much air as an open car, yet affording full protection against wind, rain, snow or cold when raised.

With a second car on a farm, one is always available for those at home when the other car is out.

The low prices of Chevrolet make the ownership of two cars feasible for most farm families.

CHEVROLET MOTOR COMPANY

Division of General Motors Corporation

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Prices Effective September 1, 1923 f. o. b. Flint, Michigan

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Superior 2-Pass. Utility Coupe	640
Superior 5-Pass. Sedan	795
Superior Commercial Chassis	395
Superior Light Delivery	495
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Five United States manufacturing plants, seven assembly plants and two Canadian plants give us the largest production capacity in the world for high-grade cars and make possible our low prices.

Dealers and Service Stations Everywhere

Kitsap County Club Members Celebrate

Notable Achievement Banquet and the Awarding of the Prizes Won at the County Fair

It takes the boys and girls of the Four A clubs in Kitsap county to set an example for other districts with their county achievement banquet, held at Bremerton October 25, as the final windup for their year's work. There were over 300 members and their club leaders at the banquet which was held in the Methodist church and 200 of them passed through the gates and visited the Puget Sound navy yard at Bremerton, where they had a group picture taken on the U. S. S. Nevada.

This was their third annual achievement banquet, held largely for the purpose of getting the winners together and awarding the prizes won in the contests at the county fair. The banquet was carried on in true banquet style, with an address of welcome by E. J. McCall, the mayor of Bremerton; a response by Mrs. Clara J. Carter of Central Valley and addresses by such men as Rear Admiral J. A. Hoogewerff, commandant of the navy yard, and Dr. S. B. Nelson, director of the extension service at the state college.

The guests of honor, however, did not do all the talking. The meal was interspersed by frequent yells and songs from the different clubs and occasionally the entire group would join in with the county yell, which went as follows:

K-I, K-I, K-I-T;
S-A, S-A, S-A-P;
KITSAP.

The manner in which each club carried on their part of the enthusiasm showed that they all had had plenty of practice at their local meetings and were well able to make themselves known.

Dr. Nelson was called on to award the achievement pins to the senior and junior county champions and he spoke very highly of the splendid work that is being done in this county. "Optimists is hardly the right word," he explained. "I would prefer to use the new word, peptimist, as it means more than an optimist. An optimist is a person who knows what ought to be done but lets the other fellow do it, while a peptimist is a fellow that knows what should be done and goes ahead and does it himself."

The garden, canning and sewing exhibits this year were displayed in a different manner than has ever been used before. The business men of Bremerton donated space in several store windows and the different clubs that brought their prize-winning exhibits along were given a section of the window all to themselves and the store decorator arranged the articles in such a way as to best suit the rest of the window. The plan was pronounced a decided improvement over the custom of having all of the clubs display their goods in one large store room or in the chamber of commerce room, as was the case the first year.

The splendid cooperation from the business men went much farther than to afford space for the displays. They also gave their financial support and did much to strengthen the backbone of the entire club movement. All of the seven banks in the county contributed to the general fund by awarding savings account books with $3, $2 and $1 deposits to the members in their own community that did not win any of the county championship awards.

The account book idea has been carried on for the last three years and the bankers all testify that there have been very few that have drawn their accounts out and many have deposited more to the original account. The plan is an excellent one and is creating a foundation of thrift as well as awarding something of value to the members to show the appreciation of the year's work. It also keeps the local bank fresh in the mind of the boy or girl who holds the account and gives him a personal interest in its operations.

A novel plan of awarding scholarships, each of $25 valuation, was taken up by three civic organizations in the county. The scholarships are to be held in trust by the State College of Washington until such time as they may be used toward defraying the expenses incident to the attendance at any regular or special course in instruction. The four scholarships were given by the following bodies: Garden project, Port Orchard Chamber of Commerce; canning project, Bainbridge island central committee; pig project, Bremerton Kiwanis club; sewing project, friends.

The county fair prizes amounted to a total of $100, while the savings accounts from the seven banks were somewhere between $100 and $200. Special prizes were also awarded and Thelma Anderson, age 9, who recited a poem on Kitsap county, was presented with a bouquet of flowers by one of the local flower shops.

Too much credit can not be given to the valuable assistance given by the local club leaders and to G. N. Worden, the county agent, for their untiring efforts in putting the work across. Mr. Worden has spent much of his spare time in getting the contests arranged and the club displays shown at the county fair. His praise was sung many times during the banquet and he was presented with a gift sweater in appreciation of his efforts among the club members.

The champions of the entire county, who have successfully met all their competitors at their district and county fair, were presented with a scholarship of $25 and a shield which told of their accomplishment and may be kept by the individual or team in their home or meeting place. Those who won the county championships were:

Sewing club—Bertha Johnson of Pearson club; Mrs. O. P. Lynum, leader.

Canning club—Verneta Ruef of Silverdale club; Mrs. F. B. Kunz, leader.

Garden club—Oak Lodholm of Burley; Mrs. Edna B. Lodholm, leader.

Pig club—Ellis Johnson of Bainbridge island; V. C. Lee, leader.

In addition to the county champions the teams in each project were also awarded shields. These tokens gave the winning team or member something to keep in the meeting place or home to show what winning was made. In case the scholarships have not been used before the winners become 21 years of age they shall revert to the county club work and be re-awarded in the same or other projects:

Following are the individual winnings:

Junior division champions—Sewing club, Orlene Carlson of Pearson; Mrs. O. P. Lynum, leader.

Canning club, Minnie Hall of Fragaria; Mrs. Gladys E. Karcher, leader.

Garden club, Louis Molzahn of Fernwood; George E. Worton, leader.

Pig club, Louis Molzahn of Fernwood; George E. Worton, leader.

County Bank Prizes.

The Kitsap County bank, First National Bank of Bremerton, Bremerton Trust and Savings bank, Citizens' Bank of Bremerton, the Silverdale State bank and the Poulsbo National bank, being all the banks in Kitsap county, join in awarding savings accounts to all boys who have satisfactorily completed their work. The county champions in both senior and junior divisions receive a $3 account, those winning second place get a $2 account and those winning a third place get a $1 account.

Following is a list of the winners in all projects:

Sewing Project.

Senior division—Bertha Johnson, Pearson, county champion. Seconds: Ada Dahl, Central Valley; Gina Ringness, Central Valley; Mildred Tegstrom, Pearson. Thirds: Ethel Koskey, Pearson; Irene Morse, Pearson.

Junior division—Orlene Carlson, county champion. Seconds: Katherine Cady, Burley; Muriel Stein, Burley; Agnes Ringness, Central Valley. Thirds: Ida Warnberg, Pearson.

Canning Project.

Senior division—Verneta Ruef, Silverdale, county champion. Seconds: Sylvia Vales, Long Lake; Adna Dahl, Central Valley; Hilma Kippo, Central Valley; Martha Olson, Central Valley. Thirds: Georgia Smith, Port Orchard; Anna Rimple, Port Orchard; Mary Ernst, Silverdale.

Junior division—Minnie Hall, county champion. Seconds: Muriel Stein, Burley; Josephine Dahl, Central Valley; Myrtle Peterson, Central Valley; Betty Hall, Fragaria; Louise Willock, Fragaria; Rowena Crist, Silverdale; Elma Major, Olalla; Helen Peterson, Olalla; Esther Peterson, Olalla; Mary Vales, Long Lake; Bessie Vales, Long Lake; Marie Hauff, Long Lake.

Thirds: Edith Colburn, Long Lake; Edith Anderson, Ellen Carslin, Elsie Carlin, Ruby Pfundt, Martha Smith, Ethel Toner, Cora Clapson, Nellie Clapson, all of the Olalla club; Florence Bates, Lena Bates, Metta Davis, Phyllis Davis, Kathryn Hedden, Ariel McIntyre, Dorothy McIntyre, Mildred Milne, Myrtle Milne, Edith Nelson, Geraldine Shattuck and Laurice Siegner, all of Port Orchard; Florence Bartlett, Julia Kitts, Josephine Kunz and Sigrid Lindberg, all of Silverdale; Mary Stein, Burley; Thelma Bjorlie, Tora Fosberg, Anna Hanson, Thora Kvarnstrom, Emma Olson, Olga Olson, Vivian Peterson, Marguerite Peterson, Alice Ringness, Ruth Ringness and Katherine Rausa, all of Central Valley; Marie Bandrup, Elma Johnsen, Ella Johnson and Louise Hall of Fragaria.

Garden Project.

Senior division—Oak Lodholm, county champion. Seconds: Edgar Ostrand of Bainbridge island and Ralph Hallam of Pearson.

Junior division—Louis Molzahn of Fernwood, county champion. Seconds: Ernest Ostrand, Bainbridge island; Valdemar Lodholm, Burley; Beech Lodholm, Burley; Edwin Molzahn, Fernwood; Pearl Noren, Fernwood; Valdis Olson, Bainbridge island; John Finholm, Olalla; Walter Finholm, Olalla; Willis Carter, Pearson.

Thirds: Oliver Nelson, Fernwood; Rossi, Fernwood, Lee Carlson, Alvin Carlson, Orville Culver, Lars Grevstad, Arthur Iverson, Merton Mallory, Orvis Rongen, all of Olalla; Anselm Sunila, Pearson; Josephine Kunz and Melvin Ruef of Silverdale.

Pig Project.

Senior division—Ellis Johnson, Bainbridge island, county champion. Seconds: Ben Burke, Bainbridge island; Ernest Ruef, Silverdale; Norman Nelson, Bainbridge island.

Junior division—Louis Molzahn, Fernwood, county champion.

Pig Club Awards.

Special pig club awards given by the Bremerton Kiwanis club are as follows:

Ellis Johnson, scholarship, $25. Ben Burke, greatest average daily gain, $5. Ernest Ruef, cheapest, $5. Norman Nelson, best record, $5. Louis Molzahn, best story, $5.

All members who have satisfactorily completed their work will receive an achievement pin as soon as they can be secured and forwarded.

The following clubs will receive formal standard club charters as soon as they can be prepared and delivered:

Central Valley Canning club—Mrs. Clara J. Carter; Central Valley Sewing club—Mrs. Hans Dahl. Fernwood Garden club—George E. Worton. Fragaria Canning club—Mrs. Gladys E. Karcher. Long Lake Canning club—Mrs. Alf Hauff. Olalla Canning club—Miss Edith Peterson. Olalla Garden club—Ole Rongen. Pearson Sewing club—Mrs. O. P. Lynum. Port Orchard Canning club—Mrs. W. L. Wheeler. Silverdale Canning club—Mrs. F. B. Kunz.

CULLING IN KITSAP COUNTY.

A total of 2335 hens have been examined in Kitsap county by members of the poultry culling school during the last three months. Of this number 552 have been weeded out as poor producers, according to a report from G. N. Worden, the county agent.

THE WASHINGTON FARMER

Successor to
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VOL. XLIX. NO. 19.

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County Fair Comes Back

Neglect does not seem able to kill the county fair as an institution.

The first county fair to be held in Skamania county for 10 years, which was also the last one of the season in Washington, was held at Stevenson the week of October 7 and was a success from every standpoint.

The holding of another in 1924 is practically assured.

Cooperation in Marketing

Cooperation in marketing will receive special attention at the coming meeting of the State Horticultural association, which will be held at Yakima December 10-12. President Paul Weyrauch of Walla Walla will preside and N. B. Coffman of Chehalis, president of the State Chamber of Commerce, will make one of the leading addresses.

Papers and discussions of interest to horticulturists will be given by State Director of Agriculture E. L. French; Roy Larson, Wenatchee; Leo K. Couch and Isaac D. Hunt, Portland; Dr. E. A. Bryan, Washington State college, and George Coburn, Wenatchee.

Why Club Members Make Good

One reason why club members make good is because they are usually the type of boys and girls that are sure to make good in any undertaking. The nature of the work and the manner in which it is carried out help to keep alive the ambition to carry some kind of agricultural pursuit. A recent survey of club work in Clallam county has emphasized this point in a very striking manner.

Out of the 604 prize-winning club members in all parts of the county, a summary of their records gives the average value of property owned by these members at $318.40. They had an average bank account of $111.10. It was the definite ambition of 65.2 per cent to attend college.

The final figures of the summary tell the most vital part of the story. Of these intelligent and thrifty young citizens of the farms 90.7 per cent said they wished to remain on the farm. Only 2.5 per cent of the remainder expressed an intention of leaving agricultural pursuits.

Did It on Home-Grown Feed

A Holstein cow owned by Chris Hendrichsen of Onalaska, Lewis county, Wash., received some national publicity in Hoard's Dairyman recently on the strength of a good year's record she recently completed in the county cow-testing association. In 305 days, at 6 years, she produced 613.1 pounds of fat valued at $313.05 (market price less cost of transportation from farm to market). Her total feed costs for the year were $115.45, leaving a profit of $197.60. An interesting feature of the story, and one that ought to be emphasized more on western dairy farms, is that, with the exception of oil meal, all of the feed was grown on the Hendrichsen farm. During the year this animal, Nisqually Olga Johanna, consumed 4320 pounds of corn silage, 2100 pounds of roots, 3150 pounds of hay and 2650 pounds of grain, besides being on pasture for six months.

The Potato Grower's Opportunity

The third annual Northwest Potato show will be held at Spokane, November 20-23. This show has been patronized in the past by a considerable number of growers from all four states of the northwest—Washington, Oregon, Idaho and Montana. This year an even greater interest should be manifested. The prize money offered is worth an effort to win, totaling $980, of which $525 will be awarded to winners in the certified seed competition, the remaining $455 being for producers of commercial table stock. Of greater importance, however, than the premium money that may be won is the information that may be obtained by the growers of this important crop. In addition to the lessons which the competition itself will give, a program of recognized authorities on various phases of the potato industry will be given.

A notable agricultural meeting is that of the Pacific Northwest Potato Growers' association, which will begin its sessions in Spokane November 20 in connection with the potato show.

Among the speakers this year is W. C. Edmundson of the federal field experiment station, Greeley, Col. He will tell the high points in five years' experiments.

Another government expert, well known to our growers, will also be present, D. G. K. K. Link, pathologist of the United States department of agriculture.

Details of the three days' program will be found elsewhere in this issue.

Reducing Cost of Cow Testing

In the early history of the cow testing association the dairymen of the dairy sections have tried different means of getting a large number of cows tested at a small cost. Some of these plans have worked for a time, but the plan that has stood the test is the one where from 450 to 600 cows are tested each month by one man who attends to all the book work and records.

Necessity has pressed the original idea and it has at last been worked out in Whatcom county, where they have been successful in handling almost three times the number of cows at a lower cost than is being charged in the smaller associations. Although the plan is now being operated as an experiment by the state college extension service through the help of the county agent, it has been prophesied that it will be taken up by other counties in this and other states.

The plan may be briefly stated as follows:

The sample bottles are left at the farms by the tester once each month, and the farmer asked to take his own samples and record the weight of each cow's milk for the two milkings. The next day the samples are collected and taken to Lynden, where they are all tested by the use of a steam centrifuge. Here the tester's job ceases, and instead of taking the time to figure up all of the data, and work out the books for each herd, one barn sheet for each herd is sent directly to the state college at Pullman, where it is figured up and recorded in the herd books which are kept there. The herd owner keeps only the original barn sheet as a record of each month's test. Thus the tester has time for real personal contact with the farmer, since he spends the greater part of his time calling at the different farms to get the samples and can at the same time talk over problems that come up regarding the herds.

READJUSTMENT OF AGRICULTURE.

Wallace's Farmer: There is such a thing as intelligent readjustment of agriculture to the present situation. It means producing less of some crops and more of others. It means putting some wheat ground back to grass, and also some rolling corn land down to grass. It means raising somewhat more cattle and sheep in the United States, and possibly fewer hogs. The problem is a technical one of the greatest complexity. If it can be tackled successfully it will mark the beginning of harmonious cooperation of agriculture, labor and capital.

Washington State Gleanings

The reorganization of the farm bureau at Oakesdale was accomplishment under the direction of Fred Talley, state director of farm bureau work, and Brick Burford of Whitman county.

The following officers were elected: Thurston Hodges, president; Jim Willard, vice president; Mrs. Gifford Martin, secretary and treasurer of organization and program work; Charles Willard, entertainment committee.

GRAPE JUICE MANUFACTURED.

Although the Kennewick district is becoming well-known for its Concord grapes, which are shipped to all parts of the northwest, there are many grapes that do not reach the fresh market. This year there were 300 tons that were used for the manufacture of juice by the Church & Co. plant, where 54,765 gallons have been stored. All of this will be bottled and shipped to jobbers for fountain and store trade.

IMPROVE IRRIGATION DITCH.

Improvement and permanent renewals on the West Oroville irrigation ditch are proceeding rapidly. Two tunnels are being run and a large part of the ditch from the intake to the first laterals will be improved, removing a large part of the high fluming, which has given trouble in past years.

About 50 men are employed and more are being added daily. The work will continue the greater part of the winter.

NEW APPLE PACKING RECORD.

M. A. Peacock of Yakima picked 28,100 boxes of apples from 38 acres of 11-year-old trees, averaging 739 boxes an acre.

Pearl Goetz, packing apples for the Yakima Valley Fruit Growers' association, in 10 hours packed 261 boxes of Rome Beauties, setting a new record. The best record last year was made by Minnie Markel, who packed 225 boxes in eight hours, working for the Moxee Orchards company.

Total fruit shipments from the Yakima valley for the week of October 22-27, were 990 cars, and vegetables were 239, making a total of 1229 cars. Apples led with 880 cars; pears, 95; mixed fruit, 8; melons, 4; prunes, 3; potatoes, 190; onions, 33, and mixed vegetables, 16. Both railways had enough refrierator cars.

BARRELED BERRIES SOLD OUT.

Dr. E. S. Barnes of Seattle, president of the North Pacific Cooperative Berry Growers, while in Chehalis recently stated that the principal regret he had was that the association has not 2000 or 3000 more barrels of strawberries to sell. Already he has turned down offers for over 1000 barrels because the North Pacific is sold out of barreled berries.

The price on barreled goods is stronger than when the season opened. While in Chehalis Dr. Barnes transacted business for the North Pacific and went fully into the matter of the plans for the southwest district to handle its own affairs.

Dr. J. T. Coleman of Chehalis has been offered the chairmanship of the committee of seven which is to work out an acceptable pooling plan of some kind.

STUDY APPLE CONDITIONS.

Coming from New Zealand to the Wenatchee valley to study apple conditions and get ideas to take back with him, Hura Beusenmaun is now working on a ranch near Wenatchee. He plans on going back November 18, arriving home in time to prepare for the New Zealand apple harvest. He is the son of one of the largest apple growers in New Zealand. Three hundred thousand cases of apples were shipped out of New Zealand last year, every one bearing the government inspection stamp.

The horticulture department will not allow apples to be exported without the official stamp. All of the ranchers, Beusenmaun says, are organized into associations. The principal varieties raised are Cox's Orange, Delicious, Jonathans, Sturmer and Dunn's Favorite. The majority of the trees were planted between 1910 and 1914, but the planting of orchards is again increasing. The land is very fertile and enough rain falls so that irrigation is not needed.

BERRY GROWERS PLAN TO UNITE.

Action taken at Chehalis October 20 by representatives of the various locals of southwest Washington counties that are members of the North Pacific Cooperative Berry Growers will result in the early formation of a district organization embracing Lewis, Pacific, Cowlitz, Grays Harbor, Thurston and Mason county berry growers, with Chehalis as the principal place of business. Recently at the annual meeting in Seattle of the members of the North Pacific organization of districts was authorized. Representatives from most of the locals in this part of the state voted unanimously to proceed to work out a plan under which to handle their present business and it is expected to still further increase the business already developed. Under the plan as suggested the business will be done locally instead of through Seattle.

L. G. Colyn of Onalaska, who is a member of the executive committee of the North Pacific, and who called the meeting, presided. George E. Worton of Port Orchard, who also is a member of the executive committee, made a very interesting talk, urging that the district organization plan be adopted and suggesting a plan whereby the operations of the district may be successfully financed. Dr. J. T. Coleman of Chehalis discussed the advantages of the district plan and how it might be financed to handle an immense business.

Chairman Colyn was directed to name a committee of three men, whose business it shall be to formulate a plan of district organization. Dr. J. T. Coleman of Chehalis, Henry Olson and J. T. Smith of Adna were named members of the committee of three.

The consensus of opinion of the berry growers at the meeting was that if the industry is to succeed in southwest Washington it must be through the cooperative method.

Present at the meeting were L. G. and John Colyn of Onalaska, A. S. Caton, S. H. Ingel and L. C. Frederick of Olympia, F. S. Ingersoll and Charles Moore of Grand Mound neighborhood, J. Wingart, R. D. Haskell, J. H. Haskell, August Wingert and Martin Goesch of Harstine island, Mrs. Allmer of Centralia, L. W. Hunting of Silver Creek, H. W. Dow of Elmer. H. S. Bates was secretary.

Something Besides Wheat

Road to Financial Safety, Likewise Road to Good Living

The National Association of Farm Equipment Manufacturers held an annual convention at Cleveland, Ohio, last week, and some things were said that were not complimentary to the farmers of this country. Sometimes it is helpful to listen to what the other fellow has to say. There has been a good deal of criticism of the manufacturers of farm machinery and utensils, and some of our readers have shied a few bricks at them.

The absorbing topic of this convention was the shrinkage in the demand of farm implements. Farmers have been saying, with force of reason, that high prices were the cause of that condition. Here is what Alexander Legge, president of the International Harvester company, said in a paper read to the 200 delegates:

"While the initial cost of implements today is much higher than the prewar levels, the whole cost, when calculated on the period of its usefulness or on the number of acres tilled by it, will probably figure less than in the old low-price days we hear so much about. I am told farmers right here in Ohio are paying out three times as much for gasoline alone as for farm machinery. The whole family is boosting the cause of the auto salesman, while only the farmer and the hired man are interested in replacing worn-out farm equipment."

J. B. Bartholomew, president of the association, touched upon the wheat problem. He approved a moderate reduction of wheat acreage, but with reason said the reduction should be made by farmers who can not compete with the producers of the northwest and the southwest, who can not raise much else; that the high-priced land of the east ought to be turned to other things.

Here in the wheat-growing areas of the Pacific northwest it would be foolish to urge growers generally to quit growing wheat and produce something else. There can be only a partial giving up of wheat-growing here. It is an industry well suited to the soil and climate of parts of Washington, Idaho, Oregon and Montana. The machinery, the equipment and the facilities have been built up here at great cost to carry it on. There is an enormous investment in machinery to that end, and in warehouses. Many wheat growers lack an understanding of other agricultural pursuits. Labor is trained to it. An industry like that can not be "chucked" all at once as you might "chuck" a potato out of the window.

Nevertheless, there should be a gradual easing away from so much wheat growing. There should be an accelerated movement toward diversification. Every wheat farm should have enough hogs and poultry to clean up the stubble and the waste of the farm.

And every farm, whether it be of 20 acres or 2000, should produce its own poultry, eggs, milk, butter, vegetables, berries and hardy fruits. There lies the road to financial safety, and it is likewise the road to good living, and to a dignified pride and satisfaction in the place that is one's home and the home of his wife and children.

World Farming--Switzerland

Of the 16,000 square miles comprising the area of Switzerland about 72 per cent is classed as productive. Of the productive area 36 per cent is under grass and meadows, 29 per cent under forest, 19 per cent under fruit and 16 per cent under crops and gardens. In 1921 there were 111,000 acres in wheat and about 50,000 acres each in rye and oats.

The chief agricultural industries of Switzerland are the manufacture of cheese and condensed milk.

The bulk of the food crops consumed in the country is imported.

At the time of the last census there were in Switzerland 129,269 horses, 3581 mules, 891 donkeys, 1,382,116 cattle, 729,999 cows, 240553 sheep, 546,112 pigs, 333,852 goats.

The population of Switzerland is 3,880,000.

Here Is the Catechism

Gird Up Now Thy Loins Like a Man and Make Answer

Then the Lord answered Job out of the whirlwind, and said,

Who is this that darkeneth counsel by words without knowledge?

Gird up now thy loins like a man; for I will demand of thee, and answer thou me.

Where wast thou when I laid the foundations of the earth? declare, if thou hast understanding.

Who hath laid the measures thereof, if thou knowest? or who hath stretched the line upon it?

Whereupon are the foundations thereof fastened? or who laid the cornerstone thereof;

When the morning stars sang together, and all the sons of God shouted for joy?

Or who shut up the sea with doors, when it brake forth, as if it had issued out of the womb?

When I made the cloud the garment thereof, and thick darkness a swaddling band for it,

And brake up for it my decreed place, and set bars and doors,

And said, Hitherto shalt thou come, but no further: and here shall thy proud waves be stayed?

Hast thou commanded the morning since thy days; and caused the dayspring to know his place;

That it might take hold of the ends of the earth, that the wicked might be shaken out of it?

It is turned as clay to the seal; and they stand as a garment.

And from the wicked their light is withholden, and the high arm shall be broken.

Hast thou entered into the springs of the sea? or hast thou walked in the search of the depth?

Have the gates of death been opened unto thee? or hast thou seen the doors of the shadow of death?—Job xxxviii:1-17.

FARM BUSINESS AND MARKETS OUTLOOK

OPINION is gradually crystallizing in well-informed quarters that land values are back on a rock bottom basis, and that some improvement in prices can be looked for in the next few years.

Most of the land changing hands represents the voluntary or involuntary closing out of overextended farmers or the liquidation of estates. These forced sales, of course, are below the level at which farmers still possessing some financial strength are holding their land, but they indicate the price at which a considerable volume of land is obtainable.

The average value of all plow lands on March 1, 1923, as compiled by the department of agriculture was $66.54 per acre. This compares with $90.01 at the peak on March 1, 1920, and with $58.39 in 1916, when the first report of this kind was made. The 1923 value probably indicates the decline in asking prices compared with 1920 rather than the extent of the decline in actual prices were made at forced sale.

A survey recently conducted by the National Association of Real Estate Boards through a questionnaire to 2000 farm land dealers indicates that the process of deflation of farm land values over the United States as well as Canada has already begun to be succeeded by a new movement, that land is beginning to sell and that land values in a number of sections are already on the up grade.

The main conclusions drawn from the survey are as follows:

1. The price of farm land is probably lower today than it has been since 1916 and as low as it will be for some time to come. In many sections of the country land can be had today at a price that will not only enable the land to yield a good return on the investment, but also probably will enable the investor to turn his property at a profit within a reasonable length of time.

2. There has been a considerable increase in the sale of farm lands in the last year, particularly with the last few months. In some sections this increase has been very marked; in other sections it is less noticeable. While the prospects that are there will be definite improvement in the market, this improvement will be slow.

Slump in Cattle Halted.

Lighter receipts last week brought a welcome halt to the break in cattle prices. The market hopper had been overflowing for two weeks as a result of rains and cold weather, which forced in cattle from the ranges simultaneous with a rush of corn belt feeders to unload when the corn market soared skyward and fat cattle values continued to slip. High prices for heavy steers in the late summer period resulted in an excessive movement of fleshy steers to the corn belt, a fact which available records failed to disclose with certainty, and these are coming back after being barely warmed up on corn. Westerners are furnishing an abundance of beef of much similar grade at lower cost, so that many of these short-feds are scarcely bringing first cost. While prime steers are still quoted up to $12.50, plainer kinds selling above $12 two months are are $2 lower at present. Bulk of the westerns at Chicago sold at $5.50 to $7 last week, with a few up to $7.50 and a top of $9 for some Montana steers of unusual finish.

The department of agriculture reports that more range cows and heifers are being marketed than last year.

Cattle feeders appear afraid of the corn market, while the supply of thin steers has been the heaviest of the season, so that prices sagged again last week and are the lowest in months. Plain steers weighing up to 900 pounds have been available at $4 to $6 at Chicago, prices which seem to carry but little element of risk for the buyer, and which are not likely to continue much longer.

Break in Hogs Interrupted.

Receipts of hogs were enough lighter last week to keep values fairly stable. But the supply was much heavier than ever before at this season and the advance did not carry far. Bottom for the season probably has not been uncovered, as arrivals are expected to reach considerably heavier volume in the next 30 to 40 days.

Smart Upturn in Lamb Market.

Receipts of sheep and lambs dropped off 20 per cent last week, while thin lambs were in the majority in the western contingent, so that prices of fat stuff advanced 50 to 75 cents and the Chicago top crossed the $13-line again. Since June 15, when new crop lambs began to dominate, arrivals at 10 leading markets have been 10 per cent larger than last year and prices are about $1.50 lower than at this time in 1922.

Corn belt feedlots are still being gorged with thin lambs, although the volume of purchases fell off enough last week to allow values to sag.

Seaboard markets report a fair demand for wool at steady prices. Stocks of some mills apparently are running low and other buyers desire to accumulate while a suitable selection is to be had.

Exports of wool from Australia, Argentina, Urguay and the United kingdom in the first eight months of 1923 totaled 1,036,000,000 pounds, compared with 1,324,000,000 pounds in the corresponding period a year previous. The United States imported 350,000,000 pounds in the same interval, compared with 245,000,000 pounds last year. During July and August, however, only 22,000,000 pounds were imported, against 65,000,000 pounds last year.

Firm Undertone in Wheat.

Wheat prices have covered an unusually narrow range in the last two weeks, but appear to be about ready for a substantial advance. Both the large supply in commercial channels in this country and abroad the prospect of greater surpluses in exporting countries than importing nations will need are unfavorable influences, but the market repeatedly has demonstrated its ability to ignore them. Even the report of substantial quantities of Canadian wheat coming into this country caused only temporary weakness.

In some particulars the market situation is improving. For one thing, Canadian wheat pressure has been less than expected. Importing countries other than European, especially Japan and China, are taking more wheat than they were counted upon to do and the total amount of wheat disappearing into importing countries since July 1 is 197,000,000 bushels, against 204,000,000 bushels last year. A small potato crop in central Europe, as shown by recent reports, will probably offset part of the market increase in their wheat crop, which was supposed to mean smaller imports. Argentina and Australia at present are disposed to hold back their old crop surpluses until the new crops were nearer maturity.

Exporting countries seem to be better sellers than in former years, as no marked anxiety to dispose of surpluses is shown, and producers also have been selling at a more uniform rate than they usually do. Finally the prospect of enough scarcity of good milling wheat in the United States east of the Rockies to put prices later in the season on an import basis has supported markets in the middlewest and their steadiness has exerted a restraining influence on markets abroad

Corn and Oats.

Old corn has declined nearly 20 cents in the last two weeks and the break in new corn also has been severe.

Oat prices have been affected by the weakness in corn, but are probably down on solid bottom again.

Cash Grain Markets.

The range of cash grain prices for the week ended October 31 was:

CHICAGO—Wheat—No. 1 hard, $1.08 1-4@1.12; No. 2, $1.07 1-4@1.12. Corn—No. 2 mixed, 99 1-2c@$1.01; No. 2 yellow, 92 1-2c@$1.03 1-2; No. 3, $90 1-2c@1.03; No. 2 white, 95c@$1.03. Oats—No. 2 white, 42 3-4@44 1-2c; No. 3, 41 1-2@43 3-4c. Rye—70 1-4@71c. Barley—57@75c.

Seed and Feed.

Clover seed prices held within a narrow range last week. Receipts of new crop seed have increased, but are so much lighter than last year that a rather firm undertone is apparent, even though dealers are not anxious to stock up for next spring's trade. Thus far this season only 2728 bags have been received at Toledo, compared with 14,243 bags last year and 13,585 bags two years ago.

Increased production of byproduct feeds and heavier receipts of corn, with lower prices for that grain, are causing an easier tone in the feedstuffs market.

Good Hay in Demand.

Hay prices generally were firm last week. Demand for the better grades is satisfactory in most markets, but the lower grades are moving slowly. Rainy weather during the fall in some of the principal hay surplus districts has caused a high percentage of undergrades.

Prices per ton in carlots: Chicago—No. 1 timothy, $26@27; No. 2, $23@25; No. 1 light clover mixed, $24@26; No. 1 clover, $22@24; No. 2 clover mixed, $17@19; No. 1 alfalfa, $19@30; midland prairie, $17@20; rye straw, $13.50@14.50; oat and wheat straw, $11.50@12.50.

Fresh Eggs Soar Higher.

Light receipts and excellent demand for good, fresh eggs last week pushed prices to a new high level. Supplies will continue to diminish as the season advances and prices should at least be maintained. The situation on storage eggs is less satisfactory. Eggs are not moving out of storage and into consumptive channels rapidly enough. In the four large markets last week the out of storage movement averaged only 26,043 cases per day, with more than 3,000,000 cases to be moved. A heavy surplus is expected to be shown in the November report on cold storage stocks, after which holders may decide to liquidate at lower prices than they are holding for now.

Butter and Cheese.

Butter prices remained practically unchanged last week, with a growing tendency to widen the range in price between the different scores. Receipts of fine butter were ample, but were generally better cleaned up than medium and undergrades. Production is gradually declining, as compared with previous weeks this year, but continues to stride ahead of last year.

An oppresive surplus of storage stocks of cheese and a very light demand are the chief factors in the quiet cheese market.

Fruits and Vegetables.

Potato prices in western markets declined last week, but in the middlewest, where they already were quite low, prices were steady. Carlot shipments from producing sections have fallen off in the last few days and arrivals in consuming markets should soon begin to decline. Many potatoes are going into storage, with holders fairly confident of better prices in the future. Northern

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Finds That Diversification Pays

Would Not Consider Running a Straight Fruit Farm Even in a Favored Fruit Section

By RALPH ERSKINE

There are many farmers who believe in specializing with their farm crops in order that more attention may be given to one crop. Particularly is this true in the irrigated fruit districts of eastern Washington.

An exception, however, is found in the case of Charles Lumm, a fruit and vegetable grower of Kennewick. Mr. Lumm is convinced that it pays to raise a number of crops instead of having all of his land in orchard. Although he has 15 acres devoted to orchard, he keeps a large percentage of his fields for cultivated crops in order to spread out his work throughout the year and bring in a greater income per acre.

"I would not consider running a straight fruit farm, even in this fruit section," said Mr. Lumm, "because one has very little to fall back on in case anything goes wrong with the fruit, or if the markets are not the best. I have found that it pays better to raise such crops as strawberries, asparagus, berries, grapes and vegetables. I also raise a little corn every year just for feeding to the hogs. I keep a couple of cows and a few chickens, and always have plenty of butter, milk and eggs and my own meat supply for the winter.

Place for Strawberries.

"Heretofore I have always had strawberries planted in between the rows of my new orchards in order to make use of the land until the trees come into bearing. Last year I had seven-eighths of an acre of Clark Seedlings, which produced nearly 200 crates to the acre. This was a good yield, and proved a paying crop, since we received a gross return of $3.20 per crate through the season. Of course, these are early berries, and always bring a good price and I believe it pays to keep a small strawberry patch, even though there is no young orchard to make use of.

"I have always planted strawberries on land which has grown alfalfa for a number of years. Alfalfa is a good soil builder, and one can always be sure of a good production of berries if the soil has been properly prepared. I intend to seed alfalfa between the tree rows as soon as the strawberries have served their usefulness, but I intend to plant a new patch of berries in the meantime.

"Asparagus is a crop that brings in a good return and it comes at a different time than strawberries. I find that I can get as high as 300 crates to the acre by properly manuring the soil. Asparagus is a heavy feeder, and will yield almost in direct proportion to the amount of fertilizer applied. This crop can not be used as an intercrop, but must be planted alone and given special treatment if the best results are expected. Our patch was only five-eighths of an acre, and was all Palmetto variety. We had a little bad luck last year in not getting the rows cultivated in time and we lost the first cutting by breaking the stocks. Had we been more careful in our first cultivation we would not have broken off any of the first stocks as they were starting to come through the ground, and would therefore have had a larger crop this year.

Good Corn Crop.

"Our corn always produces a good crop," continued Mr. Lumm, "and it is my opinion that one can be sure of at least 60 bushels of ear corn to the acre, and I have had crops that I believe would have measured 100 bushels. This includes both yellow and white Dent, and I have found very little difference in the way they produce. Both make a good corn for hog feed, and the cattle like the fodder if they can have some alfalfa hay with it. I usually husk the corn in the field as it is picked, and cut the stocks for fodder rather than leave them to be fed in the field, since it is a little handier when irrigating not to have corn stocks to clog up the irrigating ditches.

"We have a long growing season here, and we can therefore grow a long-seasoned corn. I like the Dent varieties for this reason, and have had better luck with them than some of the quicker growing varieties. There is one drawback with the late producing corn and that is the ear worm. Some years there are more worms than others and they cause much damage. This, however, does not injure corn for hog feed, unless it is very bad. The worms can be prevented by dusting the silks at the proper stage with lead arsenate powder, and it does not take long to go through a field in this manner with a large pepper shaker. The difficulty, however, is that the application must be repeated every 10 days.

Feed One or Two Pigs.

"We generally keep one brood sow and feed one or two pigs for the winter's meat supply. It is not difficult to get two good litters of pigs each year, and I have no trouble in selling all of the young pigs I can raise. There is always more or less refuse around the farm that can be fed, such as cull apples, waste vegetables and refuse from the table.

"I find that chickens also pay if proper care is taken of them," continued Mr. Lumm. "The greatest danger, however, is in getting too large a flock, so that they can not be properly cared for during the busy season. We generally keep from 100 to 150 White Leghorns, since we have to buy most of our feed, but allow them to run at large and get all of their green feed during the summer. We have always had some money coming in from our eggs throughout the year, and it does not take much time away from the other farm work to attend to a flock of this size."

Profitable Pears.

As for the orchard, Mr. Lumm feels that his best crop is a field of 180 trees of Winter Nellis pears. These produced approximately 10 boxes to the tree this season, and since there was a good demand for them he sold his entire crop before his Jonathan apples were ready to pick. He has only two varieties of apples, Jonathans and Winesaps, which help spread out the picking season of his late fall crops.

In addition to apples, pears and cherries, Mr. Lumm also has 123 Italian prune trees, which produced a little more than 12 1-2 tons this last season. Prunes are an easy crop to raise, Mr. Lumm finds, and there is usually a good market for a few prunes if they are properly packed, and sold on the fresh fruit market. While this is only a small planting, it comes at a time when no other crop needs immediate attention, and it helps to spread out his harvesting season, and thus necessitates a smaller expenditure for labor, since much of the work can be done by himself and the two boys.

Raises Feed.

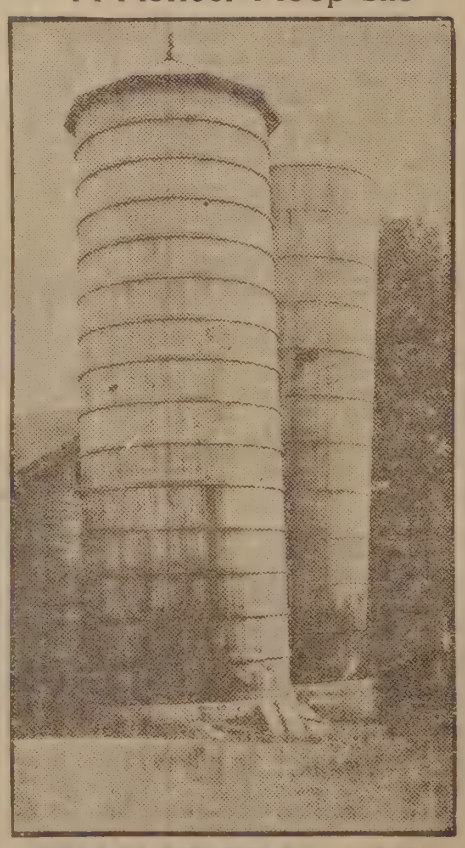
A small part of his land is devoted to hay since Mr. Lumm always endeavors to raise enough feed for his horses and two milk cows during the winter. The rest of the land is devoted to garden crops, berries and grapes, all of which are sold on the general market, and have been found to pay well for the time and trouble expended, even though there are only a few rows of each.

Taking the whole farm into consideration, Mr. Lumm's plan is one of the most ideal that can be found in any irrigated section. He not only has a large number of crops to be sold on the market at as many different times during the season, but he also has the advantage of having a number of kinds of fruit and vegetables to use on his own table without going to market after them. In fact, a large part of his table supply is raised right on his own farm with but very little extra effort taken from his routine work about the farm.

Remembers Home Table.

Mr. Lumm's first ambition is to supply necessities for the house, and then sell as much of the surplus crops as possible on a cash market. He says that if cost accounts were kept his results would compare very favorably with farms that produce straight orchard or hay crops in his and other parts of the valley. He is a firm believer that diversified farming is the only method upon which the farmer can depend in a long run.

A Pioneer Hoop Silo



Quite a bit of the farm history of Thurston county centers around the campaign carried on by E. B. Stookey, county agent, with the assistance of A. B. Nystrom. The above is one of the many wooden silos in the county and one of the first to be erected.

Begins to Receive Eggs

With the receipt of 12 cases of eggs, the Farmers' Union Cooperative Egg and Poultry association started business at its wholesale headquarters, S160 Post street, Spokane, last Friday. D. F. Mitchell is general manager and A. C. Whisler, sales manager. Under the contracts, growers have ten days' grace before they begin shipments. Arrangements have been completed for representation at Sandpoint, Idaho, through the Farmers' Union Supply company there. The officials expect to handle several hundred cases a week when the business gets running in good shape.

A FEATHER IN CHINA'S CAP.

By the year 1234, when Europeans were floundering under heavy mail, the Chinese were using gunpowder in cannon.

Many a Farm Flock Was Started From Less

Many orphanages are conducted in the spring season throughout the Inland Empire. Herewith is a picture of some of the inmates of one of these orphanages, together with two of the attendants. Mrs. Joseph Hamon suggests that we call this picture "Feeding Time on the Hamon Ranch at Benge, Wash." The lambs shown in the picture were rescued by the Hamon children, who are shown here administering to their needs with the bottle and otherwise.

"It Keeps Me Awake Nights"—

is the familiar confession of the tea and coffee drinker. The reason is that both tea and coffee contain caffeine—a drug which is the foe of night-time sleep and day-time energy.

Postum, the pure cereal beverage, is delicious and satisfying—and free from all the elements which so many users of coffee and tea find disturbing to nerves and digestion.

Postum contains no stimulant to keep you awake nights.

Sold by grocers everywhere!

Postum

for Health

"There's a Reason"

Your grocer sells Postum in two forms: Instant Postum [in tins] prepared instantly in the cup by the addition of boiling water. Postum Cereal [in packages] for those who prefer the flavor brought out by boiling fully 20 minutes. The cost of either form is about one-half cent a cup.

Made by Postum Cereal Co., Inc.
Battle Creek, Mich.

Fordson

"To make farming what it ought to be—the most pleasant and profitable profession in the world."

This is Henry Ford's vision of the Fordson.

Not a mere machine of so much horsepower, so many cylinders or so much drawbar pull. All are important. But much more than that—an opportunity to make farm life, your life, more productive and more worth living.

This vision of a better day on the farm has become more than a dream. The Fordson has made farming more pleasant and profitable.

How well the spirit of the builder is moulded into the Fordson through years of patient testing is proven by experience of a host of owners.

With operations organized on a more profitable basis, work done when it should be, labors lighter in proportion to results, the drudgery gone, life is really more pleasant on Fordson Farms.

Ford Motor Company

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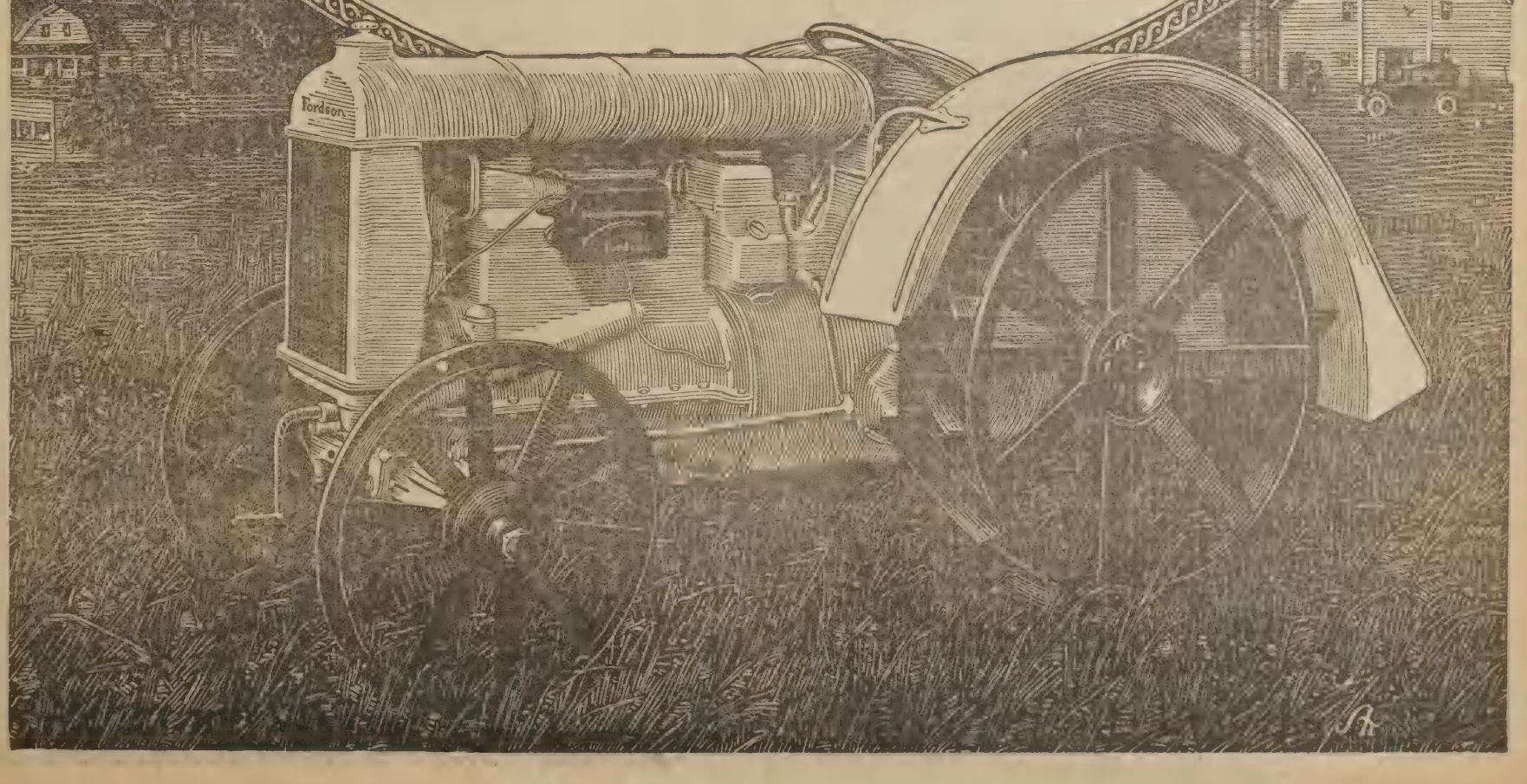
Ask Any Ford Dealer



Alfalfa

New Set of Standards Embracing Five Grades

A new set of alfalfa hay standards, embracing five instead of three grades, was made public Monday by the state department of agriculture as the result of hearings held at Yakima and Seattle last month. The new standards are made to provide for alfalfa hay with a heavy percentage of timothy, particularly that grown near Ellensburg, and are as follows:

Choice—99 per cent pure, leafy, of ripe green color and may include 2 per cent of weather-bleached hay. The balance of 1 per cent shall be hay of good quality and not objectionable as merchandise hay of its class.

No. 1—95 per cent pure, of good natural color, including not to exceed 5 per cent weather-bleached alfalfa. It shall not contain more than 2 per cent weeds or other worthless content, including not more than a trace of harsh bearded grasses.

No. 2—85 per cent pure, of good natural color, including not to exceed 5 per cent weather-bleached alfalfa. It shall not contain more than 10 per cent green cheat; or it may be alfalfa 95 per cent pure, of good natural color, including not to exceed 15 per cent weather-bleached alfalfa; must not contain more than 3 per cent weeds or other worthless content, including not more than a trace of harsh bearded grasses.

No. 3—70 per cent pure, of good natural color, including not to exceed 5 per cent weather-bleached alfalfa and not over 20 per cent green cheat; or it may be alfalfa 90 per cent pure, of fair color, including not to exceed 20 per cent weather-bleached alfalfa and not to exceed 10 per cent green cheat. It must not contain more than 5 per cent worthless content, including not more than a trace of harsh bearded grasses.

No. 1 mixed—From 60 to 85 per cent of reasonably leafy alfalfa. The balance of the hay of other kinds shall be at least 75 per cent timothy, all of good natural color, including not to exceed 5 per cent of weather-bleached hay and not more than 5 per cent of green cheat and 2 per cent of weeds or other worthless content, including not more than a trace of harsh bearded grasses.

No. 2 mixed—Containing the same percentage of mixtures as No. 1 mixed, but may be of not so good color and may contain from 3 to 10 per cent worthless content, of which not more than 3 per cent may be thistle. It shall carry a discount of 1 per cent for each 1 per cent of worthless content in excess of 3 per cent.

Sample grade—All merchantable hay reasonably well baled, not covered by other grades.

No grade—Any variety that is more than 3 per cent badly bleached or discolored, or that has badly damaged spots, heating, musty or caked, or more than a trace of foxtail, or more than 5 per cent thistles.

LIFE PRESERVERS FOR LIVESTOCK

By DR. E. E. WEGNER, W. S. C.

THE CHRONIC DISEASES.

I feel that it is a good time of the year to remind our readers that this is the time of year when it is usually convenient to have the horses treated for the chronic ailments that so often appear during the heavy working season. It is not often convenient to have this work done while the animals are badly needed in the field or on the road, but now, when the work has slacked up and the animals are going into winter quarters very shortly, it is a good time to have them treated, so that they may have the much-needed and very essential rest that is an important part of the treatment of many of these chronic conditions.

I have reference particularly to the lamenesses, chronic enlargements on the shoulders, dental work that has been put off from time to time and other ailments that must be attended to sooner or later. The tooth troubles are manifest by slobbering, careful chewing and occasionally dropping the feed from the mouth partially chewed, turning the head to one side while eating and raising the nose high to one side or shaking the head. Jerking the head up out of the water while drinking indicates that the cold water causes pain, or the animals may sip the water slowly through the lips. We sometimes become impatient with the animal that takes a lot of time while drinking, but in many of these cases the animals are afraid to drink fast and expose the teeth to the chilling effect of the cold water.

Save the Teeth.

Another indication of diseased teeth is enlargements about the face opposite the roots of diseased molars. Very frequently one sees quite an enlargement on the side of the face where an abscess has formed on the root of the molar or it may be in the nature of a growth of spongy bone from the inflammation about the root of the tooth. In either case recovery takes quite a while and one might well have the work done now, while the season is not a rushing one. The lower border of the lower jaw frequently shows great thickenings as a result of diseased lower molars and if no treatment is given the infection inflammation extends forward and backward, involving the teeth in front of and behind the one originally diseased. When such neglect has been practiced it is sometimes necessary to take out two or three teeth, when one would have been enough had the treatment been given earlier.

Lamnesses of whatever kind are better treated at a time when the part can be given absolute rest for an extended period. It is quite impossible to treat many of the lamenesses while the animal is required to do work or go to work soon after the lameness ceases. The parts must have time to get thoroughly strong and well before they are strained again or they may suffer from a recurrence of the trouble.

Treating the Shoulders.

If the enlargements that occur on the collar bed are to be removed and the shoulder smoothed up it is best to do this now, while the parts can be given extended rest. Putting the collar on too soon again is not a good practice and may defeat the object of the treatment.

The same reason applies to this appeal that applies to the one for doing the repair work before the necessity arises. Get the machinery in shape before the time to use it. It is all right to repair the machinery the day before it is to be used, but this does not apply to the animal, because the time for complete repair is considerable.

It would be well for every one with animals to look them over and see what is needed to be done, then to have it done now. Next spring, when the work starts again, the animals will be better able to get into the collar and stay there through the season. It is a matter of economy and good business to do it the right way and save loss of horse labor, as the loss of horse labor is the loss of money and profit.

Signs of the Times

Mrs. R. F. Little of King county sends the accompanying picture of a Buff Orpington rooster protecting a flock of his children from the cold. "I am enclosing a picture showing the trend of modern times—the mother deserting her little flock and father assuming the maternal burden," says Mrs. Little. "When the mother weaned the chickens he tried to talk to them and finally took over the job of being their mother and kept on the job. Long after they had gone to roost he would sit on the floor and try to coax them down."

This bird at 2 years old weighed 11 3-4 pounds, Mrs. Little writes, and says that at 8 months old some of his young sons weigh eight and nine pounds.

GENERAL ADVERTISING.

NEW LAMP BURNS 94 PER CENT AIR

Beats Electric or Gas

A new oil lamp that gives an amazingly brilliant, soft, white light, even better than gas or electricity, has been tested by the U. S. government and 35 leading universities and found to be superior to 10 ordinary oil lamps. It burns without odor, smoke or noise—no pumping up, is simple, clean, safe. Burns 95% air and 6% common kerosene (coal oil).

The inventor, W. W. Johnson, 161 Union Ave., Portland, Ore., is offering to send a lamp on 10 days' FREE trial, or even to give one FREE to the first user in each locality who will help him introduce it. Write him today for full particulars. Also ask him to explain how you can get the agency, and without experience or money make $250 to $500 per month.—Adv.

Easy to slip off and on—one of the big convenient features of the "U. S." Walrus

In and out of 'em a dozen times a day

Slide 'em right over your leather shoes—snap the buckles shut—and you're ready for the stickiest muck and mire the barnyard offers.

You can walk in mud or icy slush—these big overshoes are as watertight as a boot. And their heavy fleece lining keeps your feet always warm and dry.

Then when you're through, a pail of water washes off the caked dirt in a flash! Mud has a hard job sticking to that smooth rubber surface.

Wives have a real interest in the "U. S." Walrus, too! No miry tracks on the kitchen floor—no dried mud around the house! Just flip open the buckles—kick your Walrus off—and you walk inside with clean, dry feet, no matter what the job outside has been!

The "U. S." Walrus can be washed clean instantly. Its surface is as smooth and waterproof as a boot.

Other "U. S." Footwear—all built for long, hard wear

U. S. Boots, built so tough and rugged they're famous wherever boots are worn—rubbers and arctics, all styles and sizes for the whole family—U. S. Bootees, the all-rubber lace shoe, for spring and fall use—every kind of rubber footwear you could possibly need is included in the big U. S. line.

Every single one is backed by 75 years of skilled experience. It will pay you to look for the "U. S." trademark—the honor mark of the largest and oldest rubber organization in the world.

Trade Mark

United States Rubber Company

Ask for

"U.S." Walrus

County Pools

Used to Market California Grain

Grain sales approximating $4,000,000 were made by the grain department of the California farm bureau exchange, San Francisco, Cal., following the commencement of operations under a reorganized plan effective July 1, 1922. The grain came largely from 18 counties.

As now organized the exchange is a nonstock, nonprofit organization made up of representatives selected by county farm bureau exchanges. A "Prospectus of Co-operative Plan for 1923 Grain Crop" states that efforts are to be made to obtain the signatures of the 5000 grain growers in the state to a contract running for five years and providing for seasonal grain pools by variety and grade.

According to the prospectus, grain growers are to be organized into county farm bureau exchanges, managed by boards of nine directors each, Growers are to deliver their grain to the local warehouses or railway freight houses and indorse the warehouse receipts or bills of lading to the county exchange, which is to forward them to the state exchange with a sample of the grain. The state exchange thereupon is to issue a certificate of deposit showing grade. It is proposed to advance 60 per cent of the approximate market value of the grain delivered and to make a final settlement when the last of the grain in any pool is sold by the state exchange. The grain of each county is to be in separate pools.

The Center of Things

The following paragraphs indicate the centers of production of various crops and those of manufacture and of population. A center of production is not the median point in production of the staple, but is found by weighing the figures for each county in proportion to its distance from an (at first assumed) approximate center, until, with successive trial centers, the exact one is located. It will be readily comprehended that such a countrywide center for a product need not be in a region locally producing it, but may be.

Wheat production in 1919 had centered at a point in the extreme northwestern corner of Missouri, or at the meeting place of Nebraska's, Iowa's and Missouri's boundaries.

Corn production had its center, in that year, in Macoupin county, Ill., and about half-way between Springfield and St. Louis, having receded eastward since 1900.

The center of cotton production was in Mississippi and somewhat north of midway between Jackson, Miss., and Memphis, Tenn.

Oats had centered in Keokuk county, Iowa, nearly mid-way between Burlington and Des Moines.

The central point for all cereals was in Knox county, Mo., west of Quincy, Ill., and about one-third the distance thence across Missouri.

While in the next year, 1920, the total number of farms centered in Perry county, southern Illinois, near the 89th meridian, the total area in farms had followed its westward march, since 1850, across Kentucky and Missouri and, in fact, somewhere beyond the western boundary of our reference map, which ended but a little west of Omaha. This faster movement westward of farm acreage than of number of farms might indicate either that farm lands in the west are being taken in larger blocks since 1900, and therefore increasing faster than number of farms, or that eastern farms, since then, are breaking up into home-sized tracts. Perhaps the latter fact is the truth, since in the west, also, large ranches are giving way to smaller and often irrigated farms. Still another center is traced, that of improved acreage, and is found to have been in 1920 in Macon county, Mo., about one-third the distance west from Hannibal toward St. Joseph.

Farm values, in 1920, were centered in Missouri still, but had crossed the 93d meridian since 1910 to a center in Linn county, at about the latitude of Quincy, Ill.

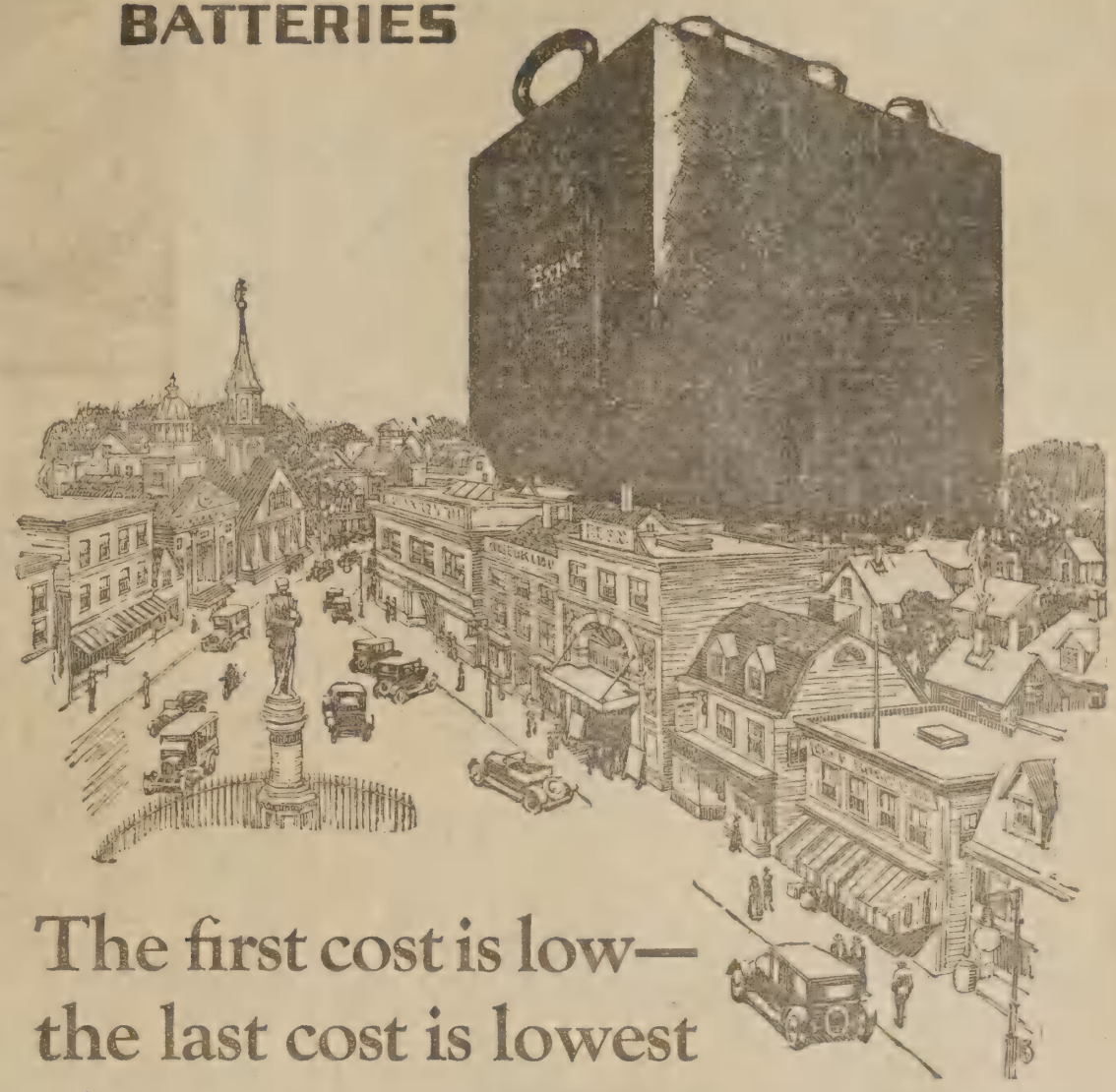
Population still centered, as for three decades, in Greene county, Ind., and had all the way since 1790 clung close to the 39th parallel of latitude in its westward movement.

Manufactures, lurking far in the east of these developments, in 1919 centered in Logan county, Ohio, on the Miami.

MORE COWS ACCREDITED.

Nearly 5,000,000 cattle are under supervision for the eradication of cattle tuberculosis, according to a statement of the status of the work just issued by the department of agriculture. A total of 661,260 cattle, including both beef and dairy breeds, are in fully accredited herds, while nearly 3,000,000 more have successfully passed the first test in the process of becoming accredited. There is a waiting list of more than 145,000 herds that will be tested as soon as federal and state veterinary inspectors can get to them.

Exide
BATTERIES



The first cost is low— the last cost is lowest

This advertisement is addressed particularly to those who have long recognized the Exide as the most desirable battery, but have felt they could not afford the original outlay.

Now, no man need deny himself an Exide. The present prices are surprisingly low—and the quality of the famous Exide, of course, remains unchanged.

Because the Exide gives such long service, it has always been the most economical in the end. At present prices, this economy is so marked that you cannot afford to ignore it.

The Exide not only gives long service, but steady service. It is powerful and rugged and stays right on the job in your car, instead of taking rests in a repair shop.

You will find an Exide, the right size for your car, at the nearest Service Station.

Before putting a new battery in your car, get the price of the Exide at the nearest Exide Service Station

For farm power and light

A great majority of all farm power and light plants have Exide Batteries. Make sure that yours is a long-life Exide.

Exide BATTERIES SERVICE STATION

Look for this sign Wherever you see it you can get a new Exide for your car or competent repair work on any make of battery.

RADIO *For your radio set get an Exide Radio Battery.*

THE ELECTRIC STORAGE BATTERY CO., PHILADELPHIA

Service Stations Everywhere Branches in Seventeen Cities

THE LONG-LIFE BATTERY FOR YOUR CAR

Double Your Money in Less Than a Year

$7000 Cash and 6 Pairs Foxes from 2 Pairs of Our Breeders in 15 Months

This was done by one of our purchasers. Ask about it. Raise ROOSEVELT STRAIN Mormon Foxes and you can do as well. All breeders purebred, registered, guaranteed.

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The department editors of this paper are anxious to be of service to you. Do not fail to write to us if they can be of help to you.

Have you glanced over the farm bargains on the "Want Ad" page?

LIVESTOCK AND DAIRY

Millions of Mules

The ability of the mule to endure hardship and perform sterling service under adverse conditions has established him as a real asset in American agriculture, and his importance and popularity as a work animal is attested by his rapidly increasing use, as shown by department of agriculture figures. In 1910 the number of mules on farms and ranches was 4,209,769. The number on January 1, 1920, was 5,432,391, an increase during the decade of nearly 30 per cent. Nearly three-fifths of all the mules in use in the United States are found in the nine cotton belt states. These states, Texas, Georgia, Oklahoma, Arkansas, Mississippi, Alabama, North Carolina, South Carolina and Louisiana, had a total of 3,172,797 mules in 1920, as compared with 2,855,257 horses. Texas and Oklahoma were the only cotton belt states having more horses than mules.

While the mule is essentially a draft animal, it is used widely for utility purposes, especially in the south. Mules vary in height from 12 hands to 17 1-2 hands and in weight from 600 pounds to 1600 pounds. They are divided into five general market classes: Draft, farm, sugar, cotton and mining. Each of these classes again is graded according to conformation, soundness, quality, condition and action, and classified as choice, good, medium, common or inferior.

The general form and appearance of the mule should resemble closely that of a horse, and in judging mules the same general points of perfection are to be looked for. The nearer the mule approaches the ideal desired in a draft horse, the more valuable he is from a market standpoint, department specialists state. The form of the mule should be compact, with a deep body, broad chest, full flanks, short back, and well-sprung ribs. The loins should be broad, short and thickly muscled; the croup long and level; the hips long, level and muscular; the thighs thick, long and well muscled, and the hind legs well set, with broad, clean-cut hocks and flat, dense bone. The mule should stand on good feet that are well shaped. While style and action may not be so important in a mule as they are in the lighter breeds of horses, these qualities add materially to its value. A smart, alert mule with a long, free stride at the walk and a snappy, balanced trot is highly desired.

Urges Uniform Laws

At the recent world's dairy congress, held at Washington, D. C., Dr. John R. Mohler, chief of the bureau of animal industry, United States department of agriculture, suggested to the delegates that efforts should be made to obtain some uniformity in the laws of the various countries regulating international trade in live stock. Some move of this sort is needed now, said Dr. Mohler, because of the great extent of international trade in live stock, and because of the prevalence of destructive animal diseases in many parts of the world.

Certain fundamental features which probably would be desirable for all countries were brought out in the statement made to the delegates. It was suggested that each country engaged in domestic and foreign commerce in live stock and its products should establish a competent veterinary service, and failing to do this it should have no right to expect its animals to be received in other countries; provisions should be made to prevent the spread of contagious diseases in the country, the introduction of infection from abroad, or the transmission of diseases to other countries; and there should be an international cooperative system of exchange of information in regard to animal health in the various countries.

Potatoes as Dairy Feed

By E. V. ELLINGTON,

Kindly tell me how many pounds of potatoes are safe and best to feed to milk cows to get best results. W. T. C.

Potatoes can be successfully fed to dairy cows in quantities varying from 20 to 25 pounds a day. Ordinarily potatoes are not used much for dairy cattle. However, when the price is low they may be economically used. During the last year the farmers have been feeding potatoes quite extensively, paying as high as from $10 to $12 in some instances. They are valuable mainly on account of the carbohydrates present. When uncooled potatoes are fed they serve the same purpose in the ration as any other root crop, inasmuch as they furnish succulence to the ration. The dry matter in them is practically of a slightly lower nutritive value than that found in corn silage. When fed in too large quantities they will injure somewhat the flavor of the milk.

In the European countries cooked potatoes are fed quite extensively to dairy cattle. The cows relish the potatoes when cooked, and they may be used with success when not over 30 pounds are fed a day per cow.

Potatoes should not be the sole ration fed. If they were fed alone there would be a drop in the flow of milk, but when they are used to supplement hay and grain they have a definite place in maintaining the milk production.

Dairymen Report Good Year

The Skagit County Dairymen's association recently voted for the retirement of $300,000 of their bonded indebtedness, $100,000 indebtedness on the Mt. Vernon Federal Condensed Milk plant, and $500,000 needed for equipment and improvement of the Burlington Milk Products plant.

The association reports a very good business year, especially for the past nine months. During this period the cooperative membership has increased from 1048 to 1307. The average price paid for whole milk per hundredweight has ranged from $2.26 to $2.27. The total amount of whole milk processed by the two plants during the nine months' period aggregates 52,182,000 pounds, there were 836,830 pounds of butter, 120,144 pounds of cream, 214,032 pounds of cream cheese, 266,894 cases of condensed milk and 1,529,131 pounds of powdered milk, the gross sales of the milk products aggregating $1,855,844.

SHOWS VALUE OF TESTING.

The value of association cow testing was again demonstrated when Miles Coleman of Lewis county, Washington, sold at public auction recently a herd which has been leading the county association in average production per cow. The animals brought good average prices for grades, while some of his neighbors' untested cows which were included in the sale either brought almost nothing or were led back because there was no bid. During the month of September the average production of 569 cows in this association was 645 pounds of milk and 26.1 pounds of fat. There were 38 cows, however, which produced over 40 pounds, and six that went over 60, while the leading cow, a purebred Holstein owned by H. Bouchard, yielded 2019 pounds of milk and 71.7 of butter fat. A Jersey owned by J. K. Conger produced within eighttenths of a pound as much fat, from 1182 of milk.

"ARABIC" FIGURES.

So-called Arabic figures were brought into Arabia from Hindustan in about the year 900 A. D. They were introduced into Spain in about 980 and into France in 991. In England their use dates from only about the year 1300.

SAVE ALL the CREAM

The Anker-Holth Cream Separator

meets with the approval of the most critical users. Why? Because of its self-balancing bowl and interchangeable disks. Place the disks in the machine any old way and they will be automatically thrown into place by centrifugal force.

PERFECTION MILKING MACHINE.

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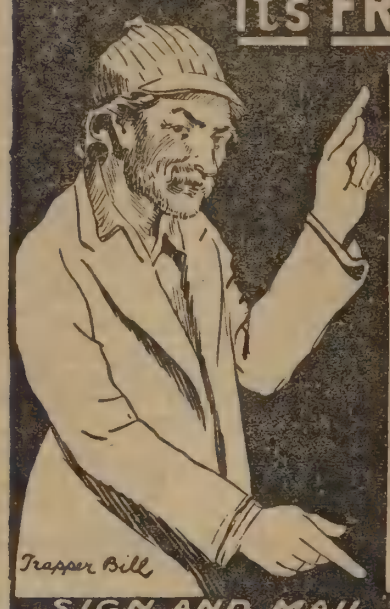

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COATS AND ROBES AT A SAVING OF 25 TO 50%

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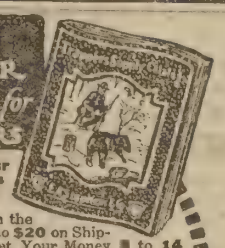

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VETERINARY

By DR. S. B. NELSON.

Milk All Right—I have a 2-year-old heifer that was fresh last May that gives watery milk—that is, if the milk is let stand until it sours into a thickened condition, the water rises between the cream and the thickened milk. What will cure this and is this milk healthful to use? The cow's mother gives good milk. Both run in the same pasture and are fed the same feed. They have access to spring water. C. W.
Battle Ground, Wash.

The milk is all right to use.

Mountain Fever—I have a 9-year-old horse that has what the neighbors call mountain fever. I am not acquainted with this disease and my remedies do not give relief. He seems to do better on a light diet than a heavy one. Can you suggest anything? A. T.
Brewster, Wash.

You might try giving the horse seven grains of arsenic on his feed night and morning for some time. This treatment has been of value in some cases of mountain fever. You might give him this remedy for five or six days, and then rest him for two or three days and repeat.

Heaves—I have a horse that has the heaves; coughs quite a bit when eating dusty hay. T. R. R.
Plaza, Wash.

Cut the hay down to about one-third of what you are now feeding; increase the grain about one-third; feed a little grass—not very much. Give the horse one ounce of Fowler's solution of arsenic on his feed morning, noon and night for quite a while.

Yohimbine for Cow—What can be done for a cow that came fresh in December last and has not been in heat since? She is still milking well. I should like to have her bred. I have another cow that came fresh last April and from one teat she has given water ever since she had the calf. I should like to know what I can do to remedy this. The cow that was fresh in December discharges some white matter quite often. H. P.
Everett, Wash.

Give your first cow one-half grain of yohimbine once daily for eight or 10 days. I do not believe that I can offer any remedy for the second cow.

Interesting Case—What can I do for a four-month-old pig that makes water (a dribble) all the time. She is a fine pig and I hate very much to lose her. I am feeding separated milk, mill run, ground barley, green stuff from the garden and wood ashes. The pigs have a large pen. T. W.
Rochester, Wash.

This is a very interesting case and I am going to express the opinion that she is affected with a cystic calculus. You should have a veterinarian examine her and he may possibly find the obstruction that you mention and this can be removed and she will be absolutely all right.

Udder Trouble—I have a 4-year-old cow that has small hard lumps form on the hindquarters of her udder between the teats and on the teats. The milk is a little stringy and does not taste right. The lumps yielded to treatment, but hard lumps of good size came in the hind teats and seemed to be sore and feverish at first. The lumps would move around when you milked her, but did not seem to affect the milk. Now the inside lumps seem to be almost gone and her udder is a mass of small, hard lumps on the outside. They are quite sore, but have not broken open. This trouble started shortly after she freshened in June. E. W. M.
Mead, Wash.

I would suggest as a treatment giving your cow one and one-half pounds of epsom salts in four quarts of water. Two days later I would begin giving her one drachm of potassium iodide in a pint of water morning and evening for a week or 10 days. I would also suggest that the lump be painted with tincture of iodine once daily or once every two days.

Lung Worms—Some of my calves were brought home from pasture quite thin and with a cough. They have had good appetites, but have gone down in flesh. The cough still holds on and the trouble has spread to others of the herd. What is the trouble and the remedy? A DAIRYMAN.
Ferndale, Wash.

It is very likely that your calves are affected with lung worms. Put the animals in a tight room. Place a tub with three or four inches of water in the room. Put a few bricks in the water and on the bricks a pan of sulphur. Set fire to the sulphur and allow the animals to breathe the fumes until they are nearly overcome, and then turn them out into the fresh air. This treatment may be repeated three or four times, four or five days apart, if necessary.

Bloat—I have a cow that gets bloated very often. What is the best thing to do for this? P. J. O.
Dockton, Wash.

Cut down the feed one-half and give her digestive system a rest. In the meantime you can give her a tablespoon of compound tincture of gentian in a pint of water once daily for 10 days or two weeks. Then gradually begin to increase her feed a little bit.

In giving the drench to the cow, slip your hand over the horn, if she has horns, otherwise over the head. Then grasp her firmly with the thumb and fore and middle finger in the nostril, pull the head straight up, but not too high, and put the neck of the bottle into her mouth just at the side of the lips between the front and back teeth and pour the liquid into the mouth along side the tongue and she will swallow it.

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Begin With Ancestry if You Would Save the Pig Crop

By M. H. KNUDSON

The time to commence saving the new pig crop is with the grandparents, sometimes even better still, with the great-grandparents.

Too much emphasis can not be placed upon ancestry, as it is one of the most important things to be considered when preparing for the pig crop. Aside from the question of breed, in which every breeder has the privilege of choosing for himself, the ancestors of the animals to be mated must have been stock that have raised large, strong litters (not less than eight), which could be brought to a finished condition and to a weight of 225 pounds in six or eight months. The short, thick-set variety that cease to grow when they have attained a weight of 150 pounds should be avoided. They almost invariably produce small litters, many of which are often weak, and here is where you may expect difficulty in farrowing.

The type of pigs to be sought are those whose outstanding characteristics are depth of side, good length and a well-sprung rib. These are the points which indicate strength of constitution; and constitution and the preservation of constitution should be given first consideration when selecting and caring for breeding animals, because a lack of constitution in the parents is followed by irregularities of type, small feeding capacity and susceptibility to disease in the offspring. Quality and smoothness, strength of bone and pasterns and arch of back are also important, but should not be secured at the expense of constitution.

The pig has the right to be well-born and it is going to mean "money in the bank" for the farmer who will see to it that his pigs are well born. But even when the ancestry is the best we must not think that we have solved the problem. The unborn pig has to be fed properly, so that it might rightly possess its heritage. It must come to the world well-rounded out and able to fight for its "teat" from the very first. This is best accomplished by giving a ration to the mother consisting of some grain, plenty of tankage, or, better still, good, leafy, third-crop alfalfa hay and skim milk, with a suitable mineral mixture either fed with the supplement or placed conveniently where the pigs may gain access to it at their own pleasure.

Be sure that the sow gets plenty of exercise, especially just before farrowing, for otherwise constipation with its attending evils will set in.

The essentials of an environment suitable for breeding animals are such as will afford them an abundance of sunlight, fresh air and exercise during the day and warmth and freedom from dampness at night.

A farmers' profit in the hog business will depend very largely upon the care he gives his brood sows for the month before and the month after farrowing. Improper shelter, insufficient exercise, improper feed (too much grain and too little protein and mineral feeds), rough handling, are just a few of the causes of losses in the pig crop.

Saving pigs in this north country is no job for a lazy man. If you want to save the pig crop you have to be on the job 24 hours a day and forget when bed time comes, but not forget to get up if you are lucky enough to get there at all.

The fact is, that to save many pigs, you have to be on the job continually during farrowing time. Gain the freindship of every sow on the place. Have her so that when you get in the pen with her she will talk to you, be glad that you are there and have confidence in you. Kindness goes a long way, but mistreatment goes further in the opposite direction.

Records Are Invaluable.

Keep acurate breeding records. Keep the exact time for each individual sow and be on hand to give her attention accordingly when she is ready to farrow. A sow that farrows in the field may lose many pigs because of a chilly rain, or a snow, or an extreme cold spell.

Be on hand to render service if necessary at the time of labor. If assistance is not needed the mother should be left strictly alone. The sows needing assistance are those that are bred too young and those that are too fat. If you are not on hand it may mean the loss of both the pigs and the sow. The pig usually dies within 30 minutes after reaching the pelvic bones, if not delivered; if it lodges for any length of time the next pig following will be dead. Then the life of the sow itself is at stake, providing she is not assisted in the removal of the dead pigs.

Provide the pens with guard rails. Nearly one-third of all pigs dying after birth are crushed to death by being laid upon. A fender six inches above the floor and eight inches from the wall will save many pigs from an untimely death.

Very little long strawy bedding should be used until the pigs are 5 days or a week old. They get tangled up in the straw, which often results in injury or even death. Use sawdust or wood shavings mixed with air-slaked lime and some dry dip. This will keep the floors sweet and clean as well as preventing the newborn pigs from getting tangled up and thus saving them from injury and perhaps death.

Care After Farrowing.

Do not overfeed the sow just after farrowing. Give plenty of pure, fresh water during the first 24 hours (taking the chill off in cold weather), but withhold all other feeds. During the next 24 hours give just a light feed of grain and slop and then increase the feed gradually until the litter is a week old when you can generally give her a full feed.

Provide plenty of sunshine. It is one of the best promoters of good health and is practically the best disinfectant against all diseases. Have the sun's rays fall directly into the sow's nest. It aids materially in keeping the bedding dry and is the most economical source of heat.

Renew the bedding often. A damp, cold bed, or a cold wind blowing directly over the litter may cause losses from "meningitis." Dusty beds are often the causes of losses by inviting coughs and pneumonia.

It is advisable to clip off the sharp tushes of the new-born pigs, as with these they often cause injury to each other as well as being the source of sore nipples to the mother. Very often a sow will not permit her litter to nurse due to the soreness of her nipples caused by these tushes.

Keep all parasites under control. Use crude oil around the pens in sufficient quantities so as to keep the youngsters free from lice and scab parasites.

Prevent Disease.

Vaccinate against hog cholera. You can not possibly afford to take any chances. Carelessness here is unexcusable and may be attended by losses.

It is variously estimated that only 50 per cent of the pigs farrowed live to the end of the suckling period. We are safe in saying that 75 per cent of this loss is attributable to faulty environment, improper feeding and poor management. Such a great mortality is unexcusable and should give deep concern to every raiser of swine. Due to this great loss the unit cost of each pig raised to the end of the suckling period is approximately twice too high. Every time we lose a pig we are decreasing our income and profit and hence our bank account is directly influenced.

Ton Litter Contest Winners

Florence Robinson of Ellensburg, a member of the Kittitas County Chester White Swine club, was pronounced winner of the ton-litter contest by the extension service of the state college. The requirements of the contest were that an entire litter of pigs must attain a total weight of one ton at the age of six monhs, and Florence had her pigs ready for the county fair, where she won first prize.

Her litter of 10 purebred Chester Whites weighed 2490 pounds at six months of age. Second place went to a litter of Chester Whites raised by Steve L. Woodhouse, a Broadview farmer, which weighed 2373 pounds. Gilbert Mills, another club boy, took third place, his litter of 11 purebred Berkshires weighing 2142 pounds, and fourth place was won by Aubrey Lynch, a club boy, with 10 purebred Chester Whites which weighed 2095 pounds.

Sign Up Wheat 50 Per Cent Basis

Returning from a meeting of the American Wheat Growers, associated, at Denver, Walter J. Robinson, general manager of the Washington Wheat Growers' association, reports that no intensive campaign to sign up tonnage on the 50 per cent basis will be made in Washington, Oregon and Idaho before April by the Lowden-Sapiro interests.

Directors of the national marketing agency conferred with the committee headed by former Governor Frank O. Lowden of Illinois and Aaron Sapiro, cooperative organization expert. The northwestern representatives lost out in their main contention that 65 per cent of the national wheat tonnage be signed up for cooperative marketing before any contracts became effective.

The Lowden-Sapiro plan is for 50 per cent control, not on a national basis, but with the individual state as the unit. In other words, they will seek to sign up 50 per cent of the tonnage in each big wheat producing state for 1924. Nothing in the plan contemplates relief on the 1923 crop, according to Mr. Robinson.

"Three intensive organization campaigns are contemplated by the Lowden committee, members of which are underwriting the expenses," said Mr. Robinson. "Six middle western states are included in the first campaign—Kansas, North Dakota, Oklahoma, Nebraska, Minnesota and Iowa because Governor Lowden and Mr. Sapiro are confident they can sign up 50 per cent of the wheat tonnage in each of those states.

"The first auxiliary campaign will be conducted in Montana, South Dakota and Colorado and by April the work will be launched in Washington, Oregon and Idaho. The biggest men in the country will be sent out by the committee to handle the organization. The actual signup of tonnage, however, will be left to local committees in each community. The national leaders will devote their efforts to interesting bankers and business men actively behind the cooperative marketing plan which the government is indorsing."

The American Wheat Growers were not entirely satisfied with the result of the Denver conference because of its failure to consider any plan to handle the exportable surplus. As a result, directors of the national organization at their own meeting drafted a resolution calling for an export commission in the conviction that the cooperative plan will never get the results sought with the exportable surplus always hanging over its head. The American Wheat Growers' plan is to have all wheat assessed to meet possible losses in the sale of export wheat.

"This export commission," according to Mr. Robinson, "would handle not only wheat, but all commodities with an exportable surplus and each commodity would bear its own losses. The plan doesn't ask congress for a penny, merely for the machinery to handle the export, the producers themselves ultimately paying all expenses."

George C. Jewett, general manager of the American Wheat Growers, was authorized to take the plan direct to President Coolidge and he plans to go to Washington, D. C., as soon as a conference with the president can be arranged.

Mr. Jewett will also take to the president a request to increase the tariff on wheat 50 per cent. This, it is expected, would raise the present price on wheat from 30 cents to 45 cents a bushel.

Handling Seed Potatoes

The average seed potato grower does not fully appreciate the importance of using every means to prevent injury to the tubers from rough handling during the process of harvesting and storing, says the department of agriculture. Mechanical injuries to a tuber are sources for the entrance of infection which rapidly spreads to other tubers which come in contact with the injured one. If the crop is grown on land which contains many small stones the tubers are almost certain to be more severely injured than when grown in a sandy loam soil. Hand digging is not always feasible, but it is believed that where small stones abound in the soil it will be desirable to harvest the home seed plat by hand. Much injury will be avoided if the seed stock designed for planting the field plat for the ensuing year in picked directly into crates in which it is allowed to remain throughout the storage period.

BEE KEEPERS CHOOSE OFFFICERS.

The new officers of the Washington State Beekeepers' association were recently elected by a novel plan of voting by mail. At several meetings in different communities about the state which have been held during the fall months a ballot was cast and the result sent to B. A. Slocum, extension bee specialist, and Dr. A. L. Melander of the state college, where the votes were counted and the election announced. George W. York of Spokane, president: W. L. Cox of Elma, vice president, and Miss Helen Steiner of Elma, secretary-treasurer.

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Will amaze and delight you

This offers you a ten-day test, to show the way to prettier teeth. To cleaner, safer teeth.

Millions now employ it. You see the results in whiter teeth wherever you look today. Now find out, for your own sake, what that way means to you.

Film—the great enemy

Dingy teeth and most tooth troubles come from film. From that viscous film you feel. Much of it resists the tooth brush, clings and stays.

Soon that film discolors. Then it forms dingy coats, and white teeth lose their luster.

Film also holds food substance which ferments and forms acid. It holds the acid in contact with the teeth to cause decay. It breeds millions of germs, and they, with tartar, are the chief cause of pyorrhea.

Very few people who brush teeth in old ways escape those film-caused troubles.

How to combat it

Dental science, after long research, has found ways to fight that film. One acts to disintegrate the film at all stages of formation. The other removes it without harmful scouring.

A new-type tooth paste has been created to apply those methods daily. The name is Pepsodent. Now leading dentists the world over advise it, and careful people of some 50 nations enjoy its benefits.

Natural, gentle ways

In other ways Pepsodent is bringing a new dental era. It multiplies the alkalinity of the saliva and multiplies its starch digestant.

Those are Nature's agents for fighting acids and starch deposits on the teeth. Every use of Pepsodent gives them manifold effect.

Thus Pepsodent acts to protect the enamel in natural, gentle ways, and without the grit that injures.

Send the coupon for a 10-Day Tube. Note how clean the teeth feel after using. Mark the absence of the viscous film. See how teeth whiten as the film-coats disappear.

You will be amazed and delighted at what you see and feel. Cut out coupon now. This is too important to forget.

Protect the Enamel

Pepsodent disintegrates the film, then removes it with an agent far softer than enamel. Never use a film combatant which contains harsh grit.

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The New-Day Dentifrice

A scientific tooth paste based on modern research, now advised by leading dentists the world over.

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Broadcasted Programs

Radio fans in Prescott, Ariz.; Ferndale, Cal., and Warsaw, Ind., have just reported hearing the programs from KFAE, State College of Washington, in fine shape. Merle Tucker was the Warsaw fan. Harold Ericesen of California says: "I have enjoyed your programs lately and thank you very much for the pleasure derived from them." Jack W. Newman, the Arizona air listener, says: "The selections played by the band were very good. Your entire program came through very clear and loud."

The extension service features for the broadcaster for November include the following talks: November 12, "Washington Poultrymen Advance in 1923," W. D. Buchanan; November 14, "Boys' Live Stock Clubs at the Pacific International Show," R. M. Turner; November 16, "Increased Use of Copper Carbonate," George L. Zundel; November 19, "Palouse Soil Troubles," Leonard Hegnauer; November 21, "What Farm Club Girls Did Last Year," Miss Elmina White; November 25, "How Some Washington Boys Spent Their Summer," Lincoln Lounsbury; November 26, "Winter Management of the Brood Sow," C. M. Hubbard; November 28, "Fire Prevention in the Home," Fire Prevention Specialist Sykes; November 30, "Selection of Clothing Materials," Miss E. Belle Alger.

The program numbers for the last week of November, not hitherto announced, are as follows: Monday—"Milk and Health," Professor E. V. Ellington; musical features; "Mining Opportunities in Washington," Professor Hugh M. Henton. Wednesday—"How to Study Occupations," Dr. D. W. Hamilton; "Housecleaning Made Easier," Dean Florence Harrison; music; "Aspects of the Future of Agriculture," Dean E. C. Johnson. Friday—"Control of Water Borne Diseases," Professor M. K. Snyder; talk on new books, Miss Alice L. Webb; music; "Gas Engine Cooking," Professor C. C. Johnson.

Moving Picture Reels

Eight new moving picture reels, totaling some 8000 feet—about a mile and a half—have just been received from the U. S. department of agriculture by the State College of Washington department of general extension service for use by farmers' clubs, granges, farm bureau meetings, civic organizations in rural districts and schools.

"Birds of a Feather" shows the benefits of raising standard bred, high-grade poultry. "Four Hundred Million Chickens" gives a review of the poultry industry in the United States.

"Bill Jones, Champion," tells the tale of a boy who attended a convention of boys' and girls' clubs, where he learned a lot and had a fine time. "A Letter to Dad" gives some other interesting scenes from the convention.

"Cranberries" shows the cranberry industry, and "Anchored Acres" shows methods of reducing soil erosion and wash. "A Tale of Two Bulls" gives an animated cartoon in which the value of the purebred sire to the herd is depicted. For those interested in the handling of sheep by scientific methods there has also been prepared a film called "A Year With the Flock."

Eighteen other reels of much interest for club members and school use include a history of the telephone, how to save coal, Mexico and its soil, the story of sulphur, story of petroleum, story of asbestos, the better way of milking, and milk, nature's perfect food.

Short Courses in Gas Engines

Whatever the car, if it is run by a gas engine, the owner and driver is bound to be interested in the announcement of a series of two weeks short courses in gas engines and tractors to be given by Professor L. J. Smith of the agricultural engineering department at the State College of Washington.

The first of the series opens January 7. Many students bring their own magnetos to be overhauled while they are taking the course, since special attention is given to gas engine ignition.

The gas engine courses will be of special value to fruitgrowers operating spraying outfits and pumping engines. These courses are also the foundation for the gas tractor courses which follow them.

The college Y. M. C. A. will have charge of the housing situation for the short courses, and Secretary Paul Phillips says every one can be comfortably cared for, as there are more rooms available since the opening of the new dormitory for men on the campus.

FORM BULL ASSOCIATION.

As the result of a slow but steady increase in the developing of dairying among the wheat fields of the Big Bend country, a purebred Guernsey bull club was organized near Waterville. Eight farmers will own the animal cooperatively with one of their number being selected to care for him during the year.

A Week's Shopping
—in one day

So much must be accomplished in a very short time when you come to Seattle on a shopping tour. You have a closely written shopping list as long as your index finger, which runs the dizzy gamut between a coat for yourself, sturdy school shoes for Jimmie, with a Bon Marche cake, a new sink strainer and a "best" hat for Sissy, scattered in between.

Perhaps you have Jimmie and Sissy along with you—and while they are delightful persons at home, they are a bit difficult when it comes to the matter of hurried and wide-spread shopping.

Let "Personal Service" Help!

A trained woman will gladly accompany you, as long as you need her—without charge. Explain to her the things you need and the prices you wish to pay, and she will help you assemble them with the least possible delay, keep a watchful eye on Jimmie and Sissy, collect the packages, and wrap them compactly for carrying or mailing, thus enabling you to pay for them all at once without waiting for change in each department.

Your Christmas Presents will be chosen easily, "Personal Service" either buying them as the result of a letter from you, or helping you to choose them personally.

The Bon Marche buys and sells for cash, because it believes firmly that cash merchandising means savings for all of us.

Your Shopping Headquarters should include almost every commodity you might desire, a comfortable place where your family may rest, and a nicely appointed restaurant where wholesome food is moderately priced.

The Bon Marche offers you all this—and then humanizes it with "Personal Service" which is yours to command at any time.

Personal Service—Second Floor The Bon Marche

The Bon Marché

PIKE ST. SECOND AVE. UNION ST. SEATTLE

POULTRY AND RABBITS

High Standard

Whatcom Accredited Hatcheries

Not satisfied with the standard set by the state organization, the Whatcom county accredited hatcheries have decided to hatch only eggs from hens 18 months old and to begin the 1924 season with males at least 9 months old. In addition the dam and sire's dam of all males must have made a trapnest record of 225 eggs in 365 days.

This is a higher standard than is required by the rules adopted by the representatives of the different counties, but is similar to rulings that other county associations are taking up. There are over 44,000 fowls owned by the 65 breeders and hatcheries.

Officers of the association are: M. S. Allen, Lynden, president; C. E. Baller, Bellingham, vice president; B. C. Young, Bellingham, secretary-treasurer, and B. S. Hillier, Lynden, and A. D. Foster, Bellingham, directors.

Likes Wyandottes

To the Editor: I have been a subscriber and an interested reader of The Washington Farmer for a good number of years and have always found it a very helpful publication. More solid fact and less theory than many farm papers, and it is better adapted to western conditions. Being a poultryman, I am especially interested in the "poultry department" and get many helpful hints from it. I am glad to note that a move has been started to form a cooperative egg and poultry association in eastern Washington. This is a move in the right direction, and I surely hope no one will hesitate about joining such association, as it's the only way we can have a stable market for our product. And right now, when the wheat market is so uncertain, is a good time for eastern Washington farmers to carefully investigate the possibilities of poultry and eggs.

Then the question comes up, "What breed is best?" The usual answer is, "There is no best. The breed that you prefer is the best one for you." This is a fairly good answer, but after all is said, there are a few breeds that have developed points of excellence over most others. The Leghorns seem to be the leading breed west of the mountains, but my experience convinces me that they are not the best for this colder climate. The shows will soon be here and the different breeds will then be in evidence, and one can compare them and make his choice. In this connection one thing has always been a wonder to me and that is that, while you see large exhibits of most of the standard breeds, there are usually very few White Wyandottes, which, to my mind, is the very best all-purpose fowl bred. "Ah," says some one, "that's because you are a W. Wyandotte breeder." But not so. I am a W. Wyandotte breeder because after years of experience with most of the standard breeds I became convinced that this one is the very best all-purpose breed. As a table fowl they are parexcellent. With their yellow skin, plump bodies and good weight they are unexcelled, and the chicks develop into good broilers two weeks younger than any breed I am familiar with. As to looks. What breed can equal them in beauty? With their white, fluffy plumage, red comb and wattles and their erect carriage, they are "a thing of beauty." I repeat, I can't understand why they are not more generally raised. One thing I have noticed, is that people once adopting them seldom make a change. As I have nothing to sell, my enthusiasm can not be ascribed to mercenary motives.

Winesap, Wash. W. J. TAYLOR.

Poultry Problems

By W. D. BUCHANAN,
Poultry Extension Specialist, W. S. C.

I have 12 Barred Rock pullets that have started to lay at the age of 4 1-2 months. They are large and well developed. They lay a good many soft-shelled eggs and double-yolked eggs. Have you any idea of the reason for this? They have plenty of oyster shells.

My scratch feed is two parts wheat and one part corn. How much of this should I feed by measure to 12 pullets per day? I feed them mash in a self-feeder and have plenty of green feed. G. A. B.
Spokane, Wash.

Pullets sometimes lay soft-shelled eggs because they are too fat. There is some indication that double yolks may sometimes have the same cause.

A little bone meal, about 5 per cent, in the mash would help. So will better feeding methods. Twelve pullets will eat about one quart a day, which should be fed one-third in the morning and two-thirds at night.

I have a hen that has one side of her head all swelled. Her eye is swelled shut and she can not shut her mouth or eat. Can you tell me what to do? MRS. J. L. S.
Benge, Wash.

I would advise you to cut her head off. She will never be profitable. It is cold, or roup followed by canker.

Prevent the trouble in the rest of the flock by seeing that they are free from drafts and crowding and that they have plenty of fresh air and clean water. It might be well to give the flock an ounce of epsom salts in each bucket of drinking water for a day.

I have some 1-year-old hens which have bumble foot. What causes it and what should I do for it? Is there a cure or not? M. C.
Timentwa, Wash.

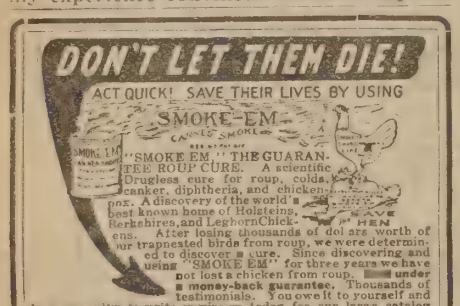
Bumble foot is caused by a bruise caused by flying from a high roost onto a bare floor or rocks, or by a sliver from scratching on a rough board floor or sometimes from thistles or thorns. When the center of the lump turns white, lance, squeeze out the pus and apply some good disinfectant. Remove the cause, so as to prevent future trouble.

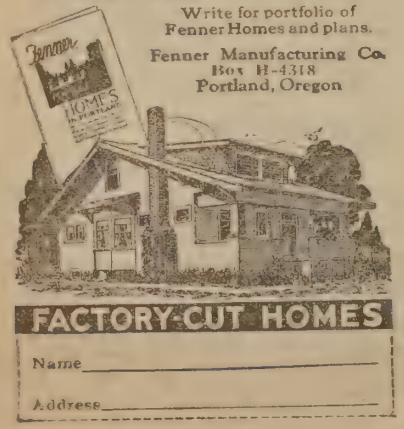
Please advise me the best method of fattening turkeys, closely confined or open range. What harm is there in having turkeys intended for breeding purposes go into the winter fat? F. W.
Oroville, Wash.

It is best to keep the turkeys on open range till about three weeks before you want to sell them. Then confine them in reasonably small yards. Start feeding lightly on wheat, keep mixing in a little corn, till the feed is half corn and half wheat. Bring them to full feed in about 10 days. Then for the next 10 days keep grain in a trough before them. If they have milk to drink it will be that much better. It is all right to have the turkeys go into winter fat, provided they are not overfed in doing it.

Please tell me how to distinguish a goose from a gander. A. L.
Bellingham, Wash.

It is difficult when they are young to distinguish a goose from a gander. The gander is usually about two pounds heavier than the goose. His neck is longer and his head a little coarser. When old he is crosser than the goose. When you find a goose that looks like a gander, that has longer neck and abdomen not so deep, weigh him and if he has the extra weight you may be reasonably sure that he is a gander.





Have you glanced over the farm bargains on the "Want Ad" page?

ORCHARD AND GARDEN

Berry Plant Diseases

The so-called degeneration diseases of berry plants have created unusual interest on the Pacific coast, and in fact the future of the industry depends to a large extent on how the fight against these troubles is carried on, according to Arthur Frank, plant pathologist of the western Washington experiment station. It is a well-recognized fact that yields have been going down in certain fields for some seasons and many fields have given out altogether. These troubles have been present in some parts of the country for a good many years, but it is only recently that the nature of the trouble has been recognized and the study of them commenced.

Three diseases are recognized as present in our raspberry fields. These are the mosaic, leaf curl and the blue stem. Although not much is yet known about them, still we know that they are present and that they are doing much damage. We also know what their symptoms are, how they are spread and a beginning has been made on control methods. These troubles affect raspberries both red and black, loganberries and to some extent bush blackberries.

The symptoms are many and varied and they are often difficult to detect, particularly in the earlier stages, except to the trained eye. Mottling and curling of the leaves, stunting of the canes, reduction of the yield and finally death of the plant—these are the chief outstanding symptoms.

No organism has been found present in the plants that is directly responsible for the trouble, but it is hoped that future work will reveal the direct cause. The chief way that the disease is spread is of great interest to the grower, for this has been found to be by the use of diseased plants for setting. If sets are taken from a diseased plant the sets are diseased also.

The chief and important point for the grower to remember and act on is that the diseased plants are not used for setting new fields.

Control measures that have been worked out in eastern states where they have been actively fighting these troubles are: First, use of clean stock; second, careful inspection of all fields and the removal of all plants showing any of the disease at all; control of insects such as aphids and leaf hoppers, for these are capable of spreading the disease from one plant to another.

The chief measure that is important for western Washington growers is to make sure that the plants they use for planting new fields are entirely free from any of these troubles. That is, they must have come from healthy plants. Second, the rogueing of new fields is important and should be attended to zealously.

The above diseases constitute a real menace to the whole berry growing industry. Growers will do well to familiarize themselves with the troubles and then to take the proper steps to make their plantation clean. Later state inspection will perhaps come to aid. Federal inspection is now in force in some places at the present time of all of these diseases.

Water Core in Apples

By O. M. MORRIS,
Department of Horticulture, W. S. C.

Will you please tell me the cause of water core in apples. Will they keep when picked? When is the time to pick the apples? The tree seems to be perfectly healthy. J. R. J. Tacoma, Wash.

The cause of water core in apples is not known. It occurs more frequently in apples that hang heavy on the trees late in the season for the variety, also most frequent in apples that are on land that has a high water content. Some of these conditions seem to be influential in producing water core, but as yet we do not know the real cause of it nor is our knowledge satisfactory relative to methods of prevention.

Water cored apples will keep well. Those that have an excess amount will not keep as well as those apples that are normal or have but a slight amount of water. Sometimes a part of the water core condition in apples seems to disappear during the storage process. Water core does not seem to be indicative of any disease or other form of abnormal condition in water.

An apple should be harvested when they have attained full size. This can not always be determined. Some varieties should be picked as soon as the green skin of the apple changes from the intense leaf green to lighter greens. In some apples it means a change to a yellowish cast. Some varieties can be gathered as soon as the seeds turn dark. Others may be permitted to remain on the tree until a good red color is attained. The date for picking some varieties can best be gauged by the taste of the fruit. When the apple is mature it seems to have a starchy taste. Strange as it may seem, there is no exact nor satisfactory rule to go by.

Decrease in Honey Production

Washington bee keepers report a dropping off in honey production of the state and the production over the entire United States is said to be lower than the five-year average recorded in the Washington forecast, according to A. B. Slocum, extension bee specialist of the state college. "Last year the average production per colony amounted to 50 pounds each, while this year with 87 per cent of the crop reported by September 1, we find only 34.9 pounds per colony," said Mr. Slocum.

"The Washington bee keeper is much better off than the average in the United States, for this year the bees of the state produced an average of 54 pounds of honey per colony. This makes 19 pounds of honey per colony more than the average. However, the reason there is some complaint about production is that last year the average for the state was 75 pounds, or 21 pounds more than now.

"Considering our neighbor states, the Washington bee keeper should feel optimistic for he produced 15 pounds of honey more than Idaho bee keepers; 17 pounds more than the California men, and 23 pounds more than the Oregon honey men.

"Washington ranks tenth in the entire country in the amount of honey per colony produced by the bees. So while we are still much lower than last year, our bees have proved themselves capable of securing a good big share of the honey available. Weather conditions have been one of the big reasons for the low honey crop."

Beautify with Shrubs & Shade Trees

Make your home the center of a picture. Paint the picture with shade trees, shrubs, roses and vines. Add to the comfort of your family and find for yourself a new satisfaction.

Washington Nursery shrubs are hardy field grown stock. They carry plenty of good roots which enable them to "take hold" and grow, producing quick results.

You will be surprised at what can be accomplished with a very small expenditure. Trees and shrubs properly planted will increase your property value many times their cost. Our big line offers a wide range for selection in fruit and shade trees, shrubs, vines, and over 100 different varieties of roses.

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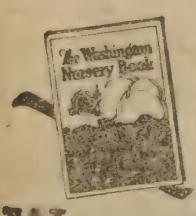

Write for this book

Plant WASHINGTON NURSERY Trees

FRUIT AND SHADE TREES
SHRUBS—VINES—ROSES

2410

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Savage Repeating Shotgun—accurate and hard-hitting, hammerless, solid breech design; Savage high-pressure steel barrel.

Model '99—Note the hammerless, solid breech. Nothing can get in to jam that powerful action. Built for .22 hi-power; .250-3000; .30-30; .300; .303.

Light to carry—
quick to handle

Steady and true to hold

CLEAN in line—swift and sure in action—every single barrel made of the finest high-pressure steel.

The same steel used in government rifles—bored the Savage way. That means *accuracy*.

High-power rifles:
You can always count on the sure action and rugged strength of these rifles.

The smashing .303; the amazing .22 hi-power; the deadly .250-3000; the powerful Savage .300, and the old favorite .30-30—a line-up that will take care of anything from woodchuck to moose.

.22 repeating rifles:
There's the *Sporter*—the latest sensation among "gun-cranks." The gilt-edge accuracy of the finest target rifle built into a sporting model.

Or take the Model 1914—the Savage slide-action repeater. Solid breech—solid top—no exposed parts. Sturdy and accurate to a degree.

Or Savage repeating shotgun:
Fills the bags with the same sureness that your Savage high-power brings down the big game. Has the Savage hammerless solid breech. Handles right—functions right—throws a hard and even spread.

And look for the Savage Red Box. The mark of good ammunition.

Ask at your dealer's or write for our interesting catalog.

SAVAGE ARMS CORPORATION
Dept. 248, Utica, N. Y.

Owners and operators of the J. Stevens Arms Company

SAVAGE

She knows—

76th Year

THE other evening, when on a visit, a lady said to her friend—

"When I buy an article for service, as, for example, a stove or range, I would rather know the name of the maker than to listen to talk about superior materials, skilled workmen, etc. I have no patience to listen to 'cheaper but just as good' chatter.

"I know that a concern that has succeeded and grown has done so because the people who bought what it produces are satisfied. With me it goes without saying that such a concern as the Charter Oak Stove and Range Company uses the best grades of the required materials and only skilled workmen, and that Charter Oak Stoves and Ranges operate perfectly — otherwise they would not be in Millions of Homes through Four Generations."

Used by Four Generations — CHARTER OAK STOVES RANGES FURNACES — In Millions of Homes

The most reliable dealers sell them.

HOLLEY-MASON HDWE. CO., Spokane, Wash., Distributors in Spokane and Spokane territory.

CHARTER OAK STOVE & RANGE CO., St. Louis

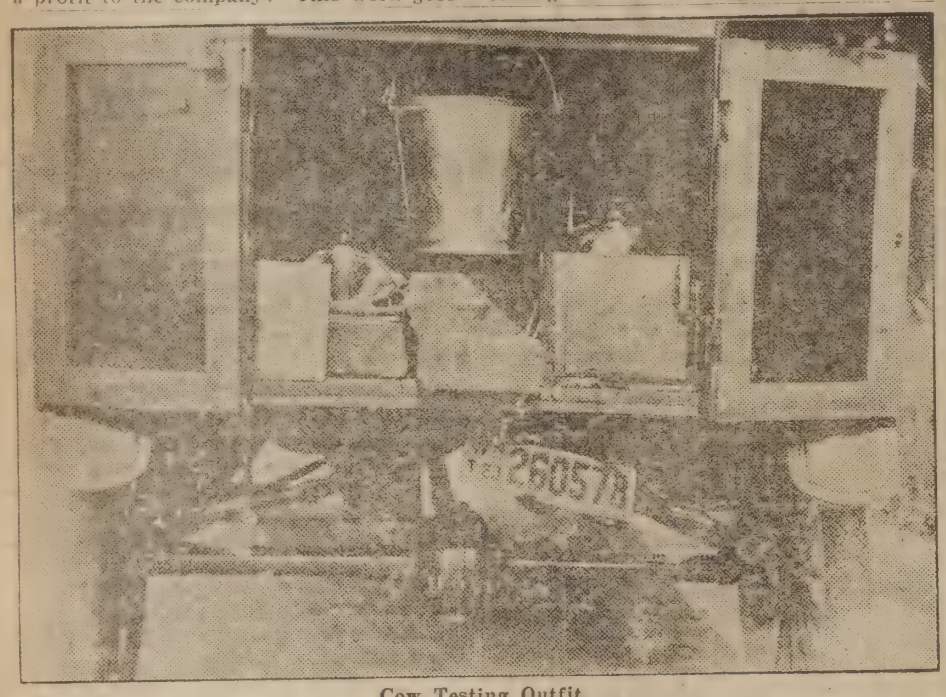
WANT ADS offering farms, live stock, poultry, second-hand machinery and a hundred and one other things on "Want Ad" page of this issue.

Figuring Profits From Dairy Herd

(Continued from page one.)

The result was that many of the members found that they could make an increase in their profits either by feeding more grain, different rations, or by mixing their own rations instead of buying prepared feeds. This is a detail that the dairyman can not always work out for himself and it is needless to say that the assistance given by Mr. Saunders has been greatly appreciated.

Much county testing association work in the northwest has emphasized the weeding out of poor-producing cows rather than giving help on better feeding. In almost any tester's yearly record one may notice a few cows sent to the butcher. Would the work of an efficiency expert for a large cooperation be accepted if he were to limit his findings to discharging employees who might not be returning a profit to the company? This work goes



Cow Testing Outfit.

a step farther and suggests economical methods and practices.

When the better feeding gospel was first advocated there were a few that came back with the idea that higher feed costs would cut down the profits. Saunders soon found an interesting comparison in the association records for the previous year. The average feed cost per cow in the high herd for that year was $140.20, buf the average return above the cost of feed per cow was $120.36. The lowest record in the association for the same year was made by a herd whose feed cost averaged $61 and the average profit over the cost of feed was $44.38.

This shows what some high-producing herds require for feeds, although it is possible that the low herd did not have the ability to return a good profit, even if the animals had received a generous ration. They must, however, be able to utilize the raw material in order to produce the finished product. The above figures prove the point that has been advocated by the United States dairy division, that "as the production of a cow is doubled, the profits increase three times." The high herd produced twice the amount of butterfat as the low herd and nearly three times the profit of the low herd.

"Many dairymen have made the mistake of depending entirely on pasture," said Mr. Saunders in one of his reports, "especially during the rush of haying, silo-filling and other work of midsummer. Farmers are apt to neglect the herd in this way and thus lose a large part of their year's production. It is not altogether the fact that the cows make a drop that hurts, it is the fact that when they are on poor pasture and go down in milk they generally lose flesh and as a general rule a thin cow will test lower. One can, therefore, readily see that going through the summer months on short pasture the cows are in poor shape to go onto winter feed.

"A thousand-pound cow requires about 40 pounds of clover and mixed grass pasture per day to maintain her own, and if she is producing 30 pounds of 4 per cent milk she requires approximately 60 pounds of pasture more. That makes a total of 100 pounds of pasture.. When the grass is plentiful and palatable, the probabilities are that a cow can pick 100 pounds of grass and find time to lie down several times during the day to chew her cud, but in the latter part of the season when the pasture is getting short, the flies are becoming bothersome and some of the days are quite warm, it is doubtful if the average cow can eat 100 pounds of grass, or hold up her production unless she is given assistance either in the line of green feed or grain.

"In fact, many of the dairymen in Snohomish county have found that it pays to supplement their pasture either with green feed or grain. Some find that it pays to feed soiling crops, even with the extra labor required.

"A good example of what soiling as a supplement to pasture can accomplish has been demonstrated on the B. A. Barker farm at Snohomish. In June the pasture was getting quite short and in spite of the fact that he was feeding liberally of a good grain ration, it looked as if the cows were due for a drop in production. However, this drop never came as Mr. Barker had anticipated. He seeded a large field of oats and vetch, the greater part of which was made into hay and the portion close to the barn was being fed as green feed. While the butterfat average of the testing association dropped four pounds during the last month, the average of Mr. Barker's herd of 26 cows dropped but one pound, thus proving beyond a doubt in his mind that it pays to feed during the summer months as well as in the winter."

Another suggestion made was that of P. D. Hillis of Snohomish county, whose cows were milking down into a very thin condition. Even though they were being fed exactly according to production and of a good grain ration, it seemed that the lost flesh could not be replaced. Mr. Hillis asked for suggestions on his ration and the following mixture was suggested:

Two hundred pounds mill run.
One hundred pounds ground barley.
One hundred pounds ground corn.
Fifty pounds soy bean meal.

As a result of feeding the new ration for a month, Mr. Hillis says his cows are producing equally as well, the ration is costing less, while the cows gained flesh rapidly.

"When changes are made in the ration to increase the production, the dairyman should not be alarmed if he does not get results at once, since it will often require months before any noticeable increase can be had," Mr. Saunders insisted. "I might cite the case of James Norberg, one of the Snohomish county members. He had fed hay for several years with no grain at all and consequently received a very small milk check.

"When he changed his feeding methods and began giving a grain ration, he could see no increase in the production until the end of a year's time. Now the herd is doing much better and he is well satisfied with the milk check. Many of the cows had been grain starved and needed the grain in the ration to put their bodies back to normal condition. When they had all accomplished this result, they began to put their surplus energy back into the milk pail and thus return a better profit to the owner."

Good Milkers, Poor Cows.

But feeding will not always account for some of the low producers and there are occasionally some cows that appear to be good milkers that have to be weeded out of the herd. In very few cases have these animals been picked out by any other means than by the tests which are made each month during the lactation period. The following instance may interest some dairymen who think they can pick out their poor cows by seeing how their milk holds out, but without the periodical tests.

Before joining the cow testing association George Barr of Monroe considered three of his cows, Nos. 3, 4 and 14, to be of equal value in production, according to Mr. Saunders. There was little difference in their appearance and they all gave about the same quantity of milk. They all freshened about the same time and got similar care and have otherwise had an equal chance. Their yearly net income as shown by their record in the association was as follows:

No. 14 .....$52.73
No. 3 ..... 98.45
No. 4 .....114.26

The figures show that cow No. 3 in the same length of time has produced $45.72 more net income than cow No. 14 and cow No. 4 has produced $61.53 more net income than No. 14. With the weeding out of cows like No. 14 it can easily be seen that almost any untested herd can have its money making capacity greatly increased by taking advantage of some kind of testing.

Although Mr. Barr has a good herd of grade Holsteins, he said that the testing and disposing of a few of his poorer cows soon paid for the costs of a year's testing. He also expressed his opinion that the cow testing association is the best method to stop the leaks in the dairymen's cost of production pocketbook.

Changes in Rations.

In regard to some of the other changes in the ration of different herds, the following examples are taken from one of Mr. Saunders' monthly reports.

"In February I found Mr. Walen of Silvana, feeding a ration composed of:

100 pounds mill run.
100 pounds barley.
100 pounds corn.
100 pounds linseed oil meal.
Oat, pea and vetch silage.
Good mixed hay.

"Mr. Walen had at that time three cows which were milking very heavily and I suggested that they be continued on the same ration. In view of the fairly high protein content of the silage and the good hay, I suggested the following ration for the remaining eight cows:

300 pounds mill run.
300 pounds barley.
300 pounds corn.
100 pounds linseed oil meal.

"At that time the cost of their ration was 2.2 cents per pound, and the cost of the suggested ration was 2 cents per pound. They were feeding 85 pounds of grain mix to these eight cows and two dry ones a day. The new ration made a saving of 17 cents per day, or $5.10 in a

(Continued on page seventeen.)

Which do you want?

I WILL send anyone interested free Bulletins giving practical information on Nitrate for any of the crops listed below. Write name and address, state Bulletins wanted, and to identify this advertisement add the number 3426

Apples	Grapes	Sugar Beets
Asparagus	Hay Crops	Sweet Potatoes
Beets	Lettuce	Tobacco
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Corn	Pears	Berries
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Nitrate of Soda

AT YOUR SERVICE.
DEMPSEY
Hotel and Restaurant
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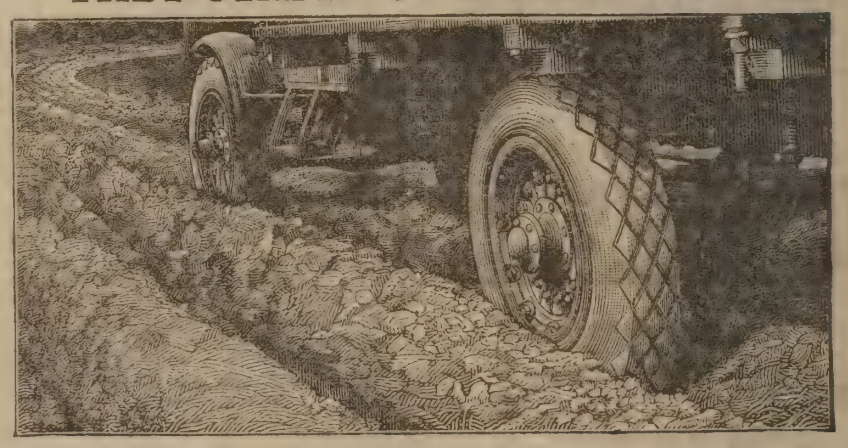
UP TO DATE.
Opposite Union Station, Spokane.

In writing advertisers, be sure to say you saw their advertisement in The Washington Farmer.

THEY STAND UP TO THE RUTS



"Month after month, my Goodyear Cords stand up to the punishment inflicted by rutted roads. Mileages are remarkably good and repair costs have been low."

D. H. REYNOLDS, Ankeny, Iowa

WHEN you run up against the ruts of Fall and Winter hauling, you need the extra tough, extra thick side-walls of the rut-proof Goodyear Cord Truck Tire. You need the tractive power of the Goodyear All-Weather Tread. You need the long-wearing, high-mileage quality of Goodyear group-ply construction—a Goodyear patent—for more miles at low tire cost.

The new beveled All-Weather Tread Cord Tire is made in all sizes for trucks and passenger cars

GOODYEAR

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Training for Disabled Veterans

There are 85 men who are getting special training from the state college through the United States Veterans' bureau in the rehabilitation division. The present plan, which is quite a departure from the institutional training that was used less than a year ago, calls for the placement of the men on farms of their own or rented farms and they are given instruction by special instructors who go from farm to farm.

The above picture shows a group of instructors and vocational men who are taking training under the plan which allows the state college to aid in the selection of instructors and in giving special instruction to the men on the farms. The picture was taken at the experiment station at Puyallup during Farmers' week.

The work is being carried on through contact with the state college and the western Washington experiment station. The five instructors are employed to act much the same as the circuit riders of our early history and go from one farm to another to give the men the training that they have requested. This is done under a very complete system of lessons which are given to the men as they have time to study them. All men are under supervision of the veterans' bureau and are paid subsistence money by the government in addition to what is necessary for text books and for equipment needed for their work.

"There are about 75 per cent of the men who are taking this work in western Washington that are going into the poultry business," explained James I. Stewart of Seattle, who has charge of this work in Washington, Oregon and Idaho. "Many of the men are buying their farms and are putting their subsistence money into the payments of their places. There are a few that are renting, but they plan on getting some kind of a farm of their own as soon as they can do so.

"All of these men have been disabled in some way while in the service of the United States during the World War and when discharged have found that they were unable to carry on their pre-war occupation. There are 45 men in eastern Washington, but they are so scattered that they have had to take up such special training as they could get, either from the county agents or by correspondence. In all cases the men are enthusiastic over their work and have a long list of questions to ask the field instructors when they arrive and they are all practical questions that have come up from their work."

There are 30 men that have already completed their work and there are others who are nearly finished with the courses, which take from 12 to 18 months. This is thought to be one of the best means of getting a man back to where he can be self-supporting and can take care of himself and family without the aid of a pension, as was formerly provided to ex-soldiers of the Civil war and is still being paid to those who are yet living.

Good Crop of Grapes

A good crop of grapes was produced on the two-thirds of an acre patch at the western Washington experiment station at Puyallup this year. While the vines are only young plants, they produced a total of 1500 pounds on the patch, or at the rate of one ton to the acre. H. D. Locklin, horticulturist of the station, said he was very well satisfied with this production and expected the patch to produce at the rate of four or five tons to the acre when mature.

The grapes were largely the Island Belle or Campbell's Early variety, while there are a few vines each of Vergennes, Eclipse, Delaware, Niagara and Moore's Early. These grapes are largely for variety tests to see if there are any that will produce an outstanding crop in this climate. Mr. Locklin says that the production this year from the Moore's Early vines are a little better and slightly earlier than the Island Belle. This of ourse is only the result of the first year's crop, and it is necessary to give it several years' trial before any definite conclusions are made. Practically all of the varieties named have given a good production for the first year, and are advised for home planting where two or three odd varieties are desired for fresh fruit consumption.

NEW SILOS IN KING COUNTY.

Considerable activity is being shown among the dairymen of King county in the building of new equipment for their farms. During the last month County Agent W. W. Henry reports three new silos constructed on dairy farms. C. J. Larson and George Bagwell of Carnation each completed a 12x32-foot silo. O. E. Jones, Issaquah finished a 10x36-foot structure.

Short Courses at W. S. C.

Courses beginning January 7: Diversified farming, practical poultry farming; eight weeks each.

Fruit growing, dairy farming; four weeks each.

Mining, geology, assaying, ore testing, metallurgy, mineralogy, mine surveying; 12 weeks.

Gas engines, tractors, automobiles, ignition; two weeks each, beginning January 7, 21 and February 4.

Creamery management, official testing; two weeks each, beginning March 4.

For full information write to

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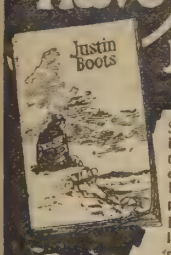
STATE COLLEGE OF WASHINGTON.

Have You Seen The new JUSTIN Boot CATALOG



Send for it today. It's the biggest, finest and most beautiful Boot Catalog that has ever been produced. Every Boot that *Justin* makes is pictured in actual colors! Each picture is so real it looks just like the boot itself right there on the page.

Printed throughout in beautiful colors. Lots of western drawings—stampede scenes—trail scenes, etc.

If you wear Cowboy Boots, Lace Boots or Sporting Boots send for this Catalog—Your copy is ready.

H. J. Justin & Sons
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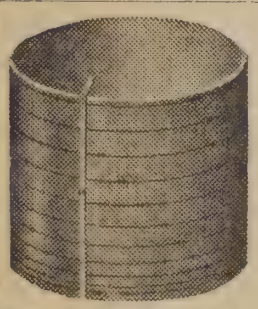
Wood Tanks For Every Farm Purpose



Get our prices before you buy. For serviceability and right down economy, you can't beat a **FEDERAL Tank.** All sizes—and at prices that farmers who believe in getting a dollar's value for a dollar, will declare an exceptionally good buy. Tell us the kind and size tank you want—we'll give you the price and full details. Inquiry does not obligate you in any way.

Federal Pipe and Tank Company
5330 24th Ave. N. W., Seattle, Wash.
Manufacturers of Water Tanks, Semi-Circular Creosoted Flumes, Wire-Wound and Continuous Stave Wood Pipe.

Non= Detonating

Neither the most powerful *powder* nor the most powerful *gasoline* detonates

There are two kinds of gasoline just as there are two kinds of powder. One **detonates**—explodes with a single crash.

It pounds the piston down with a sledge hammer blow.

Having a tendency to explode prematurely, it limits compression, decreasing power and efficiency. It often causes "knocking" on hills.

And the crashing blows, repeated, increase vibration—which means more wear and tear.

Detonating gasoline and dynamite are similar in that both **detonate.**

Even, Sustained Impulses

Union Gasoline is different. Like the smokeless powder, used in all big guns, it does **not detonate.**

Its explosions are progressive and prolonged. They **thrust** the piston down with a steady, sustained impulse, just as the big gun thrusts out the projectile.

These explosions permit higher compression, for compression is limited by the tendency of a **gasoline** to detonate, as all authorities know.

You enjoy more power and efficiency from a gasoline like this in your motor car or tractor.

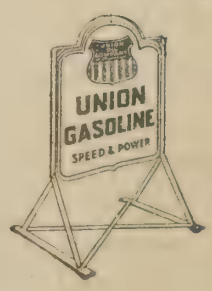
New Speed

This additional, **smoother** power in your motor means a new "lift" on hills, new speed on the level and more snap in the pickup.

These steady, sustained impulses decrease vibration, so save wear and tear. Detonating powder would be the ruination of big guns.

And this increased, all-'round efficiency means greater fuel economy.

Thus Union **Non-Detonating** Gasoline is the fuel that gives you better service from your motor or tractor in several important ways.



Union is always uniform. It doesn't disintegrate, thus doesn't deteriorate in storage. You get all the power when you want it that is put into it at the Union plants.

Union Oil Company of California

Union Gasoline

Your Health

By Royal S. Copeland, M. D., F. A. C. S.

In America we take infinite pains to maintain the means of education. We take pride in our schools. We think education is the greatest thing in the world. We insist on the children going to school. To make it certain that every child shall have the privilege, we pass "compulsory attendance" laws and provide "truant officers" to enforce them. The only accepted excuse for absence is sickness.

Copeland.

This is all as it should be. But in spite of truant laws, every schoolroom shows vacant seats each day. Illness keeps away a large number of pupils.

Unless you have investigated the causes of school absences you will be astonished at what I am about to tell you. Forty per cent are due to ulcerated and aching teeth! The same power that compels attendance at school should compel children to have good teeth. Decayed and ulcerated teeth are inexcusable. They are inexcusable because they are preventable.

Nobody should have any disease he can prevent. Bad teeth can and should be prevented.

Ulceration or abscess is due to decay of a tooth, or "caries," as the dentist calls the condition.

Caries is a disease of civilization. It did not occur when men were barbarians, and it increased as they progressed in civilized arts and customs. The effect of civilization on certain African tribes is significant. For instance, one tribe less than two generations ago had caries prevalent to the extent of 1 per cent. In two groups of these same natives, living under the conditions of civilization 95 per cent were recently found to have caries.

The tooth is well made to resist disease. It is covered with a very hard and compact substance, the enamel. But, like every other material in nature, this dense substance can be destroyed. It gives way to the attacks made against it by the acids formed through the fermentation of food.

The mouth swarms with germs. This is no wonder, because we put almost everything in the world into it, including our own dirty fingers. Some of these germs have the power to convert certain foods into lactic acid. Sugar and starches are the particular foods which may be acted upon in this way. Let us consider for a moment the "sticky" foods of this sort—chocolates, biscuits, fresh bread, cake, pie crust, caramels.

Suppose we eat such food at night and go to bed without cleansing the teeth. Immediately the acid-forming germs of the mouth go to work on this material lodged on our teeth. Enough acid will be produced to cut off a layer or two of enamel. Tomorrow the process is repeated and after a while a cavity is eaten into a good tooth. Thus caries begins.

Proper eating and the use of the toothbrush form the first line of defence against tooth decay.

Just Folks

Fear is death to progress.

Sectionalism begets sectionalism, class begets class, sect begets sect, and there you go.

On the other hand, you can universalize your sympathies until that sympathy nearly fades out into nothingness.

Where to draw the line between the two, I confess I do not know.

Perhaps granting the other fellow the same rights and privileges which you claim for yourself will help out.

A state church is prohibited by the constitution of the United States, yet in the classifications of history we are a Christian nation, just as Turkey is a Mohammedan nation or India a pagan nation.

As a Christian nation we build on the Ten Commandments and the Lord's Prayer. Here is fundamental union and universal breadth. But when we get into the niceties of sectarian logic we are lost so far as the brotherhood of man is concerned, unless we grant freedom of opinion to allow one to believe in baptism by immersion, and to another baptism by sprinkling, without abating one jot or tittle in our own belief on the subject. Here are serious dangers to your own soul in sending another to hell because he does not believe just as you do.

E. A. S.

Our Friend---The Toad

(Continued from page two.)

shows the per cent of each article of diet as selected by this animal:

Ants	19
Cutworms	15
Thousand-legged worms	10
Caterpillars	9
Ground beetles	8
May beetles (white grub adult)	6
Wireworm beetles	5
Destructive weevils	5
Miscellaneous caterpillars	3
Grasshoppers and crickets	3
Spiders	2
Sow bugs	2
Potato beetles	1
Carrion beetles	1
Miscellaneous beetles	1
Snails	1
Angleworms	1
Unidentified animal matter	7

Toads work mostly at night and hide under dense foliage, or in deep grass, during the day time. They procure their food by suddenly thrusting out their long, sticky tongue, which holds the tiny insect it strikes until it can be drawn into the mouth. Some one has estimated that every toad in the garden is worth $5, but that was several years ago, before the dollar had lost so much of its purchasing power. Judging by the way that other commodities have gone up in price since then we must come to the conclusion that the toad is surely worth protecting. This should be encouraged wherever it is possible to do so. The thoughtless boy should be taught in school, or at home, just what the importance is of the toad in the scheme of life.

Form Home Club

A new home demonstration club has just been formed at the Gull Harbor district, in Thurston county, which makes a total of 12 clubs in the entire county. This is the seventh club to have been organized since last March. The farm women expect to meet once each month and study such problems as hat making, nutrition, dressmaking and the sewing of furs.

Following is a list of the officers: President, Mrs. W. A. McClarty; vice president, Mrs. Frank Cushman; secretary-treasurer, Mrs. E. E. Lane. The project leaders are: Clothing, Mrs. W. A. McClarty; nutrition, Mrs. Jilson White; home management, Mrs. A. W. Giles.

Are your shingle roofs weather tight?

It doesn't cost much either in time or in money to weatherproof roofs with Oronite Shingle Oil. Applications on roofs and sidewalls *now* will effectively prevent warm sun or soaking rain from doing costly damage.

Oronite Shingle Oil retards the evaporation of natural oils in the wood and prevents the absorption of moisture; retards warping, splitting, leaks and prevents moss growths. Adds years of new life to shingles on roofs and sidewalls.

Ask our agent about mixing Oronite Shingle Oil with color pastes for cheerful red and green stains.

STANDARD OIL COMPANY (California)

ORONITE

Shingle Oil

FARMERS' WANT ADS

MONUMENTS F

COMPLETE STOCK. WRITE FOR DESIGNS and prices. Inland Monument Co., N1001 Monroe, Spokane.

PERSONALS R

WIDOW, FINE PERSONALITY, INDUSTRIous, refined; past 48; would like to correspond with man, pleasing personality, good habits; retired farmer and business man, fond of diversified farming, fruit, etc.; object, matrimony. A 7, Washington Farmer, Spokane.

HELP WANTED—MALE 3

ALL MEN, WOMEN, BOYS, GIRLS, 17 TO 65, willing to accept government positions, $117-$250, traveling or stationary. Write Mr. Ozment, 208, St. Louis, Mo., immediately.

WANTED—FARMER ON DAIRY AND HOG ranch near Spokane; salary $800 year, with house rent, fuel, feed for cow and garden patch. Write A 8, Washington Farmer, Spokane.

RAILWAY POSTAL CLERKS; START $133 month. Railroad pass, expenses paid; questions free. Columbus Institute, N5, Columbus, Ohio.

PERMANENT POSITION FOR ALL ROUND practical farm hand. C. E. Logsdon, Grants Pass, Ore.

HELP WANTED—GENERAL. 5

MEN AND WOMEN, AGE 17 TO 30, AT ONCE to train for positions with Western Union Telegraph Co. and various railroads. Pacific Telegraph Institute, Spokane, Wash.

AGENTS WANTED 9

$5 TO $15 DAILY EASY, INTRODUCING new style guaranteed hosiery; must wear or replaced free. No capital or experience required. Just show samples, write orders. Your pay in advance. We deliver and collect. Elegant outfit furnished, all colors, grades, including silks, wool, heathers. Mac-O-Chee Mills Company, Desk 29212, Cincinnati, Ohio.

SCHOOLS AND COLLEGES 26

EARN $110 TO $250 MONTHLY; EXPENSES paid as railway traffic inspector; position guaranteed after completion of 3 months' home study course or money refunded. Excellent opportunities. Write for free booklet G-157, Stand. Business Training Inst., Buffalo, N. Y.

FRESH FOOD PRODUCTS 51-3

FISH—4 LBS. SMOKED SALMON, $1; 4 LBS. Alaska salmon bellies, $1; 4 lbs. black cod, $1; 3 lbs. best codfish, $1; delivered by mail. Coffin Fish Co., Seattle, Wash.

DRIED OREGON PRUNES, $7 PER 100 pounds. Fred Kubin, Route 2, Salem, Ore.

APPLES POSTPAID. WRITE FOR PRICES. Guy Turner, Mt. Hope, Wash.

MERCHANDISE 51-5

YOUR ANNUAL OPPORTUNITY—FOR QUICK disposal we offer salesmen's samples of woolen goods, underwear, hoisery, blankets, sheep-lined coats, mackinaws, leather vests, etc., at one-third to one-half less than regular prices. Our price list of sample goods is now ready. Send for it today. Minneapolis Woolen Mills Co., Dept. 23, 612 1st ave. North, Minneapolis.

ARMY GOODS—PURE O. D. WOOL BLANkets, $3.50; O. D. pure wool long pants, $2.95; O. D. wool breeches, $1.95; army wool shirts, $3.25; wool socks, 25c; cotton socks, 10c. Order from this ad; postage paid. Write for big illustrated catalog. Walker's Army Store, Lewiston, Idaho.

FARMERS DRY GOODS STORE, 1211 FIRST, Spokane, undersells them all on dry goods, notions, shoes, rubber footwear, bedding, household supplies etc., because we're out of the high rent district. Mail us your orders.

SPECIAL—ONE-POUND TIN "SATISFACTION tobacco" and pipe for $1. Smoking, chewing tobacco, cigars, cigarettes and complete line of pipes. Wholesale and retail. Peter M. Jacoy, 3 Washington st., Spokane.

HONEY 53

KING CLOVER'S ALFALFA-SWEET CLOVER honey; 60-lb. can, $7.50; two cans, $14.50; 60-lb., prepaid, second zone, $8.29. King Clover, Sunnyside, Wash.

ALFALFA, SWEET CLOVER HONEY, PREpaid second zone, 3 10s, $5; 60 lbs., $8.30; two cans, $14.50, not prepaid. Harry Fisher, Prosser, Wash.

HAPPY HOME HONEY — ALFALFA AND clover; 60-lb. can, $7.50; two cans, $14.50; case six 10-lb. pails, $8.50. H. N. Paul, Mabton, Wash.

BEEKEEPING PAYS. INSTRUCTION BOOKlet free. Earl Spencer Apiaries, Sawtelle, Calif.

EXTRACTED HONEY FOR SALE—WELLS D. Rose, Sunnyside, Wash.

MISCELLANEOUS—FOR SALE 60

PIPE—GET PARTICULARS ON OUR SPEcial flue pipe, 1¼, 1½ and 2 inch. Big saving on it. We also have all sizes second-hand and new standard pipe at low prices. We also save you on roofing, belting, pumps, engines, cables, etc. Alaska Junk Co., S120 Adams, Spokane, Wash.

MISCELLANEOUS—FOR SALE (Continued) 60

SASH AND DOORS—O. B. WILLIAMS CO., 1943 First ave. So., Seattle. Chicken house sash, 20" wide by 25" high, 80c; a dozen different sizes in stock for immediate shipment. Skylights for chicken houses, 36"x40"; price, glazed, $2. This is the size recommended by the Western Washington experiment station. We carry them in stock for immediate shipment. Sash and doors for all purposes at lowest prices. All orders receive prompt attention. Our large illustrated catalog No. 35, showing full line of building material and built-in fixtures for the home, free on request. O. B. Williams Co. Established 1899.

TOBACCO — SELECT THREE-YEAR-OLD leaf; nature cured; 3 lbs. chewing, $1; 4 lbs. smoking, $1; 7 lbs., No. 2 smoking, $1. Pay for tobacco and postage when received. Farmers' Grange, Hawesville, Ky.

WALL BOARD—WRITE FOR SAMPLE OF Washington plaster wall board; won't warp, won't burn. Manufactured by Washington Building Products company, 6851 E. Marginal Way, Seattle, Wash.

NATURAL LEAF TOBACCO—CHEWING, 5 lbs., $1.75; 10 lbs., $3; smoking, 5 lbs., $1.25; 10 lbs., $2. Pay when received; pipe and recipe free. Farmers' Tobacco Union, D19, Paducah, Ky.

KENTUCKY LEAF TOBACCO—5 LBS. CHEWing, $1.75; 10 lbs., $3; 5 lbs. smoking, $1.25; 10 lbs., $2. Pipe and recipe free. Pay when received. Cooperative Farmers, Paducah, Ky.

TOBACCO—KENTUCKY'S PRIDE: EXTRA fine chewing; 10 pounds, $3; smoking, 10 pounds, $2; 20 pounds, $3.50. Farmers' Club, Mayfield, Ky.

ALL WOOL KNITTING YARN FOR SALE from manufacturer, 95c up per lb; golf and plain socks. Free samples. H. A. Bartlett, Harmony, Maine.

50,000 SACKS FOR SALE. INLAND HIDE & Junk Co., W21 Main. Spokane.

MISCELLANEOUS. 61

ELIJAH COMING BEFORE JESUS, FREE book. N. Megiddo Mission, Rochester, N. Y.

MISCELLANEOUS—Wanted 63

LEARN BEEKEEPING—READ "YORK'S Bees and Honey" monthly; $1 year; sample free. York Honey and Bee Supply Company, Spokane.

MACHINERY—For Sale 93

DOLLARS IN YOUR POCKET ON OUR USED engines, wood sawing outfit, farm equipment. New sawmill outfits, etc. Fallquist Brothers, W20½ Riverside, Spokane.

AUTOMOBILES—FOR SALE 117

SEE CHEVROLET FIRST—NEW AND USED cars at prices that will surprise you; stop in or write Inland Empire Chevrolet Sales Corp., 916 2d ave., Spokane. Open evenings. Open Sunday.

AUTO ACCESSORIES AND PARTS 119

NEW AND USED AUTO PARTS, NEARLY ALL cars. Our low prices and prompt service will convince you. Money refunded if not satisfied. C. & D. Auto Salvage & Supply Co., 1904 Grand ave., Kansas City, Mo.

SATISFACTORY SERVICE—THE MOST COMplete stock of new standard make automobile repair parts. Pacific Gear & Auto Parts Co., 1022 First ave., Spokane, Wash.

STOVE REPAIRING 123

WRITE MYER RUBENS, SPOKANE, ABOUT stove repairs, welding broken parts, nickel plating.

PATENTS 150

PATENTS, TRADEMARKS, COPYRIGHTS. Write to B. P. Fishburne, registered patent lawyer, 398 McGill bldg., Washington, D. C.

DETECTIVE AGENCIES 163

C. H. KIRK, FINGER PRINT EXPERT, P. O. Box 615, Baker, Ore.

PETS—Dogs, Birds, Etc. 171

"SKYLINE KENNELS"—OREGON'S FINEST Airedales; high class healthy, farm-raised puppies, $15 to $35. Prizewinning dogs at stud. H. Ringhouse, Clackamas, Ore.

FOR SALE—BEAUTIFUL COLLIE PUPPIES $10 each; satisfaction guaranteed. Write Fred Schneider, Albany, Ore.

FOR SALE—PUREBRED NEWFOUNDLAND puppies, beauties. Fred Schneider, Albany, Ore.

FOX HOUND PUPS, BEST BRED DOGS ON the coast. J. E. Bateman, Gales Creek, Ore.

RABBITS and HARES. 173

RABBITS, TOULOUSE GEESE HAVE MADE my living for 10 years. Prize winning blue Flemish Giants, New Zealand Reds, Himalayans at utility prices. Agnes Brenner, R4, Box 49, Tacoma, Wash.

FOR SALE—PEDIGREED AMERICAN BLUE and black Siberian rabbits, $3. Black Canyon Rabbitry, Emmett, Idaho.

(Continued on the following page.)

POULTRY 174

CERTIFIED WHITE LEGHORN QUALITY chicks from selected free-range, heavy-laying, utility hens, mated to double pedigree cockerels with authentic trapnest records. Our breeding flocks are inspected and accredited by the Sonoma county farm bureau. Safe arrival and full count of live, vigorous chicks guaranteed. Booking orders now for the spring season of 1924 delivery. Send for catalogue and attractive prices. Must Hatch Incubator Co., Inc., the world's largest electric hatchery, 445 Seventh st., Petaluma, Cal.

"FRESHLAID" WHITE LEGHORN CHICKS for 1924 will produce results. Thirteen years hatching of real chicks. High record males, vigorous, mature females, unlimited free range, a chick producing proposition hard to beat. We send out chicks that will make you a permanent customer. Discount on large orders. World's largest electric incubator. Free catalog. Freshlaid Farm, Colfax, Wash.

ACCREDITED CHICKS—ALL OUR CHICKS for 1924 will be from accredited flocks mated with certified cockerels sired by hens with 225-egg record. A limited number of chicks from cockerels sired by our $1000 champion cockerel and our world's record pen of hens. Write for special prices for those who order early. Queen Hatchery, 1430 1st ave., Seattle, Wash.

"HENACRES" BABY CHICKS FOR 1924—Booking orders now. Early orders get delivery when wanted. We never have enough February, March or April chicks to meet the demand. Strictly high grade chicks at common chick cost. $22 per 100; $200 per 1000. Free catalog. "Henacres," Box A, Prosser, Wash.

WHY DELAY?—PLACE YOUR ORDER FOR 1924 chicks with the White Hatchery, the hatchery with a reputation for good chicks. Safe arrival, full count guaranteed. Member Accredited Hatcheries, Sonoma county. "A" and "AA" stock. Price right. Send for catalog. White Hatchery, Petaluma, Calif.

KEEP INFORMED — SELECT POULTRY reading with care. Only paid writers of recognized authority featured in The Pacific Poultryman. Must read it to get the best. Has guided thousands to success. Special, four months for two-bits; two years for a dollar. 503 Polson bldg., Seattle, Wash.

S. C. WHITE LEGHORN CHICKS, 100 PER cent live, delivery guaranteed; 20 per cent books order. 100, $16; 500, $75; 1000, $140, postpaid; hatch only eggs from my own flock; no lights; trap records to 292. Absolutely only one grade. Catalog free. Roy S. Hands, B614, Cottage Grove, Ore.

WHITE LEGHORN BABY CHIX FROM flocks mated to males having sire's dam record of 240 to 297 eggs per year. Full particulars and interesting literature on request. We are accredited by Sonoma county farm bureau. The Pioneer Hatchery, 422 Sixth street, Petaluma, Cal.

1924 WHITE LEGHORN CHICKS FROM FAmous egg strains; Corvallis bred; low price, high quality; enlarged capacity to care for large orders as well as small. Oregon-Corvallis Hatchery, Corvallis, Ore.

PUREBRED S. C. RHODE ISLAND REDS, pullets and cockerels; beautiful color; good laying strain. $3, $5 and $10 each. Send your order now. Mrs. L. Wham, Double Diamond Ranch, Omak, Wash.

BARRED ROCK COCKERELS AND PULLETS from high producing hens and undefeated show quality for nine years; $5, $7.50, $10. Jacobson's Poultry Yards, 3596 Tacoma ave., Tacoma, Wash.

PUREBRED BABY CHICKS AT REASONable prices. Leghorns, Reds, Barred Rocks, White Rocks, Minoreas, Anconas. Booking orders now for '24. Postal secures free catalog. Salem Chickeries, Salem, Ore. C. N. Needham, Mgr.

IMPERIAL PEKIN DUCKS, PRIZE WINNING, long bodied, heavy kind; large, choice young drakes, $3; eggs and baby ducklings, Mammoth Bronze turkeys. Low prices. H. L. Moody, Parkland, Wash.

PULLETS—CHOICE W. L. PULLETS, APRIL hatch; husky, free range birds of Hollywood train; heavy laying stock; ready for the laying pens; $1.85 each. Pulletpens, Prosser, Wash.

HUNT'S BARRED ROCKS, UTILITY COCKerels from the best egg producers, Imperial ringlets, both matings. Prices right, satisfaction guaranteed. W. A. Hunt, Lebanon, Ore.

ANCONAS—BACKED BY OFFICIAL CONTEST records and splendid list of winnings in the west's leading shows. Booking chick and egg orders. Oscar Dunlap, Junction City, Ore.

SPECIAL PRICES ON GUARANTEED DAYold pullets; fall and winter delivery. Write for particulars. Eureka Hatchery, Petaluma, Cal.

GIANT BRONZE TURKEYS FROM PACIFIC International winning strain; circular free. Herbert Stoneberg, Route "B," Eugene, Ore.

PUREBRED S. C. WHITE MINORCA COCKerels, also White Rock cockerels; price $2 each. Mrs. Arthur Schmidt, Charlo, Mont.

ONE, TWO AND THREE YEAR OLD BRONZE turkey hens, $6 each; toms, $15; May hatched toms, $8. Mrs. Roy Watkins, Olex, Ore.

BLOCKED GIANT BRONZE TOMS AND hens; extra fine; prices right. Lawrence Christensen, Eugene, Ore. Box. 479.

BOURBON RED TURKEYS—150 CHOICE young toms and hens; large and well marked. Mrs. A. H. Yates, Parma, Idaho.

WHITE HOLLAND TURKEYS; CHOICE young birds; $15 per pair. Mrs. James Watsehi, Kalama, Wash.

BIRDS OF QUALITY—SINGLE COMB WHITE Minorca pullets and cockerels. J. E. Richardson, Prosser, Wash.

S. C. BROWN LEGHORNS, PEDIGREED stock. Write your wants to E. H. Rosenranz, Coltax, Wash.

ROSE COMB BLACK MINORCAS—COCKERels, $2; pullets, $1; hens, $2. Mrs. Carley, Carley, Wash.

TO MAKE ROOM, WILL SACRIFICE ROCK and Leghorn breeders. D. W. Allen, Laconer, Wash.

4 PUREBRED ROCK PULLETS, $1 EACH; also cockerels at $2. J. R. Moon, Oakley, Idaho.

JERSEY BLACK GIANTS, FIVE MONTHS old, $2.50 and $3. E. M. Chambers, Bovill, Idaho.

PRINTING FOR POULTRY MEN. EMPIRE-Pacific Printing Co., Auditorium bldg., Spokane.

THOROUGHBRED BRONZE TURKEYS—Toms, $10; hens, $7. Cora Burroughs, Ione, Ore.

PUREBRED MAMMOTH BRONZE TURKEYS. Mrs. S. L. Maltby, Rogerson, Idaho.

POULTRY AND LIVESTOCK WANTED 175

TOP PRICES PAID FOR CREAM, EGGS, poultry, turkeys, geese, ducks. Inland Products company, Second at Cedar, Dept. E, Spokane, Wash.

FARMERS' WANT ADS

This is the farmers' "want," "sale" and "exchange" department for small advertisements of farmers, including live stock and poultry.

Advertising rates for ads running 1 to 3 times, 10c per word per insertion, with a special rate to Farmer subscribers, as follows: Ads running 4 to 12 times, 9c per word per insertion; ads running 13 times or more, 8c per word per insertion.

All commercial and land advertising, 10 cents per word per insertion. Open also to nonsubscribers.

In using these columns advertisers must observe (1) No advertisement will be accepted for less than $1.00 per insertion. (2) Every word, number and initial, including name and address, must be paid for. (3) New advertisements, changes of copy or cancellations must reach general office, Spokane, Wash., 10 days in advance of publication date. (4) Cash must accompany order.

Above rates include insertion in The Washington Farmer, The Idaho Farmer and The Oregon Farmer, which constitute the Pacific Northwest Farm Trio, 46 Review building, Spokane, Wash.

POULTRY AND LIVESTOCK WANTED 175 Continued.

WE GUARANTEE TO PAY THE HIGHEST market price for your poultry and live stock. Owing to the constant changes in the market we are unable to quote prices in this paper from week to week. We will furnish tags and prices when you are ready to ship. Write us what you have to sell. Prompt returns. John Lewis & Co., Spokane, Wash.

DOLLARS FOR YOUR EGGS—WE PAY THE top market prices for your eggs and poultry. Daily cash remittances. McClintock-Trunkey Co., produce department, Spokane.

WE PAY TOP PRICES FOR YOUR LIVE OR dressed veal, hogs and poultry. Your check by return mail. Shipping tags on request. M. & J. Packing Co., Spokane.

LIVE POULTRY WANTED—WE REMIT promptly at market prices. Commercial Creamery Co., 1327½ Railroad Spokane, Wash.

WE WANT YOUR TURKEYS, GEESE, POULtry and eggs; highest prices, Hotchkiss Produce company, Spokane.

SHIP YOUR POULTRY AND EGGS TO THE Washington Meat & Poultry, Spokane, Wash.

LIVE STOCK 177

NOTICE TO SHEEP MEN—I HAVE 50 RAMbouillet yearling bucks for sale. They are large, smooth, heavy, tight fleeced and very heavy shearers. Two bucks from this bunch have completed the fair circuit of the northwest. They took first and champion at Spokane, Yakima and Salem fairs. The decision of the judges is to the effect that these are the best Rambouillets in the northwest. I will price these sheep to you at a reasonable figure. Order promptly as no reservations will be made. Orders will be filled as received. E. C. Burlingame, Walla Walla, Wash.

JERSEY BULL FOR SALE—BIG BOY'S ARMistice No. 222764, dropped November 11, 1922. Solid dark color, first prize junior bull class, Twin Falls county fair, 1923. A bargain for this particular individual. $100. Filer Seed company, Filer, Idaho.

TWO FIVE-GALLON REGISTERED RED Polled cows; also several young bulls, sired by Idaho Chief; has better A. R. backing than any bull in west. E. M. Richardson, Juliaetta, Idaho.

FOR SALE—CARLOAD PART COARSE FIVEyear-old ewes, bred to Hampshire bucks to lamb March 10th. Write Box 564, Heppner, Ore.

FOR SALE—HOLSTEIN BULLS, COWS AND heifers, sired by senior champion Washington state fair. D. F. Nugent, Granger, Wash.

FOR SALE—CHESTER WHITE BOARS. Write for prices. Booking orders for bred gilts. H. S. Curtis, Palouse, Wash.

FIFTEEN MONTHS' JERSEY BULL; DAM 600 lbs.; sire's dam, 1080 lbs. fat. Price, $150. Floyd Otto, Roy, Wash.

HIGH CLASS DUROC JERSEY SWINE. Young stock for sale; bank references. Dimick Stock Farm, Hubbard, Ore.

JERSEY BULLS FOR SALE—GOLDEN CICEro's breeding; prices reasonable. Alex Harold & Son., Salem, Ore. Route 8.

CHOICE DUROC JERSEY SERVICE BOARS, open and bred gilts; priced to sell. Geo. De Bok, Oregon City, Ore.

MILK GOATS—REGISTERED SAANENS AT prices that will please you. Ferd. H. Dietzel, Portland, Ore

A FEW HEAD OF REGISTERED SHORThorn cows and heifers, cheap. A. J. Fleming, Elma, Wash.

JERSEYS AT A BARGAIN—SEVEN REGistered Jerseys, $500. Write E. O. Fisher, Oak Grove, Ore.

WANTED—25 TO 50 GRADE HOLSTEINS, soon to freshen; good cows. F. C. Holibaugh, Clatskanie, Ore.

REGISTERED HAMPSHIRE BREEDING bucks and ewe lambs. Far Niente Farm, R2, Bothell, Wash.

REG. SHROPSHIRE AND HAMPSHIRE rams. Write McK. Edwards, Valley, Wash.

PUREBRED CHESTER WHITE SHOATS FOR sale, $15 each. Meryl Davis, Elberton, Wash.

FOR SALE—3 REGISTERED SHROPSHIRE rams. Frank H. Shepherd, Corvallis, Ore.

REGISTERED ANGORA BUCK GOATS, $15, crated. C. D. Hartman, Silverton, Ore.

GOOD, REGISTERED HAMPSHIRE SHEEP for sale. H. L. Brandt, Nampa, Idaho.

MILK GOATS—DOES AND BUCK; PRICES $20 to $50. A. Teal, Falls City, Ore.

MILK GOATS, BRED DOES, $10 TO $25. Fannie Branson, Dallas, Ore.

HARNESS and SADDLERY 189

SEND FOR FREE HARNESS AND SADDLE catalog today; cut out the middleman, buy direct from the manufacturer. Lowest prices in the west; satisfaction guaranteed. Established 1881. Write Pierce Harness Co., Dept. T, Spokane, Wash.

HAY FOR SALE. 209

ALFALFA, GRAIN HAY, TIMOTHY AND straw; guaranteed quality; prompt shipment. Prices upon application. Richard Nyman, Walla Walla, Wash.

HOTELS 306

WHITE'S HOTEL AND RESTAURANT. ROOMS $1 and up; special weekly rates. Stevens and Sprague. Right on the corner; 5 minutes from all depots. In heart of the business district, Spokane.

FAIRMONT HOTEL—RATES $1 DAY AND UP. 319 Riverside, Spokane. Free bus.

JOB PRINTING. 372

WEDDING ANNOUNCEMENTS AND INVItations, catalogs, booklets, high school annuals, letter heads, envelopes, cards, butter wrappers, etc. Union Printing Co., 412 First ave., Spokane, Wash.

LETTERHEADS, ENVELOPES, BUTTERwraps, special prices: 500 letterheads, $4.25; 500 envelopes, $3.25; 1000 butterwraps, $5; postage paid. Gazette, Kendrick, Idaho.

CLEANING, DYEING, Etc. 420

FRENCH DRY CLEANING BY PARCEL post. Ladies' and gents' suits, furs, hats, etc., prompt service. Address City Dye Works (Dept. A), E422 Sprague ave., Spokane, Wash.

TANNING 425

WE WILL TAN YOUR COW OR HORSE HIDE for robes or coats, and guarantee our work. We are custom tanners, manufacturers and taxidermists Write for prices. Spokane Fur Tanning Co., 7 Pine st., Spokane.

ANY KIND OF HIDE TANNED WITH HAIR on, or for leather. Fur and taxidermy work done to order. M. R. Mohr Co., 321 Sprague, Spokane, Wash.

TAXIDERMISTS 426

DEER HEADS AND BIRDS MOUNTED, HIDES tanned and made into rugs and robes. Withers Bros., 913 Sprague ave., Spokane.

BEAUTY CULTURE 450

50C JAR VANISHING CREAM FREE—SEND only 75c for bottle of toning lotion for complexion and get 50c jar cream free, postpaid. XL-O Chemical Co., Inc., 12 Riverside, Spokane.

KODAK FILM DEVELOPING 472

FREE ENLARGEMENT WITH 75C ORDER high gloss print. Spokane Film Co.

FILMS DEVELOPED FREE—KODO, THE PICture King, S15 Stevens, Spokane.

MATERNITY HOMES 497

MATERNITY HOSPITAL; STRICTLY PRIvate; doctor in attendance; prices reasonable. Mrs. Elizabeth Peel, matron. W1324 Broadway, Spokane.

BUILDING MATERIAL 588

TACOMA SASH & DOOR CO., 15TH AND Dock, Tacoma, Wash. Direct selling means direct saving. These prices demonstrate: Chicken house sash, 26"x23," 75c; other sizes in stock. Chicken house skylights, 36"x40," glazed, $1.95; western Washington experiment station recommends this size. Sash and doors correspondingly low priced. Prompt delivery, careful filling of orders guaranteed. Catalog No. 1 is yours for the asking.

TURNS PLASTERING INTO PLAY—PERFECtion plaster wall board can be nailed on just like lumber, and makes a perfect plaster job. Western Wallboard Co., Seattle, Wash.

SEEDS 620

FOR CLOVERSEED, PASTURE GRASSES, vetch, gray oats, etc., get latest prices, stating amount wanted. Lee Hershberger, Hubbard, Ore.

HUNGARIAN AND PURPLE VETCH SEED, 6c pound. Farm Bureau Cooperative Exchange, Roseburg, Ore.

NURSERY STOCK 621

GROW NEW PEDIGREED WASHINGTON asparagus; best in the world. Roots now ready. Ask for circular. Cherries, pears, peaches, apricots, soy beans for silage and soil building. For lumber, shade, windbreak plant Siberian elm. Special prices on berries, grapes and asparagus for commercial planting. Home Nursery, Richland, Wash.

RELIABLE TREES AND PLANTS—PRUNES, appies, pear, cherry, peach, apricot, grafted walnut and filbert trees, gooseberries, currants, etc., at attractive prices for early orders. Send your want list today for quotations. Benedict Nursery Co., 185 E. 87th st. N., Portland, Ore.

ISLAND BELLE GRAPE PLANTS FOR SALE —Write for the grape book, giving directions how to grow them successfully, etc. Issued by E. H. Urban. Box 777, Bremerton, Wash., grower of Island Belle grape vines.

TREES—NOW BOOKING MAIL ORDERS AT reduced prices for limited time only. Apples, pears, peaches, nut trees, prunes, cherry, small fruits, etc. Live agents wanted. Lafayette Nursery Co., Lafayette, Ore.

NURSERY STOCK—PRUNES, WALNUTS, FILberts, fruit trees of all kinds, gooseberry and small fruits. Buy direct and save 50 per cent. Brooks Nursery, Lafayette, Ore.

TREES—CHERRY, PEAR, PRUNE, APPLE, walnut, filbert. Mazzard cherry seedlings. Prices based on production costs only. Homer R. Brixey, McMinnville, Ore.

NURSERY STOCK SOLD DIRECT TO PLANTers; apple trees a specialty; no agents employed; can save you money. Write for prices. Lawson Nursery, Gates, Ore.

FILBERT AND WALNUT TREES, THE BEST paying crops for the northwest. Write for prices on the different grades. Villa Nurseries, Route 1, Portland, Ore.

STRAWBERRY PLANTS—SIXTEEN VARIEties. Asparagus and Munger black caps. Prices low. Brigg's Fruit Ranch, Olympia, Wn.

EVERYWHERE TO SELL OUR COMPLETE line of fine nursery stock. Cash weekly. Kimberly Nurseries, Kimberly, Idaho.

GOOD, THRIFTY APPLE AND PRUNE TREES at reasonable prices. R. B. Porter, Forest Grove, Ore.

FARM LANDS FOR SALE 651

BIG CROPS CERTAIN EVERY YEAR ON IRrigated land in southern Alberta. Let the Alberta government send you particulars about the opportunities for settlement in the new Lethbridge northern irrigation district. First class mixed farming proposition. Excellent climate. Rich soil. Ample water. Low priced land. Alfalfa, corn, wheat, oats, barley, clover, vegetables, small fruits, all yield heavily. Wonderful country for livestock. Investigate this first. Send for descriptive booklet to the Irrigation Council of Alberta, 12 Provincial building, Lethbridge, Alberta.

HARRINGTON DISTRICT — 540 ACRES good wheat land; 100 acres pasture; creek; good buildings; macadamized road; two miles from Harrington; main line Great Northern; good schools, churches, stores; small payment will handle, balance easy terms; bargain; no trades. Owner, W. E. Shrader, Harrington, Wn.

CHOICE ¼ SECTION FARM LAND; SLOPE county, N. Dakota. A. E. Percy, Fern Hill, Tacoma, Wash.

FARM LANDS FOR SALE (Continued) 651

CUTOVER LANDS, EASY TO CLEAR; $8 TO $20 per acre; 25 miles north of Spokane; on hard surfaced highway; Great Northern and Milwaukee railways; excellent opportunity for dairying and stock raising with Spokane markets and creamery near at hand. Will help the man who will live upon this land and agree to clear a part each year by giving lumber to help start his buildings, and a purebred Jersey bull to groups of farmers. Interest and payments low. Write Milan Farms Development company, Dept. T, Old National Bank bldg., Spokane, Wash.

5000 ACRES, SMALL TRACTS; NEWAUKUM river valley lands; easy terms; employment. Big mill and timber companies are selling their large holdings in this well known and fertile valley, at Chehalis, Washington, on most advantageous terms and conditions, where settlers are assured steady employment, good wages and live at home. Positively all high type agricultural land; level bench and valley. No gravel. No mountains. No irrigation required. Already well settled community; good schools and markets. 20 acres or more, $15 to $50. Terms to suit purchaser. Graham Land Company, 1008 American Bank bldg., Seattle.

IDEAL DAIRY OR STOCK FARM—80 ACRES; 1¼ miles from best town Colville valley; 40 in cultivation; 30 alfalfa; family orchard; large creek; good house, chicken house, spring water in house; good schools, market; $7500; $3000 cash; would lease. F. A. Yeomans, Chewelah, Wash.

BIG OPENING SALE OF YAKIMA VALLEY farm land, under an assessed state and government approved irrigation project; best, deep soil; close to town and good roads. Price $25 per acre and up. Very easy terms. Western Lands, Inc., owners, 918 Green bldg., Seattle.

SPLENDID OPPORTUNITY—POULTRY FARM with hatchery; five-room plastered house, five chicken houses, waterworks, garage, outbuildings, orchard; on Columbia highway, McNulty station, near St. Helens and Portland; part cash, balance easy. A. B. Larson, Warren, Ore.

BIG LUMBER COMPANY LAND SALE—IN Skagit county; 40-acre tracts, $1400; $200 cash, balance easy. Lots work for the settler. Splendid district, roads, schools, towns. Information free. H. C. Peters, 726 3d ave., Seattle.

WHATCOM COUNTY, WASH.; 47 ACRES; EXceptional fertility; 2 springs; family orchard, etc.; fine dairy section. For quick sale, $5250; terms if desired. Owner, Mrs. Laura Smith, 802 Cole ave., Los Angeles, Cal.

20-ACRE IMPROVED PLACE; 30 MILES OF Portland; on account poor health will take $2650; $750 cash, balance your own terms. L. Strong, Washougal, Wash.

SELL YOUR PROPERTY QUICKLY FOR cash; no matter where located. Particulars free. Real Estate Salesman company, 501 Brownell, Lincoln, Neb.

TRADE ALBERTA LAND, ASSUME PALOUSE, brick, timber, merchandise, hay ranch; sell, rent. Woods Realty, Coeur d'Alene, Idaho.

BARGAINS IN DRY AND IRRIGATED farms. Oregon Mortgage Co., Paulsen bldg., Spokane.

SIXTY ACRES, SOME STOCK; NEAR SCHOOL. $3750 down. E. Schilling, Route 1, Sherwood, Ore.

FARM LANDS—Wanted 654

NO COMMISSION—SELL YOUR FARM through Washington Farm Bureau Exchange, represented in 45 states. Lists of farms for sale by owners mailed free. 312 Lindelle bldg., Spokane, Wash.

I HAVE INQUIRIES FOR FARMS IN NORTHwest. Describe fully and state price. R. A. McNown, 310 Wilkinson bldg., Omaha, Neb.

WE HAVE BUYERS FOR SEVERAL FAIR priced farms and ranches. Central Land Bureau, New Franklin, Mo.

FARM LANDS FOR RENT 657

90 ACRES IN FERRY COUNTY, WASH., TO lease for term of years; 8 acres now in timothy, besides 6 acres fine pasture, balance timbered; good well, barn and house, furnished except bedding. Free lease to responsible party who will make further improvements. Mrs. Dora Smith, 735 S. McKinley, Casper, Wyo.

IRRIGATED LANDS—For Sale 663

FARMERS AND STOCK MEN—THE COLUMbia irrigation district has several tracts of irrigated lands of various sizes, in the famous Kennewick valley, with plentiful water supply. The district wishes to get these tracts into the hands of good farmers who will put them to work, and will make very low prices and long terms to such men. No speculators need apply. One tract 580 acres, especially suitable for stock or dairy ranch. Write the secretary, Columbia Irrigation District, Kennewick, Wash.

IRRIGATED TRACTS, 20 MILES FROM SEattle; 5 to 40 acres; suitable for poultry, berries, fruit, garden truck and dairying. These tracts are selling at rock bottom prices on very easy terms and make the ideal farm home. Located few miles from the largest vegetable, berry and fruit canneries in the northwest. Also close to the big markets of Seattle and Tacoma. Gateway Land Company, 504 Hinckley building, Seattle, Wash.

55 ACRES, YAKIMA VALLEY, IRRIGATED; government water rights; 25 above ditch; grow corn, spuds or anything put in ground; good house, barn, chicken house; fine climate, school, church; two railroads; no better land in valley; will sell $2000 under value to some one who wants good home and willing to work; reasonable payments; easy terms. H. L. Williams, W924 14th, Spokane.

A MONEY MAKER THAT WILL ALWAYS show handsome profits; 130 acres, near Yakima; good water rights; excellent buildings and well equipped; large dairy herd. Price $22,000; good terms. Western Lands, Inc., owners, 918 Green bldg., Seattle.

FOR SALE OR EXCHANGE 702

STOCK AND GRAIN FARM, EASTERN WASH. Good buildings, well; 600 acres summer fallow, unlimited grass; 3000 under fence; 33 mares bred; adapted to sheep, cattle, mules and horses. $2000 cash will handle. For full particulars write Box 879, Connell, Wash.

480 A. WHEAT LAND, NEAR WILBUR, Wash.; $40 per acre. 320 a. Wainwright, Alta., $40 per acre. 160 a., Champion, Alta., $40 per acre. Trade part or all for coast property or Yakima valley. Full details, first letter. 405 Jamieson bldg., Spokane.

160 ACRES; 80 IN CULTIVATION; GOOD buildings; running water; good roads; near school. Otto Peterson, Colville, Wash.

TO EXCHANGE—Real Estate 703

160 A. DAIRY, STOCK, HAY AND FRUIT farm; Yakima river bottom land, irrigated; 2 sets extra good buildings and fences; on highway, school bus, mail; 3 mi. to town. $32,000; mortgage, $8300; exchange for property in Nez Perce, Palouse or Willamette valley. R. F. D. 1, Box 20, Richland, Wash.

Cattle Ranch To College

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CHAPTER XIX.

An Awakening.

It was a terrible shock to the boy, and for a few moments he seemed dazed as if by a physical blow. He had come into camp weary of body but light and gay of heart, full of triumph, sure of a half-chaffing word of commendation from his friend and comrade. But this friend had met a horrible death. John's heart sank like lead, and for the time the light went out of the sky for him. There was no joy, no sunshine, no future—Jerry was dead!

"Where is he?" John asked of the man who brought him the sad news.

"In camp," was the answer.

John was in haste to go to his friend, yet he dreaded it with all his soul. He forgot his triumph, his pride in his horse, his weariness, in the one thought that filled his mind—"Jerry is dead!"

"So Jerry, great, strong, experienced Jerry, on his big bay went down, and I neither strong nor wise, am safe and well," John soliloquized.

In a minute or two they entered camp and John's first question was "Where?"

The cook nodded toward a bed outspread in the shade of a wagon.

Mr. Baker, the ranchman, was there, and as John reached the place he pulled back the canvas covering. The boy never forgot the sight that met his view. Jerry it was, certainly, but almost unrecognizable.

John sat down by him, overcome by his first great grief. Death he had seen many times, horrible deaths some of them, but none had come so close as this. Cook, perceiving his plight, brought him a cup of steaming hot coffee, well knowing that it would put heart into him.

"Mr. Baker," said John at length, "he's got to be buried some place where the coyotes can't get at him."

"But it's 60 miles to the ranch," objected the ranchman.

"That's nothing. Let me have a team and a wagon and I'll get him there."

After some demur, which John finally overcame. Mr. Baker allowed him to take a big wagon and a four-horse team.

The body was laid in reverently, the horses harnessed and hitched up. Just as John was about to take up the reins Mr. Baker came forward. "I guess I'll go with you, Worth," he said. "Roundup's most finished and I can do more good at home."

He climbed into the seat of the big covered wagon as he spoke; and after tying Lightning alongside the wheel horse John took up the lines. The punchers stood round, hats off, their weather-beaten faces grave and full of concern. All of them realized that this might have been their fate. Their rough hearts, accustomed as they were to all the chances of the dangerous life, were full of grief for the loss of their companion, "who was and is not."

"So long!" they said—a farewell to living and dead.

The whip cracked, the leaders jumped, and in a few minutes the white top of the wagon sank out of sight behind a rise. The 60-mile funeral journey had begun.

For some time employer and employee sat silent side by side. John's hands were busy with the four fresh horses he was guiding, and his mind with the real sorrow that filled it. He had never known Mr. Baker well; that familiar relation, unknown in the east, between employer and employed was prevented by John's absence on the range, but the boy was grateful for the kindness Mr. Baker had shown him.

"How long have you known Jerry, Worth?" the ranchman asked at length, touched by the boy's grief, and his interest aroused.

"Since I've worked for you only," was the answer. "Some people you never take to and some you know and like right off; Jerry was that kind. He always stood by me in quarels, and many's the time he's stood a double watch 'cause he knew I was tired and didn't want to wake me up. Yes, he stood by me through thick and thin."

"He was a good hand, too," interpolated Mr. Baker.

"He'd have divided his last dollar with me," continued John, more to himself than to his hearer. "I'd have done the same with him."

All this time they were travelling at full speed. The four horses yanked the heavy wagon along steadily over gullies and ridges, through valleys and over hilltops.

A couple of hours passed in this way, during which John slowed the horses down over the rocky places and urged them forward where it was smooth.

"What are you going to do with your money, Worth?" said Mr. Baker, hoping to dispel some of the sadness that hung over the boy. "You've not spent much this year, have you?"

"'Bout $300, I guess. Jerry and I thought of starting in with a little bunch of cows on our own hook, but——" The glance that John gave over his shoulder into the wagon finished the sentence.

"Did you ever think of going to school?" asked the ranchman, intent on his effort to divert the boy's thought.

"No, I saw a dude feller one time that had been to school all his life"—John spoke contemptuously—"and I'd rather punch cows all my days than be like him."

"Why? He might have been a poor specimen. My son would have been a lawyer if he had lived, and I would a great deal rather have him one than a cow-puncher."

John shook his head, unconvinced. A vision came to him of streets walled in on each side by buildings so that every thoroughfare was a canyon and every room a prison. The joy of wild freedom, fraught through it was with danger and hard work, tingled in his veins.

"You know if you stay on the range," continued Mr. Baker, "it's only a question of time when you'll be stiffened and

A new idea had been presented to him.

broken down, or else, what may be better, you'll be caught as Jerry was. If you keep on punching cows all your life nothing will be left behind showing that you've been in the world but a pine plank set in the ground."

For a time John's thoughts were as busy as his hands. A new idea had been presented to him—his future. What would he do with it? He loved the wild, free life he was now leading, and up to this time he had never thought of working for something higher and more lasting. Mr. Baker had stirred a part of him that had long lain dormant—ambition. His plans heretofore had seldom carried him further than a few days or weeks, his sole care was to do his duty and keep his job; but now he had a new care—his future.

The horses jogged along steadily over the rough country, their driver getting every bit of speed out of them that would allow them to last the journey through. Most of the time Lightning went alongside the wheel horse contentedly. With particular perversity, however, as the team was passing through a narrow place, where there was barely enough room to pass, Lightning began a spirited altercation with his side partner. He shied off from him, pushed him and bit at him till he in turn retaliated. For a time John had his hands full, but Lite, in his efforts to kick holes in the unoffending side of the wheel horse, got tangled in the harness, and so stopped the whole business. His master extricated him with difficulty, and Lite, instead of getting the punishment he so richly deserved, was petted instead, whereupon he became very good indeed and rubbed his nose affectionately against John's sleeve, as much as to say: "I'm sorry. I'll never do it again."

"It seems to me," said Mr. Baker, after they had got started again, "that a fellow that could tame such a wicked brute as that horse was a few months ago could master anything, books or anything else."

"Oh, I've read some books," said John eagerly, "and I thought I knew something till that dude feller told all about the things he knew. But that chap couldn't ride a sway-backed cow," and John smiled, sad as he was, as the thought.

"You struck a poor sample," the ranchman responded. "He saw you could beat him physically, so he tried to get even with you mentally."

For a time they rode along in silence, the boy busy with his own thought, which Mr. Baker was wise enough not to interrupt.

At length Smith Creek, the halfway mark of their journey, was reached, and they stopped for water, rest and food. The horses were unharnessed and allowed to feed a while. Thirty miles had been covered in less than five hours—thirty miles of diversified country, hill and plain, rock and mud. The road was not worthy of the name, it was merely a wheel track more or less distinct.

John was restless, the short hour of relief allowed the faithful beasts seemed long to him, and he was more at ease when they were spinning along the trail again. He had been living on his nerve all the morning and the strain was beginning to tell.

Soon Mr. Baker began to talk again. He was interested in the young companion by his side, this boy so filled with determination, so energetic and forceful and yet so abounding in loyalty and affection, as his grief over Jerry's death and his fondness for his horse testified, this boy who read books and yet had such a wholesome contempt of affected learning as evidenced by his ill-concealed disdain of the eastern "dude." "You've never been east," began the ranchman, "or to school?"

"No. I was born in Bismarck, N. D.," was the answer. "It must be queer," he added after a pause, and a smile lit up his tired face. "There's lots of women there, they say, and the men get their hair cut every month; the people have to always dress for dinner, the paper novels say, and everybody goes to school."

Mr. Baker smiled at this description of the life and manners of the east, and kept plying the boy with questions, put kindly, until he had learned pretty much all there was to know about him. It was long since John had had so much interest shown him, and it warmed his heart it was specially grateful at this time when he felt that he had lost a tried and true friend. The ranchman advised him to work out the year and save his money and at the end of that time doff his cowboy clothes and manners, array himself in a "boiled shirt," enter some good-sized town and go to school and church.

John was rather dubious about this "muscle work," as he called it, work requiring a quick eye, a strong will and the ability to endure, he knew he could do but about brain work and book learning he was not so confident. The idea of wearing a "boiled shirt" made him smile.

"Those stiff-bellied things the dudes wear," said he derisively. "Me wear one of those things!" and he laughed aloud at the thought.

Nevertheless the serious idea took deep root, and while he did not make any promises he had a half-formed resolve to follow the old ranchman's advice.

All this time the horses jogged along more and more wearily, and required more and more urging from the youngster on the driver's seat. The last 10 miles seemed endless; it was all John could do to keep the team going, and even tireless Lightning running alongside moved unsteadily with fatigue.

They were glad enough when the ranch buildings appeared dimly in the fast deepening gloom. The 60-mile drive was ended at last. When the wagon entered the ranch yard John almost fell into the arms of one of the men who had come to find out the cause of this unusually late arrival. It was Mr. Baker who told what the wagon contained and the story of Jerry's death.

John dragged himself to a hastily improvised bed, and, dropping down on it was asleep in a twinkling; the first rest for 36 long fatiguing hours.

Late the next day he was awakened to attend Jerry's funeral. It was a very simple ceremony, but the evident sincerity of the mourners' grief made it impressive. He was laid away on a grassy knoll where several other good men and true had been buried by their comrades. A rude rail fence enclosed the spot—the long resting place of men who had died in performance of their duty.

For a time things went sadly at the ranch, for John (he did not rejoin the round-up) missed his cow-puncher friend, his good-natured grumbling, his ever-ready helping hand. But gradually the boy's faculty of making firm, loyal friends helped to fill the gap that Jerry's death had made, though no one could ever take his place.

Mr. Baker's talk about school and a future took deep root, and as the boy turned the idea over in his mind it developed into a resolve to try it anyway.

Life had a new meaning now for John and he found it absorbingly interesting. The work he had to do was means to an end, and the commonplace, every-day drudgery became simply a cog in the machinery and therefore not only bearable but interesting.

The boy's success as a breaker of horses kept him much of the time at that work. Since he had broken Lightning all other horses seemed tame to him in comparison. It was part of his work not only to break the horses to the saddle, but to care for them generally, brand the colts, and train them for cow-pony work, as well as to guard them by day and night. On the long day rides over the rolling prairie and bleak, fantastically shaped and colored "bad lands" he would take a piece of a book in his pocket, and when an opportunity occurred, read it. He read many books this way, tearing out and taking a few pages in his packet each day. Mr. Baker was fond of reading, and understood the value of education; he had some books, and the less valuable ones he gave to his protege; these and the few John had been able to pick up from outfits he met and during the infrequent visits to a town formed his text books.

As he thought and read and studied he became more and more convinced that cowboy life was not for him; to know more about the things he had read a few scraps about, to gain a place in the world to learn something and achieve something was now his firm resolve.

The summer, fall and early winter went by quickly for the boy. Each season had its own peculiar duties and dangers—the roundup and branding, the driving of the steers to the railroad for the eastern market (a serious undertaking, involving as it might the loss of valuable cattle through injury and drowning when fording streams), the cutting of hay for the weaker cattle and horses, and occasional hunting trips for fresh meat. And so the year wore round.

On New Year's day John's time was up—the time which he had set to start out to seek his fortune. He had saved more than a year's earnings, so the small capitalist saddled Lightning, bade his friends goodby, and set forth, not without some misgivings, on a new quest; to get knowledge, see the world, and, if he might be, grasp his share of its honors.

(To be continued.)

Bits of Fun FOR Everyone

Legal Humor.

"Hello, Mose, how long you-all in jail fo'?"

"Three weeks."

"What did you do?"

"Jes' killed mah wife."

"An' you all only got three weeks?"

"Dat's all. Den dey's goin' to hang me."
—The Lawyer and Banker.

Today and Tomorrow.

Little Willie was of an inquiring turn of mind. He was always asking questions.

"Daddy," he asked one day, "is today tomorrow?"

"No, my son, of course it isn't tomorrow," was the reply.

"But you said it was," murmured Willie.

"When did I say today was tomorrow?" asked father.

"Yesterday," answered Willie.

"Well, it was. Today was tomorrow yesterday, but today is today, just as yesterday was today yesterday, but is yesterday today, and tomorrow will be today tomorrow, which makes today yesterday and tomorrow all at once. Now, run along and play."—Exchange.

Overruled.

A professor at law school is hindered by poor hearing. If a pupil mumbles along while reciting, he is apt to get by with very little preparation.

One of the class was called on, "Mr. O'Mahoney, state the next case, please."

The luckless student was void of any knowledge on the subject, but he had a copy of the Rocky Mountain News before him, so he read:

First inning—Ward tossed out Bancroft, going far to his left to get a mean bounder. Groh singled over second base. Frisch ahead of him, Young flied out. Kelly fouled out to Schang. Three runs, three hits, no errors.

"What you say is substantially correct, if you mean that the plaintiff's injunction should have been overruled," said the professor, presuming a good recitation. —Perrakeet.

Little Willie Had Him.

The great Thurston was producing eggs from a hat. With his characteristic humor, he addressed a boy in the front row.

"Your mother can't get eggs without hens, can she?"

"Oh, yes," quickly replied the boy. "How's that?" nervously asked the conjuror.

"She keeps ducks," chuckled the youngster.—Penn. Punch Board.

A Matter of Spelling.

"Bill," said a sailor looking up from his writing, "do you spell 'sense' with a 'c' or an 's'?"

"That depends, replied his friend. Do you refer to cents, meaning money, or sense, meaning brains?"

"Aw, I don't mean either of them two," was the reply. "What I want to say is 'I ain't seen him sense'."—Santa Fe Magazine.

Wheat Findings

Revise Production and Marketing

Production and marketing methods must be revised if there is to be an adequate solution of the wheat problem, in the opinion of the war finance corporation investigators who recently toured the wheat-growing areas at the request of President Coolidge.

The directors, Eugene Meyer and Frank Mondell, have talked over their findings with Mr. Coolidge.

The report warned against too much sympathy in working out the problem and urged maintenance of "a thoroughly rational attitude" in efforts to alleviate distress. It added that countless means of attaining the end long sought were laid before the two officials in their conferences, but most of them were rejected as cures likely to prove more damaging than the disease.

The report discussed the proposals at length, but into more detail with respect to cooperative marketing, declaring in conclusion that, even where sentiment existed for the purchase of the surplus, or for price fixing, there was general admission that a plan contemplating orderly marketing "is an essential and fundamental factor" in arriving at a solution. In the view of the two officials it provides the only method by which the producer can avoid to any extent reliance upon the speculator, whom the report described as the "key man" in the industry at present.

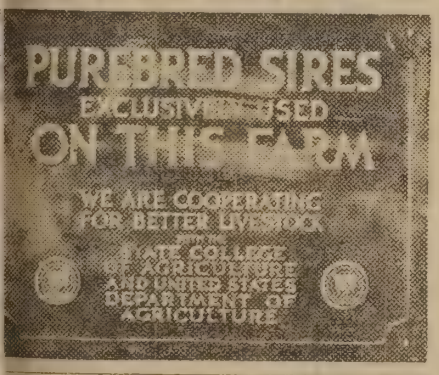
Discussing the depression among the wheat farmers, the report said, the local tax burden was one of the chief causes to complaint because it added materially to production costs. The scarcity and high cost of labor were cited as fundamental factors, while freight charges develop another vital problem accentuating the producers' troubles.

In connection with the tax question, the report said the privilege accorded states, counties and municipalities of selling tax-exempt securities has encouraged them to make extravagant expenditures.

Price-fixing appeared to have more opponents than advocates, the report says. With regard to the proposal that the government purchase "surplus" production a different situation was said to exist.

Purebred Sire Sign

In response to numerous requests, the United States department of agriculture has prepared a sign to be distributed free to persons who enroll in the "Better Sires Better Stock" campaign. The sign is lithographed on cardboard in several colors and resembles a metal tablet. It measures 11 1-2 by 15 inches. Each sign



issued will bear the official enrollment number of the person to whom it is presented, as authority for its display. Persons who have already enrolled in the "Better Sires—Better Stock" campaign may receive the sign if they write to the Bureau of Animal Industry for it, giving their official enrollment number.

Figuring Profits

(Continued from page Sixteen.)

month's time. This amount of money is not so very large, but it is fairly large considering that only eight cows made the difference.

Reducing Feeding Costs.

"This is a very good example of how feeding costs may be reduced by merely changing the nutritive ratio—or, in other words, balancing the ration. Mr. Walen said that the cows went on producing as well as before, and he thought that they would do even better. The cows did not go down in milk, for they had nothing taken from them which was needed—they were deprived of only the excess protein which was not needed for the amount of milk which they were producing.

"Results from feeding a herd of cows a balanced ration made up of a variety of feeds, fed according to production through the winter months.

"Last fall I made a suggestion to Hilmer Sather of Silvana that he discontinue the use of the prepared feeds which he was feeding, and start feeding a ration which he could mix himself at home, such as:

200 pounds mill run.
100 pounds ground barley.
100 pounds ground corn.
Linseed oil meal fed according to production.

"Mr. Sather began feeding the new ration immediately. Each succeeding month I have figured out for Mr. Sather exactly how much grain each cow should receive according to her butterfat production. The herd of cows have milked wonderfully well during the winter and went onto the pasture in splendid condition. The following is a comparison of the average fat production of last year with the production this spring under the new ration.

Average butterfat production April, 1922, 36 pounds.
Average butterfat production April, 1923, 50 pounds.

"The above figures are based on exactly the same cows for the two years. Of course, the pasture came a little early this spring, but that does not offset the greater production for this year, as the cows have done better all through the winter.

Mixing His Own Ration.

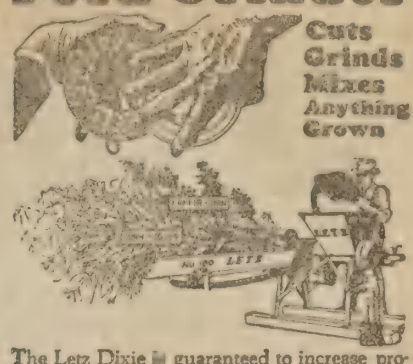
"My reasons for a dairyman mixing his own grain ration and feeding his oil meal separate and according to production, are that by mixing his own grain he knows what the mixture contains, and by mixing his own grain the correct nutritive ratio can be worked out for the herd.

"Still further I find that by mixing his own grain one is able to feed cows closer to their individual needs. For instance; a heavy milking fresh cow requires a more narrow ration than does the cow which is not milking so much and is farther along in lactation. By narrow ration is meant a larger proportion of a protein-containing feed. By feeding the oil meal separate the higher producing cows can thus be fed slightly heavier than the other cows in the milking herd. On the other hand if there is a cow or two which are below normal in flesh they can be fed handfuls extra of corn or barley each day and thus be brought back into good physical condition."

COUNTY OWNS FAIRGROUNDS.

Walla Walla county now has title to its fairgrounds, a deed of 35 acres from the county fair association having been recorded October 26. The consideration was $12,000, but stockholders of the association receive no money, county warrants going instead to creditors.

Feed Grinder



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TIME was when only the "prize cook" could produce a perfect loaf. Today, thanks to Sperry Drifted Snow Flour, *every woman* can exercise the same oven-magic. The reason? All the guess-work is taken out of the flour before it gets to you. Smooth, uniform, even-strength *every time!* You can bank on that! What's more, you can bank on this Sperry treasure-recipe for a crisp, golden brown loaf that won't linger long on the table:

1 cup water or milk, scalded
1 tablespoon melted shortening
1 tablespoon sugar
1 teaspoon salt
½ compressed yeast cake dissolved in ¼ cup lukewarm water
Between 3 and 4 cups of Sperry Drifted Snow Flour

Mix first four ingredients. When lukewarm add dissolved yeast cake; then add Drifted Snow Flour gradually, beating until too stiff to stir. Knead in remaining flour until dough is smooth and does not stick to board. Place in greased bowl, brush top of dough with melted shortening, Cover, set in warm place until doubled in size. Knead again, shape into loaves half the depth of baking pan. Place loaves in greased pans, brush top with melted fat, let rise again until twice the size. Bake in hot oven about forty-five minutes. This amount of yeast can be used to three cups of liquid if dough is to stand over night. This quantity makes one loaf of bread.

Every woman should have the Sperry Cook Book: Not only does it give the famous Sperry tested recipes for bread, cake and other flour mixtures but it shows how to get more out of every food-dollar. Your copy is waiting for you—and it's free! Use the coupon.

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DRIFTED SNOW FLOUR
to be *Sure*

Mail this coupon to Sperry Flour Co., Dept. T, Sperry Bldg., San Francisco, Cal.

Please send me, without cost, the Sperry Cook Book.

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FAMILY CIRCLE

ALICE W. BARLAND
EDITORIAL CONTRIBUTOR

TWO DAYS.

God gave me a lovely day,
All garnished with smiling flowers,
And golden with sunshine all the way
Through its cycle of wondrous hours.
But I spoiled the day that he gave
With a single deed of wrong,
And sad Mem'ry covered it in its grave
Without a hope or a song.

God gave me another day,
And I struggled to live my best,
To toil, and gladden, and serve, and pray.
Till the evening brought me rest.
Into it I put my all,
For I played my honest part;
And I came to the quiet of evenfall
With a strangely happy heart.
—Unknown.

Dear Family Circle: You have had this page for many months and I am sure you will not object if I use it for a few weeks. Wouldn't it be fine if we could all be gathered together in some great place, like the Coliseum, and could meet as one great family, as we really are, and talk about these questions which affect us all?

We can't do that, but this is next best. I have been with you week by week so long that I feel sure you all know I have your interests very much at heart and I deeply desire that you, who have followed these discussions from week to week, shall have been strengthened in your determination to do right and make the most of your lives. Very many have written saying that this is the case.

Then there are the others who have written me letters that made me very sad to read. This sort of letters comes from girls 14 years old and younger, who should be so sweet and fresh, as they are just beginning to look out upon life; but their letters register experience in the ways of the world which show how greatly misguided they have been.

It shows a false view of what goes to make up a decent and useful life when girls give expression to ideas like the following, which is an extract from a letter from two girls. They write a joint letter:

"We are two girls, 14 and 16, who believe in dancing, smoking, petting parties and midnight rides, and we consider ourselves decent.

"We started to read this page and we consider it perfectly ridiculous and the girls who write absolutely Sunday school superintendents.

"We are out for a good time and don't carry a Bible over our hearts.

"If we don't have a good time now, when should we have it? Should it be later when we are raising babies?"

After some statements about the great beauty of the two of them, the other girl takes up her pen and with no preliminary remarks, says:

"Although we have stated our views (she says "conversed our views") to the boys, they think more of us than the 'church-going bunch'. You may think we have no intelligence, but we have more than the so-called church-goers." They ask me to state my views in THE FARMER.

These letters are very poorly written, the spelling is worse and the writers are high school age.

The letters are so absurd that any thinking person of any age must see it, and one would want to smile if he could forget where this sort of unsupervised girls are headed for. They are so knowing; they can not be told anything.

A few months ago I heard a judge of a juvenile court talk for nearly an hour on questions concerning his office. He made this statement:

"What the youth of this and every other community need is to be brought back into the Sunday schools and to have a place in the churches. In all my experience with young people who are brought into my court, it is almost an unheard of case when one appears who has been in the habit of attending Sunday school."

At about the same time that I heard this judge talk, there was a conference of sheriffs of several counties which met in a city in Washington to consider ways and means of preventing so much misdemeanor among young people. It was the expressed opinion of those men, who were not so very religious either, that the hope of better behavior lies in parents sending young people to Sunday school and a more careful supervision of their hours or recreation.

Now, dear girls and boys, who have written me without giving me your names, the rest of my message is for you particularly.

I can not believe that you are naturally bad, or that you in any measure understand where your avowed course is leading you. I believe you have in most cases lacked wise parental council, that you have been led to a false idea of what constitutes a "good time," which you all seem to be seeking without regard for consequences. And the consequences are sometimes so terrible!

Many have asked me what I think about girls smoking. Up to the present time, so far as I can recall, I have never expressed my views on this page concerning the subject, but great numbers have written into their letters this sentence: "I think just as you do Mrs. Barland about girls smoking"; and then have gone on to say that they didn't believe it was right, but that they did smoke and liked it; or that they agreed with me that it wasn't right and didn't do it.

I have wondered what your real impression would be, dear girls, if you were to call upon me at the office or my home some day, and I should be puffing away on a cigarette, which I would have to remove before I could give you some words of welcome.

If this smoking among girls is so good a thing, and since most of the hundreds upon hundreds who have written maintain that girls have as much right as boys to smoke (even though they do not use the so-called right), I say, since so many girls are forming this habit to prove that they are "good sports," to be "game," to "take a dare," or because they are "urged and teased by boys" or just because they like it and are going to do it for that reason—these are the reasons given by girls for smoking—if these are good reasons and we have as much right as men, why should any of you be surprised if I, too, have asserted my "rights"?

Girls, you all know, even the most thoughtless among you, that I would not lend my influence to anything that would tend to degrade you, and after all is said, smoking is a dirty, vile habit and does degrade and injure influence for good when practiced by girls and women.

You are all taught in school of the injurious effect tobacco has upon the body and if you want to be convinced that it can fasten itself about one with cords of habit which it is impossible for very many to break, just watch a man trying to quit the smoking habit.

The habit is very expensive and some day I will give you some figures that will, I believe, surprise you as to what could be done with the money spent for tobacco by even a moderate user.

Now let us take a new start on other subjects. Many, I am sure, have been on tours by auto or otherwise this summer, and I want you to write and tell us where you went, what you saw and all about it.

There are others who took no long trips, but quite likely had some good hikes and picnics and we want to hear all about them. Then some of you have been too busy to tour or hike; you have perhaps been earning money to take you through a year of school. If there are such we want to hear all about it.

If some of you have been to some nice parties and saw something there that we will all enjoy hearing about, write us.

In addition to these things, let every one be thinking of something to discuss and exchange opinions on. There are a great many of you and I am sure you can think of many things we would like to exchange ideas on and discuss with pleasure and profit. Very truly your friend,

ALICE W. BARLAND.

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"Dandelion Butter Color" Gives That Golden June Shade and Costs Really Nothing. Read!

Before churning add one-half teaspoonful to each gallon of cream and out of your churn comes butter of Golden June shade to bring you top prices. "Dandelion Butter Color" costs nothing because each ounce used adds ounce of weight to butter. Large bottles cost only 35 cents at drug or grocery stores. Purely vegetable, harmless, meets all state and national food laws. Used for 50 years by all large creameries. Doesn't color buttermilk. Absolutely tasteless.
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That's what millions of women have done with

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The Economy BAKING POWDER

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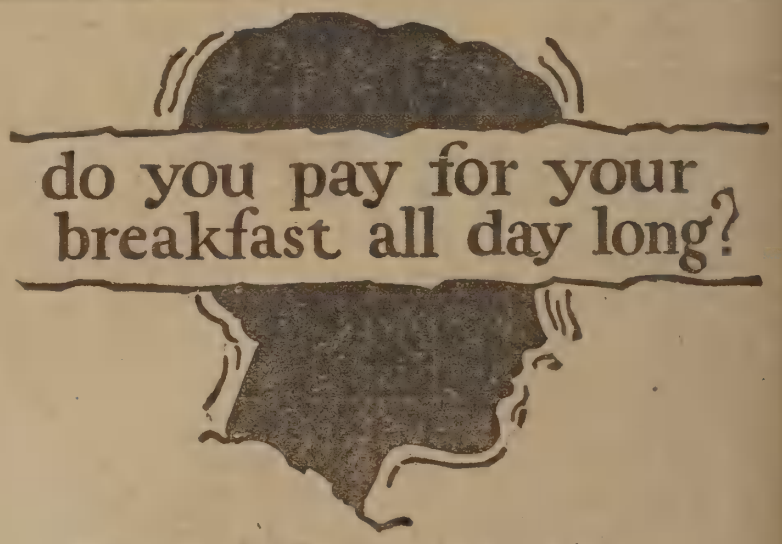

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The woman on the farm, no less than the woman in town, can ill afford a breakfast drink that gives her "nerves" instead of nutriment. Ghirardelli's Ground Chocolate has *everything* a woman needs in her morning cup. Fragrance! Flavor! Strength! "Drink to your own health with Ghirardelli's"—every morning!

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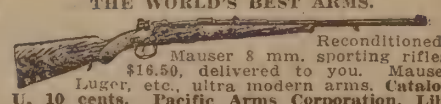

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The department editors of this paper are anxious to be of service to you. Do not fail to write to us if they can be of help to you.

Gift Suggestions

That Are Inexpensive to Make

A "farmer's wife," living on a rural route out of Vancouver, Wash., and who does not wish her name used, offers an excellent suggestion for this season of the year. In a letter to Mrs. Barland, she says:

"As the holidays are drawing near, it has occurred to me that it would be a good idea to ask the readers of your page to help with suggestions for inexpensive gifts that could be made at home. I always have to get busy and make things of what I can find in the house.

"One nice gift is composed of several small pin cushions, not more than two by four inches, made of bright colors, to hang in places where there is never a pin to be found. Another useful gift is a set of kitchen holders, made of washable material and of a generous size, and put in an envelope bag to hang up. I made the bag of unbleached muslin, with a holder appliqued on one side in bright colors and with a loop so as to hang it over a nail.

"I am trying to make rag rugs, braided of wool, and wish to make some drawn-in burlap ones. I would be very glad to get help about those."

THE SPRUCE BUDWORM.

The spruce budworm is causing serious defoliations of spruce and fir in northern and central Idaho, in the Yosemite National park and in the Tower Falls and Camp Roosevelt sections of Wyoming, according to a report made to the United States department of agriculture. This destructive insect, which has devastated the spruce and balsam fir forests of Quebec, New Brunswick and Maine, is apparently distributed throughout the western states.

Latest High Class Patterns for the Home

Please order the patterns you desire at least two or three weeks before you wish to use them. Desiring to obtain the latest high-class patterns for its readers, THE FARMER has made arrangements to have them sent direct from the east, and under present mailing conditions it takes about that time for them to reach you.

4039-4572. A stylish gown. Blouse 4039, cut in seven sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. Skirt 4572, cut in seven sizes: 25, 27, 29, 31, 33, 35 and 37 inches waist measure. To make the dress for a medium size will require six yards of 40-inch material. The width at the foot is one and seven-eighths yards. Two separate patterns, 10 cents for each pattern.

4562. Child's dress. Cut in four sizes: 4, 6, 8 and 10 years. A 6-year size requires two and one-fourth yards of 36-inch material. Price 10 cents.

4412. Girls' dress. Cut in four sizes: 8, 10, 12 and 14 years. A 10-year size requires four yards of 32-inch material. Price 10 cents.

4558. Girls' coat. Cut in five sizes: 6, 8, 10, 12 and 14 years. A 10-year size requires two and one-fourth yards of 54-inch material. Price 10 cents.

4565. Child's dress. Cut in four sizes: 2, 4, 6 and 8 years. A 4-year size requires two and three-eighths yards of 27-inch material. Price 10 cents.

4549. Misses' dress. Cut in three sizes: 16, 18 and 20 years. An 18-year size requires three and five-eighths yards of 40-inch material. The width at the foot is one and three-fourths yards. To trim as illustrated requires five-eighths yard of contrasting material 40 inches wide. Price 10 cents.

4407. Ladies' dress. Cut in six sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. A 38-inch size requires four and three-eighths yards of 36-inch material for the dress and two and five-eighths yards for the panels. The width at the foot is about two yards. To make dress with short sleeves one-half yard less is required. Price 10 cents.

4414. Girls' dress. Cut in four sizes: 6, 8, 10 and 12 years. A 10-year size requires three and one-eighth yards of 32-inch material. Price 10 cents.

2463. Ladies' apron. Cut in one size: Medium. It requires one and three-fourths yards of 32-inch material. Price 10 cents.

4573. An attractive "character" suit. Cut in four sizes: 6, 8, 10 and 12 years. A 6-year size requires two and three-fourths yards of 36-inch material. For jacket of contrasting material one and one-fourth yards 36 inches wide is required. The collar alone requires one-fourth yard. Price 10 cents.

4196. A new doll set. Pattern comprising the doll and garments is cut in three sizes: Small, 12 inches; medium, 16 inches; large, 20 inches in length. The doll requires for a medium size one-half yard. The rompers seven-eighths yard. The suit and hat one and one-fourth yards of 27-iinch material. Price 10 cents.

4261. Ladies' home or porch dress. Cut in seven sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. A 38-inch size requires four and seven-eighths yards of 32-inch material. The width at the foot is two and one-fourth yards. Price 10 cents.

Send 12 cents in silver or stamps for our up-to-date fall and winter 1923-1924 book of fashions.

Please fill in this order and mail with remittance to:
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Enclosed find ..... cents for which send me the following:

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Pattern No..... Size..... Pattern No..... Size.....

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R. F. D..... Box No..... St. No. .....

Be sure to give the pattern number and the correct size.

Keep Them Healthy and Happy

WHAT is so vital to the health and happiness of growing children as good cooking?

And what is so necessary to good cooking as a good range?

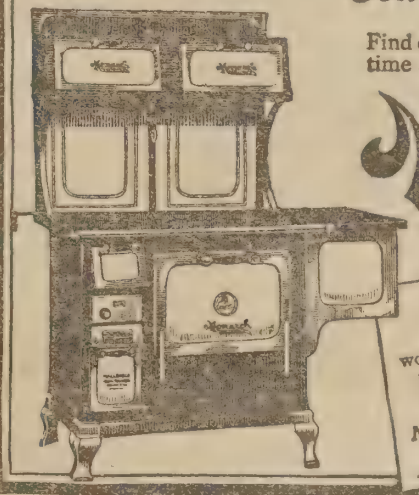
Even the best of cooks get better results when they use a Monarch. For the Monarch's leak-proof malleable iron construction gives perfect control over the fire and oven—not only when the range is new, but after many years of hard service.

With this greater satisfaction comes a saving in time—a saving in fuel—and a pride in the appearance of her range that is dear to the heart of a good housekeeper.

A Monarch would add more than you guess to the health of your family and the happiness of your home.

Send Coupon NOW!

Find out how a Monarch will save you time and expense—work and worry.



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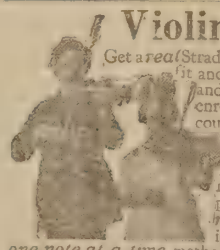

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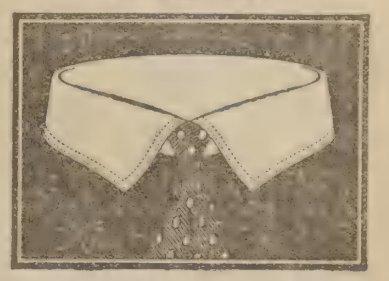

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Never have starched collars been quite so comfortable as this season's newest style in

SLIDEWELL COLLARS

If your dealer does not sell SEDAN, send us his name, your size and 75c for four.

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When answering advertisements don't fail to mentione this paper.

Conference Jeopardized by France

Statements attributed to Premier Poincare, in press advices from Paris, indicate the desire of the French government to restrict the scope of the proposed expert inquiry into the reparations situation. Official Washington is reported to be considerably shocked over this news. The four points indicated by Premier Poincare's speech at Nevers are:

First—Germany's present capacity for payment.

Second—New methods of payment.

Third—The renovation of Germany's finances.

Fourth—A new monetary system.

It is said authoritatively at Washington that the above restrictions are not in accord with the suggestions by an expert commission put forward by Secretary Hughes. There is every indication that if France insists upon a formula that will prevent a full and complete inquiry into Germany's capacity to make reparations, the success of the present negotiations will be seriously jeopardized.

COOPERATIVE MARKETING.

The government's inquiry into the advantages of cooperative marketing as a means of farm relief was carried a step further today by President Coolidge, who called into conference C. S. Barrett of Georgia, president of the farmers' union, and also conferred again with Managing Director Meyer of the war finance corporation, who made an investigating trip through the northwest.

Mr. Barrett explained the progress made in the cooperative movement under the auspices of his organization and told the president that through cooperation in the selling of products and in the buying of farm machinery and fertilizers the farmers of the country could throw off the present depression.

He was requested to return to the White House for another conference.

EUROPEAN MARKET.

A committee of farm bureau leaders has just started for Europe, seeking first hand information as to economic conditions, crops and markets there.

The committee, which was appointed after varying opinions were expressed by the different senators who have been abroad this summer, is headed by Gray Silver, organizer of the American Farm Bureau Federation. The other members are E. B. Cornwell, president of the Vermont farm bureau; George Starring, secretary of the South Dakota farm bureau, and Murray D. Lincoln, secretary of the Ohio farm bureau.

Without advance notice of their purpose, the members of the commission have slipped away to learn how and where the American farmer fits into the European scheme. They expect to visit England, France, Germany, Poland, Russia, Norway, Denmark, Sweden and Finland, probably Belgium and Holland. They will be gone from six to eight weeks, and hope to have the facts about Europe at their fingers' ends.

WORLD DAIRYING.

J. A. Scollard of Chehallis, president of the United Dairymen's Association of Washington, has returned home from an extended eastern trip, during which he and Mrs. Scollard attended the various meetings of the world's dairy congress. Forty-one countries were represented and the proceedings were conducted in the English, French, Spanish and German languages. Mr. Scollard was on the program at the Syracuse meeting October 9, his subject being "Cooperative Manufacture and Marketing of Dairy Products." He pointed out that the United Dairymen's association is now third in the United States as a producer of powdered milk, with chances that second rank soon will be assured, with annual output of 6,000,000 pounds for 1923.

PACIFIC INTERNATIONAL.

With over 4000 official entries the 13th annual Pacific International Live Stock Exposition was opened at North Portland Saturday by E. A. Stuart of Seattle, president. Last year similar entries numbered 3816. In addition to the display of beef cattle, dairy cattle, hogs, sheep and other live stock, the 10-acre pavilion also houses grain and dry-land farming exhibits, a poultry show and show of fancy and draft horses.

MAKES 274 MILES AN HOUR.

The highest speed ever attained by man was reached Sunday by Lieutenant Harold J. Brow, navy airman, when he did one leg of a three-kilometer air race at the rate of 274.2 miles an hour.

Lieutenant Alford J. Williams, however, won the speed duel, averaging 266.6 miles an hour, over a three-kilometer course. This is unofficial time and remains to be homologated.

Williams is former pitcher for the New York Giants. He captured the record of 259.12 miles an hour set by Brow last Friday over a three-kilometer course, lost it again to Brow and recaptured it just as dusk was setting in.

APPLE EXPORTS.

Last week, apple week, witnessed the departure of two steamships from Portland for the United Kingdom, one with 60,000 boxes of apples and the other with 100,000 boxes of apples.

TAKE YOUR NOTE BOOK.

Take information home from the fair.

Farm Business and Markets Outlook

(Continued from page five.)

round whites, United States No. 1, are quoted at 90 cents to $1.10 per 160 pounds sacked and bulk in the Chicago carlot market. Idaho No. 1 Russets are quoted at $2 sacked.

Approximately 30,000 cars of apples have been shipped from producing sections in the last three weeks. Washington alone has contributed around 3000 cars weekly and is believed to have shipped about 25 per cent of its crop. This is a much heavier movement than ever known before. Prices have been weak, as the domestic demand is only moderate. British prices were high early in the fall, resulting in extremely heavy exports from this country during September, but have declined rather sharply of late. Northwestern medium to large fancy Jonathans are quoted at $1.75 to $2 a box in Chicago, with extra fancy at $2 to $2.25; Delicious, fancy, at $2.50 to $2.75, and fancy at $2.75 to $3. Middlewestern Jonathans are bringing $5.50 to $6 a barrel and Northern Spies $5 to $5.50.

The carlot movement of onions has declined rather sharply and the market is gaining strength. Midwestern yellow stock is quoted at $3 to $3.25 per 100 pounds in consuming markets.

LATEST QUOTATIONS.

The Live Stock Market.

PORTLAND, Ore., Nov. 3.—Cattle—Beef steers, good grade, $6.75@7.25; medium grade, $5.50@6.75; common, $4.25@5.50; beef cows and heifers, good grade, $4.50@5.25; medium, $3.50@4.50; common, $3@3.50; canners and cutters, $1.50@3; bologna and butcher bulls, $2.75@4; feeder steers, $5@5.50.

Calves—Medium to choice 190 pounds down, $8.50@9; 190 to 260 pounds down, $6.50@8.50; 260 pounds up, $5@6.50; culls and common mixed, $3@5.

Hogs—160 to 200 pounds, medium good and choice, $8@8.60; 200 to 260 pounds, $7.50@8; 250 pounds up, $6.50@7.50; packing hogs, rough, $4.50@6; slaughter pigs, $7.75@8; feeder pigs, $7.75@7.90.

Sheep and lambs—Lambs, 84 pounds down, medium, good and choice, $10@11.25; cull and common, $7.50@10; yearling wethers, medium to choice, all weights, $6@9; wethers, $5.50@7.50; ewes, medium to choice, $3.50@6.50.

The Grain Market.

PORTLAND, Ore., Nov. 3.—Wheat—Hard white, Bluestem, Bart, soft white, $1.05; western white, $1.01; western red, $1.02; hard winter, northern spring, $1.01.

Today's car receipts: Wheat, 122; flour, 16; corn, 2; oats, 4; hay, 11.

Grain futures: Wheat—Bluestem, Bart, soft white, November, December, $1.05; western white, November, December, $1.04; hard winter, November, $1.01; December, $1; northern spring, November, December, $1.01; western red, November, December, $1.02.

Oats—No. 2 white feed, November, December, $33.50; No. 2 gray, November, December, $32.50.

Barley—No. 2, 46 pounds, November, December, $32; 44 pounds, November, December, $31.

Corn—No. 2 eastern yellow shipment, November, $34; December, $32.

Mill run, November, December, $24.

SEATTLE, Nov. 3.—Wheat—Bid: Hard soft and western white, Big Bend Bluestem, $1; hard and soft red winter, northern spring, western red, $1.04.

Yesterday's car receipts: Wheat, 36; corn, 2; rye, 2; hay, 3; flour, 17; barley, 1.

LEWISTON, Idaho, Nov. 3.—Red, 83c; white, No. 1, 85c.

DAYTON, Wash., Nov. 3.—Club, 90c; red, 88c.

COLFAX, Wash., Nov. 3.—Red, 83c; white, 86c.

RITZVILLE, Wash., Nov. 3.—Bart, 88c; red, 84c; Fife, 82c.

PULLMAN, Wash., Nov. 3.—Red, 84c; white, 85c.

DAVENPORT, Wash., Nov. 3.—Bluestem, 85c; Gold Coin, 85c; Club, 85c; northern spring, 82c; Turkey red, 82c.

WALLA WALLA, Nov. 3.—Bluestem, 92c; Club, 90c; Turkey red, 87c.

ODESSA, Wash., Nov. 3.—Bart and Bluestem, 88c; Marquis and Fortyfold, 85c; Turkey red, 84c; Jones Fife, 82c.

Hay and Feed Grain.

PORTLAND, Ore., Nov. 3.—Millfeed—City delivery prices: Mill run, $31 per ton; middlings, $43; scratch feed, $50; rolled barley, $42@44; cracked corn, $53; rolled oats, $42.

Hay—Buying prices f. o. b. Portland: Alfalfa—$16.50@17 ton; cheat, $12@13; valley timothy, $18@19; eastern Oregon timothy, $20@22; clover, $13@14; oats, $14@15; oats and vetch, $15@16; straw, $8 per ton.

SPOKANE, Wash., Nov. 3.—Wheat—Feed wheat, $36 ton. Oats—$38 per ton; rolled, $40. Corn—$50 per ton; cracked corn, $52 per ton. Barley—$36 per ton; rolled, $40. Bran—$29 per ton. Bran and shorts—$30 per ton. Shorts—$34 per ton.

Alfalfa, $22 ton in ton lots; $19 carload lots; new timothy, $20 in ton lots, delivered.

General Produce.

PORTLAND, Ore., Nov. 3.—Butter—Cubes, extra, 45c lb; prints, parchment wrapped, box lots, 49c; cartons, 50c. Butterfat, 51c, delivered, Portland.

Eggs—Buying prices, white hennery standards, 55c; hennery receipts, 52@53c; mixed color standards, 45@48c. Selling prices: Front street, selects, 58@60c; candled ranch, 52@53c; storage, processed, 40c; No. 1 candled, 35c; association selling prices, cash at store, extras, 55c; pullets, 45c.

Cheese—Price to jobbers, f. o. b. Tillamook: Triplets, 30c; longhorns, 31c; loaf, 30c per lb.

Poultry—Hens, 15@23c; springs, 20@21c; ducks, 17@20c; geese, young, 15c; turkeys, live, young, 25@27c; dressed, 35@37c.

SEATTLE, Wash., Nov. 3.—Eggs—Select local ranch, white shells, cases included, 53@55c per doz f. o. b. Seattle; mixed colors, 50c per doz; pullets, 36@38c per doz; pewees, 23c per doz; checks, 25c per doz; cases returned to shippers, 1c less; do to country stores, f. o. b., 51c per doz, loss off.

Butterfat—F. o. b. Seattle: A grade, 52c per lb; raw milk, $2.30 per cwt.

Poultry—Hens, 4½ lbs and up, 24c per lb; do over 3½ and under 4½ lbs, 17c lb; springs, 2 lbs and heavier, 22c per lb; do 1 to 2 lbs, 30c per lb; hens, 3 to 3½ lbs, 15c lb; do dry picked, 2c above live; fryers, roosters, 2½ to 5 lbs, 22c per lb; capons, live, fat, 6 to 10 lbs, 34c per lb; do dry picked, fancy, dressed, 36c per lb; old roosters, 11c per lb; Belgian hares, 3½ lbs and heavier, live, 13@16c per lb; do dressed, 17c per lb; geese, fat, live, 16c per lb; ducklings, live, 3½ lbs and up, 17@18c per lb; ducks, old, over 3 lbs, 15c per lb; turkeys, fat, dry picked, 12 lbs and heavier, 36c per lb; do 8 to 12 lbs, 32c per lb.

SPOKANE, Wash. Nov. 3.—Poultry, live weight—Hens, 4 lbs and over, 18c; light hens, under 4 lbs, 14c; springs, 20@22c; old roosters, 8c.

Fresh ranch eggs—$11@13; fancy poultry farm, $15; pullet eggs, $10.50@12.50.

Butterfat, 49c

Hides, Pelts, Etc.

PORTLAND, Ore., Nov. 3.—Hides—Salted hides, all weights, 3c; green hides, all weights, 4c; salted bulls, 4c; green bulls, 3c; salted or green calf, 10c; salted or green kip, 7c; hair-slipped hides and pelts, half price; flint dry hides, 11c; dry salted hides, 7c; culls and damaged, half price. Horse hides, green or salted, each, $1@1.50; colt hides, each, 25c; dry horse with tail and mane on, 50c.

Pelts—Flint dry sheep pelts, long, 20c; flint dry sheep pelts, short, 10c; flint dry sheep pelts, fleeces, 10c; dry salted pelts, 15c; salted pelts, longs, each $1@1.50; salted pelts, short, each, 50c@$1; salted pelts, shearings, each, 10@30c; salted goats, long, 50c@$1; dry goats, long, per lb, 12c; dry goats, short, each, 20@30c; goat shearings, each, 5@10c.

Cascara bark—Peel 1922 or older, 10c; new peel, 1923, 9c per pound.

Tallow—No. 1, 5c; No. 2, 4c pound; grease, 6c pound.

Oregon grape root—Per pound, 4c, delivered Portland.

Mohair—Long staple, 30c per lb; short staple, 20c lb; burry, 15c lb.

Hops—1923 crop, 25@28c lb.

Wool—Valley wool, fine, 30@32c; medium, 30@32c; coarse, 27@30c; Cotswold and braid, 20c; matted, 15c; Eastern Oregon, good average, 30@32c.

Range of Live Stock Prices for Week Ending October 31

CATTLE.	Chicago.	Spokane.	Portland.	N. Salt Lake.
Choice and prime heavy steers (1100 lb. up)	11.10@12.50			
Good heavy steers	10.00@11.50			
Medium heavy steers	7.75@10.45			
Common heavy steers	5.60@ 7.85			
Choice and prime light steers (1100 lb. down)	11.35@12.50			
Good light steers	10.25@11.50			
Medium light steers	7.85@10.45	6.25@ 7.25	6.25@ 7.00	6.00@ 7.25
Common light steers	5.25@ 7.85	4.25@ 6.25	4.25@ 6.25	4.00@ 6.00
Common to choice butcher heifers	3.75@10.75	3.00@ 5.00	3.25@ 5.00	2.85@ 4.35
Common to choice butcher cows	3.25@ 8.35	2.75@ 4.50	3.00@ 4.50	2.35@ 4.10
Bologna and beef bulls	3.00@ 6.75	3.25@ 4.00	3.25@ 4.00	2.00@ 3.25
Canners and cutters, cows and heifers	2.35@ 3.25	1.50@ 2.25	1.50@ 3.00	1.00@ 2.35
Canner steers	3.25@ 5.35			
Medium to choice light veals	7.25@11.00	8.00@ 9.00	8.00@ 8.50	6.50@ 7.50
Common to choice heavy veals	3.00@ 7.25	6.50@ 8.00	4.50@ 6.00	3.50@ 6.50
Common to choice feeders (750 lb. up)	5.00@ 7.75			
Common to choice feeders (750 lb. down)	4.25@ 7.25	4.00@ 5.25	5.00@ 5.50	4.50@ 5.50
Common to choice stocker cows and heifers	2.75@ 5.00			2.50@ 4.00
HOGS.				
Top of market	7.85	8.25	8.50	7.35
Bulk of sales	6.80@ 7.60	7.50@ 8.00	8.25@ 8.35	6.25@ 7.25
Heavy (250 lb. up)	7.00@ 7.80	7.00@ 8.00	7.85@ 8.25	
Medium (200-250 lb.)	7.10@ 7.80	7.00@ 8.00	8.25@ 8.50	5.35@ 6.35
Light (150-200 lb.)	6.65@ 7.75	7.00@ 8.25	8.00@ 8.35	6.35@ 7.35
Light lights (130-150 lb.)	6.00@ 7.25	7.00@ 7.50		
Smooth packing sows (250 lb. up)	6.50@ 7.00	6.50@ 7.00	6.00@ 7.00	4.30@ 5.30
Rough packing sows (200 lb. up)	6.25@ 6.70	5.00@ 6.50	5.50@ 6.25	
Medium to choice pigs (130 lb. down)	5.25@ 6.50	7.75@ 8.00	7.85@ 8.10	
Stock pigs		6.75@ 7.00	7.75@ 8.00	6.50@ 7.00
SHEEP AND LAMBS.				
Medium to prime lambs (84 lb. down)	10.75@13.50	9.00@ 9.75	9.50@11.25	9.50@10.75
Culls and common lambs	8.75@11.25	8.50@ 9.00	8.00@ 9.50	8.00@ 9.50
Medium to prime yearling wethers	8.00@11.25	6.50@ 7.50	8.00@ 9.00	6.50@ 7.25
Medium to prime wethers	5.00@ 9.50	5.50@ 6.50		6.00@ 7.00
Common to choice ewes	3.75@ 6.75	3.00@ 5.00		3.00@ 4.50
Culls and cull ewes	1.00@ 3.75	2.00@ 3.00		1.00@ 3.00
Feeder lambs	11.00@12.85			8.50@10.00

Are You a Silent Partner?

Do you know that the life, fire and accident insurance companies in the United States are almost without exception very heavy investors in the securities of electric light and power companies?

The light and power companies are engaged in furnishing a necessary service. They offer a stable investment, since their securities are not influenced by the ups and downs affecting industrial securities.

If you are the owner of a fire or accident insurance policy you, or if you hold a life insurance policy, your family and you are vitally interested in the success of the light and power company in your district.

It is the attitude of the silent partners which influence public opinion. Proper interest on the part of our silent partners will enable us to maintain the security of their investment.

NORTHWEST ELECTRIC LIGHT AND POWER ASSOCIATION

Nellie Hall, a Lewis county cousin, wrote Aunt Nellie a nice letter. Nellie has two little kittens and a dog for pets. They had two visitors at their school. This cousin is 12 years old and has a brother who is in the sixth grade.

"What four letters would frighten a thief?" is the riddle asked by Vesta Rogers, another Washington Corner cousin. "O I C U" is the answer, Vesta says. Aunt Nellie thanks Vesta for the riddles; they were fine. This cousin is in the fifth grade.

"May I join the Corner, too?" writes Helen Broderick of Whatcom county, Wash. "My pets are three little kittens. I have a mile and a half to go to school. I am in the sixth and seventh grades at school. My birthday is April 5. I am 10 years old."

From Whatcom county, Wash., comes an interesting letter from Otto Slotemaker. Otto is 12 years old and in the sixth grade at school. He goes to school on a bicycle every day and there are 210 pupils in the school. He has five pet rabbits. Otto has three brothers and two sisters. Sometimes he goes hunting.

Bella Havey, Ferry county, Wash., attended the fair in Republic, Wash., where she says she saw many things of interest. She met one of her best friends at the fair. Her friend's name is Anna Berg. Bella's pets are five little white kittens and a dog. She takes fourth grade work at school. (We shall be on the lookout for that picture, Bella)

Almost every day this summer Lillie Anderson went swimming, but she says she did not learn to swim. Next summer she will try very, very hard to learn. She has both kittens and rabbits for pets, also four calves. She is a Skagit county (Wash.) cousin. She sends this riddle: As I looked out of my chamber window I saw something fall. I send my maid to pick it up, but couldn't pick it all. What was it? Snuff.

Anna Mae Tarter writes that she has good times at school and likes both of her teachers. Her studies are spelling, geography, arithmetic, language, history, music, healthful living, reading and writing. Anna says she likes them all. She is in the fifth grade and there are 12 in her class. Grant county is where this little cousin lives. Although Anna had not written for quite a time, she did not forget the cousin. We are glad to hear from you, Anna; write again.

Esther Strunk, Clarke county, Wash., had a fine time July 4 with her relatives. She says two carloads of relatives had dinner at her home that day. This summer her mother, brother and she had a nice visit with her cousins in Vancouver and attended a big picnic, then went to Hillsboro, Ore., and visited with her aunt. They then returned to Vancouver and also visited relatives at Harmony. Now Esther is going to school again and isn't doing so much visiting.

BEDTIME STORIES

By THORNTON W. BURGESS.

OWNER OF EGGS DISCOVERED.

Little Mrs. Tiny is a very smart person. Tiny the warbler says so, and certainly he ought to know. He says she is the smartest person in the old orchard. Of course, his neighbors do not agree to that, but they do admit that she is very smart. They couldn't help admitting it after she built that two-story house with the strange egg locked in the lower part where it couldn't hatch. After he had heard about that even Sammy Jay, who has little respect for anybody, bowed to her most politely when they chanced to meet.

"I don't see how you thought of it; I really don't, my dear," Tiny would burst out every ounce in a while. "It is quite the cleverest thing I ever heard of. May I just peep at those eggs?"

"You may take care of them while I go get something to eat," Mrs. Tiny would reply, "but be sure that you don't leave them for an instant. It would break my heart to find another strange egg in with them, and I am not at all sure that that heartless creature who left the one we have locked up is not hiding around here somewhere waiting for another chance. I can tell you one thing, Tiny Warbler, and that is that I am not going to bring up any strange children."

Tiny new by the snap of her bill and the queer little jerk of her head that she meant just what she said. There were four beautiful little eggs in the nest now, and Tiny was very proud to take care of them while his smart little wife got her meals. He was doing this one morning when he caught a glimpse of a brownish-gray bird of twice his own size sneaking through the trees as if trying to keep out of sight. The instant she saw him she turned and disappeared. He was still wondering who she was and why she was so anxious to keep out of sight when there was a great outcry in another part of the old orchard. He could hear the voice of nearly all his neighbors creaming angrily, and he did so want to go and see what all the fuss was about. But he remembered his charge and sat tight. It was a hard thing to do when there was so much excitement, but he did it.

Presently Mrs. Tiny came hurrying home, and she was so excited that she could hardly keep still long enough to tell him the news. "What do you think?" she cried. "We've found out who has been laying those egs in the nests of other birds. It is Sally Sly the cowbird. Mrs. Pewee had left her nest for just a few minutes, and when she came back there was that dreadful Sally Sly just leaving

Sally Sly, the cowbird.

it, and in it was an egg just like the one we found in our nest and that Mrs. Chippy and Mrs. Redeye the vireo found in their nests. Mrs. Pewee called the rest of us and we drove Sally Sly out of the old orchard, and I don't think she'll come back very soon. I pulled two feathers out of her coat myself, and it did me a lot of good." Mrs. Tiny ruffled out her feathers.

"Did you ever hear of anything so wicked? They say she never builds a nest and never takes care of her babies. In fact, she doesn't even know her own children. She sneaks around and lays her eggs in the nests of others, always the nests of those a great deal smaller than herself, and then goes off to have a good time without any cares at all. She never even goes back to see if the eggs have hatched and the babies are being taken care of. She hasn't a spark, not a spark, of mother love in her. Nobody but Bully the English sparrow and his wife will have anything to do with her, and you know they are a very poor kind of people themselves and none of the rest of us will even speak to them. They are better than Sally Sly, though, for they do take care of their children. Did you ever hear of anything so awful? Just think of a mother leaving her children for strangers to feed and bring up and not even caring enough to find out whether they live or die!"

"What does Saly Sly look like?" asked Tiny.

"She wears a cloak of brownish-gray, a perfectly homely thing, and she sneaks around in the most shameful way," replied Mrs. Tiny.

"Then I saw her this very morning," declared Tiny, "and just as sure as you live she meant to leave an egg in our nest."

(Copyright.)

Birthday Greetings

THURSDAY, November 8—Sylvia Wirkkala, 9 years old.

FRIDAY, November 9—Bella Harvey, 9 years old; Delma Hedington; Hannah Wells, 11.

SATURDAY, November 10—Sarah Edwards, 11 years old; Freeda McCaul, 10, Helen Staadt, 10.

SUNDAY, November 11—Gaylus Adams, 11 years old.

TUESDAY, November 13—Leona Case, 8 years old; Ruby Irene Downing, 7.

That Old Inner Tube

By Mrs. C. W. Shumaker.

When journeying by car it is often necessary to have a pail or something in which to carry water to the radiator—when going back into the mountains, along the Coast or any place off the service station roads. Cut whatever length is needed from an old inner tube, take the piece to the vulcanizer and have one end vulcanized shut, and you have a water carrier that is collapsible, is not bulky, and will not scratch or mar any surface.

Rubber bands cut from old inner tubes come in very handy when wrapping up awkward bundles, or are useful about the car or farm buildings. They can be cut broad or narrow to suit one's needs, and a supply is a convenience when on a camping trip.

We needed a trough from the pitcher spout pump just outside the barn, to the tub from which our cow and horse drink, just inside. We took a section of an old inner tube long enough to make the connection, laid it on a board, and into the upper end tucked the rolled end of a piece of tin that catches the water and starts it through the tube. This kind of a "trough" has the advantage of not leaking, like a wooden one might.

Bits of tubing on the bottom will hold objects more stationary, and keep smooth surfaces from slipping.

LETTERS WELCOMED BY AUNT NELLIE.

Among recent letters received by Aunt Nellie are those from cousins whose names follow. A few of these will be published each week in the regular edition of THE FARMER and others will appear from time to time in The Junior Farmer:

Thordis Fjerlie, Victoria Penhallick, Cordelia Wagoner, Helen and Marie Youngsman, Alice Goldie Hilliard, Mabel Medsker, Beulah Warren, Martha Slikker, Effie Johnson.

Laura Anderson, Edna Heimbigner, Amalia Schaal, Clara Bernice Smith, Dorothy McClennan, Helen Staadt, Thelma Forsberg, Sadie Engebretson, Elizabeth Charlesworth, Ruby Robbins, Floyd Harris, Garland Harris, Pauline Forsman, Coral Wolverton, Charles Pendergrast, Ruth Eddie, Mildred Gerber, Esther Gronroas, Sylvia Simukka, Alice Holm, Edith T. McIlroy, Nellie Roe.

Car Owners Wanted

—To show and sell the greatest improvement in Spark Plugs since Gasoline Engines were invented. Unbreakable, translucent core shows at a glance just which cylinders are firing.

Broom Lite Spark Plugs
You Can See Them Fire

Just lift the hood and look. See instantly which cylinders are "dead." No guessing. No testing. Cost no more than ordinary plugs. Sure fire. Extra durable. Sold only by "Paul Men". Agents smashing all earning records. Exclusive territory. Write quick.

THE PAUL RUBBER CO. (1f)
93 Paul Park Salisbury, No, Car.

"The Rainy Day Pal"
TOWER'S FISH BRAND
REFLEX SLICKER
Patented Features make the Big Difference

DEALERS EVERYWHERE TOWER'S
A.J. TOWER CO.
BOSTON
FISH BRAND

Want a Farm?

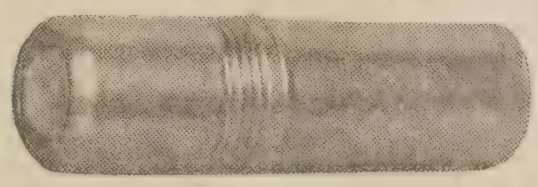
Very likely the place you wish is offered at a reasonable price on our "Want Ad" page. Why not look and see?

New Prizes for Junior Hustlers

Tray Coin Purse

has a tray for sliding coin into view and an extra pocket with flap and button lock for bills, etc. Highly polished nickel frame. Size of purse, 3x3 inches. Seal grain leather; colors, either brown or black. The purse pictured here will be awarded to you in return for your services in securing and sending in three three-year subscriptions to The Washington Farmer at the regular rate of 50 cent each, or $1.50 for the three orders.

Handy Nickel-Plated Vest-Pocket Flashlight



Seven-eighths of an inch in diameter and over three inches long. Flashlight and two batteries in a neat cardboard case. The Flashlight pictured here will be awarded to you in return for your services in securing and sending in two three-year subscriptions to The Washington Farmer at the regular rate of 50 cents each, or $1.00 for the two orders.

Two-Compartment Coin Purse

Made of good quality brown leather; 3 1-4 inches wide. This is a dandy purse. The purse pictured here will be awarded to you in return for your services in securing and sending in two three-year subscriptions to The Washington Farmer at the regular rate of 50 cents each or $1.00 for the two orders.

Granger Project

Completed at Cost of $250,000

Completion of the construction of the distributing system for the Granger irrigation district in the Yakima valley is announced by J. L. Lytel, project manager of the reclamation service. This work has been in progress since early in the year and has been completed at a cost of approximately $250,000. An inverted siphon of concrete 33 inches in diameter is constructed to convey the water from the Sunnyside canal to a point on Snipes mountain, where it is distributed by a series of canals and laterals to irrigate 1600 acres.

The cost of construction is $160 an acre, but most of the land was purchased from the Northern Pacific at $10 and $12 per acre. The total cost, leveled and ready for cropping, with construction added is put at less than $200 an acre and payment is spread over a 20-year period.

Win Prize Calves

High school boys' judging teams from four different high schools in Whatcom county competed with each other in milk testing, potato judging and stock judging at the Northwest Washington fair at Lynden. This part of the fair was an interesting procedure to both old and young and the interest was stimulated by two breeders donating pure bred bull calves, a Jersey and a Guernsey, to the winners.

The winners of the high school teams were decided by the grading system, the number of points made by each team deciding their standing.

The standing of the teams, together with their score and members of each team are as follows: Lynden high school team, first, with a total of 996 points; team composed of Francis Zweegman, Floyd Young and Percy Clark.

Sumas high school team won second place with 929 points, the members being Clarence White, Fred Smith and Donald Nims.

The Meridian high school team was third, with a total of 785 points, members being Allen Ross, Ling Bloom and Reider Rassmussen.

The Mount Baker high school team was fourth with 777 points, the team being composed of Ed Hoffman, Mitchell Brill and Marvin Gould.

Each team was required to judge three rings of dairy cattle and one ring of Duroc-Jersey swine. They were limited in their time of making their decision, but were allowed to give reason in each case, which was used as a basis in scoring the total number of points.

The individual winners were: Percy Clark of the Lynden team, who won a Berkshire sow pig donated by J. W. Morris of Ferndale as a prize for the boy or girl carrying the highest score in swine judging. Clarence Harlander of Lynden won the purebred Jersey bull calf donated by R. I. Tanner of Sumas as a prize for the highest score in judging Jersey cattle.

The winner of the purebred Guernsey bull calf is yet undecided, since there were three boys who tied for first place by scoring 95 points each. The Whatcom County Guernsey Cattle club will decide how the boys are to decide the tie.

York Heads Beekeepers

George W. York of Spokane has been elected president of the Washington State Beekeepers' association by the mail ballot that has just been completed. W. L. Cox of Elma, Grays Harbor county, was elected vice president and Miss Helen Steiner of Auburn, King county, secretary-treasurer. The results of the election have just been announced by B. A. Slocum, state college extension bee specialist, and Dr. A. L. Melander of the college, to whom the votes were mailed.

The new officers are among the most prominent beekeepers and authorities on bee subjects in the state. President York, formerly of Sandpoint, Idaho, where he was engaged in dairying and beekeeping, was for several years editor of the American Bee Journal in Chicago. Of recent years he has been connected with the Spokane Seed company. He is now engaged in the bee and honey business commercially in Spokane, and is publishing a bee paper, York's Bees and Honey.

Mr. Cox is one of the most prominent beemen of western Washington, while Miss Steiner is secretary of the Peninsula Beekeepers' association, the principal bee organization of the West Side.

FOUR CUTTINGS OF HAY.

Four cuttings of alfalfa hay have been reported from the J. E. Hostetter farm in the Riverside district near Yakima. This is the first season that four crops have ever been taken from the hay land, but in order to make them mature the three main cuttings were mowed down earlier than he had been accustomed to do in other years. If it had not been for fear of bloat he might not have cut the fifth time, but let the cows pasture it instead, he declared. However, when the alfalfa is high there is too much danger of bloating, while if the cows are turned in as soon as the hay is off they are obliged to feed more slowly and therefore not so liable to bloat.

Poultry Short Course

The poultry department of the State College of Washington at Pullman offers a new winter short course in practical poultry farming, starting January 7 and terminating March 2, 1924. This course is divided into two terms of four weeks, each offering complete work in the subject offered. A student may elect either or both terms as desired. Both terms are planned to give practical assistance to poultry keepers, both men and women, who are interested in learning more profitable methods of poultry farming.

Poultrymen interested in improving their breeding methods and acquainting themselves with pedigree and breeding records are offered a strong course in poultry breeding and breeding records. Poultrymen interested in the movable colony house plan of brooding as a means of disease control will find the course offered in the colony brooder house construction of great value to them.

First term: Poultry management practice, poultry breeding and breeding records, poultry diseases, poultry feeding, markets and marketing, culling and selection, poultry house construction, round table.

Second term: Incubators and brooding practice, poultry breeding and breeding records, fruit growing, incubators, brooding, trapnest practice, candling, grading eggs, round table.

If interested write to Professor John S. Carver, poultry department, State College of Washington, for special short course booklet. Enrollment in poultry short course is limited to 15 students.

"A Perfect Day"

The extension service of the State College of Washington takes into account the old saying that all work and no play makes Jack a dull boy. It provides two hours and a half of every day during the school year for play or other form of recreation. Here is the schedule of what the extension specialist considers a perfect day for the country boy or girl who has to travel some little distance to and from school: Seven o'clock, rise; 7-7:30, breakfast; 7:30-8, work; 8-8:30, going to school; 8:30-12, at school; 12-1, lunch; 1-1:30, returning to school; 1:30-3:30, at school; 3:30-5, recreation; 5-6, work; 6-7, dinner; 7-8, recreation; 8 p. m.-7 a. m., sleep.

Fastest, Cheapest Way to Clear Land

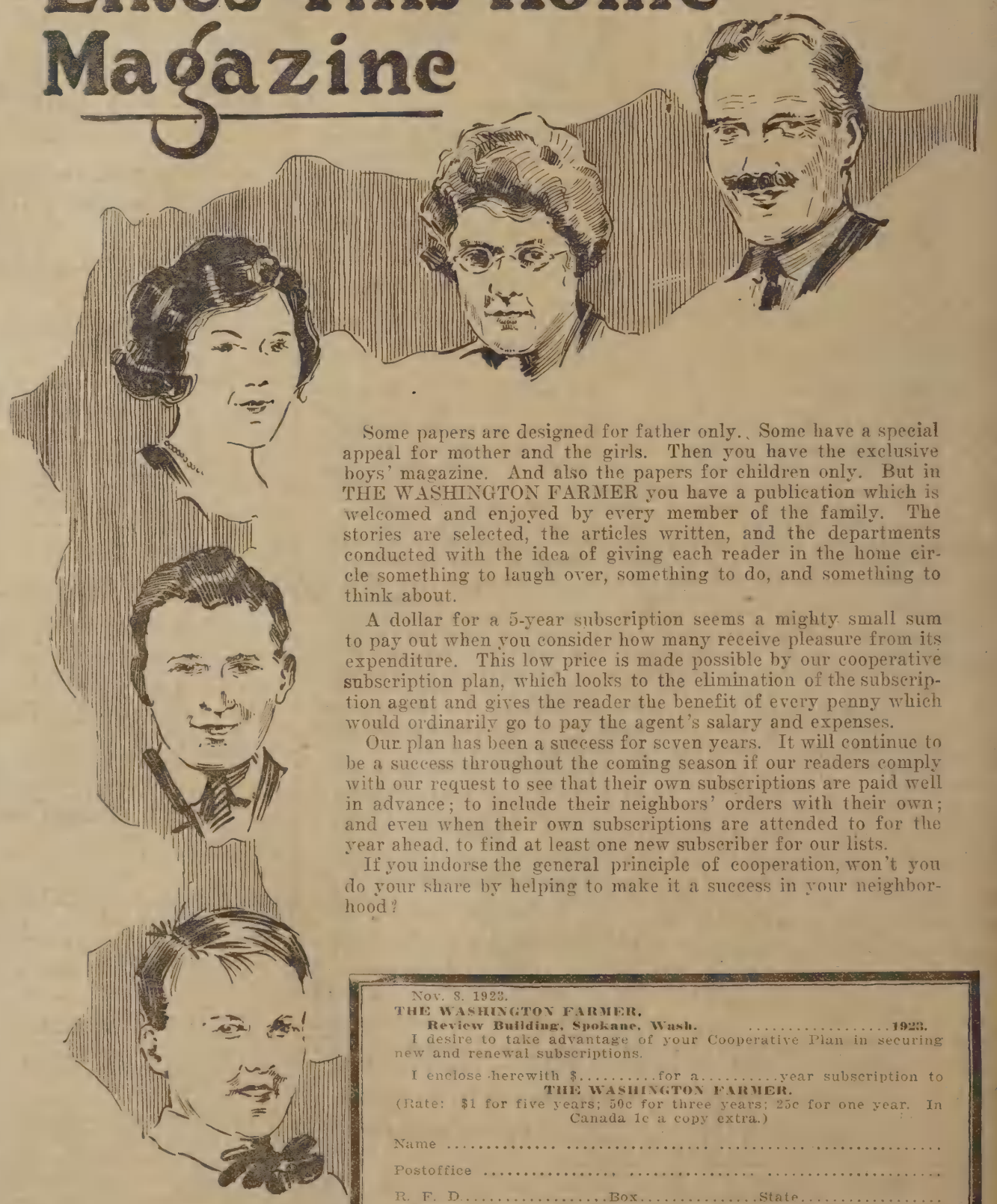
At a contest held recently in England, Hercules all-steel triple power stump puller pulled stumps faster than any other method. Quick work—low cost and one man does the job. **Hand power** in four speeds, single, double, triple and quadruple power. Easy to pull—quick winding cable, and other features. **Horse Power Hercules** is most complete, up-to-the-minute stump pulling outfit made. Write for prices and catalog—get my 1923 introductory offer.

$10.00 Down
Easy Payments

A. FULLER, Pres.
Hercules Mfg. Co.
614 29th St.
Centerville, Iowa

Read the "Want Ad" page this week for good offers of all kinds.

-Every Member of Family Likes This Home Magazine



Some papers are designed for father only. Some have a special appeal for mother and the girls. Then you have the exclusive boys' magazine. And also the papers for children only. But in THE WASHINGTON FARMER you have a publication which is welcomed and enjoyed by every member of the family. The stories are selected, the articles written, and the departments conducted with the idea of giving each reader in the home circle something to laugh over, something to do, and something to think about.

A dollar for a 5-year subscription seems a mighty small sum to pay out when you consider how many receive pleasure from its expenditure. This low price is made possible by our cooperative subscription plan, which looks to the elimination of the subscription agent and gives the reader the benefit of every penny which would ordinarily go to pay the agent's salary and expenses.

Our plan has been a success for seven years. It will continue to be a success throughout the coming season if our readers comply with our request to see that their own subscriptions are paid well in advance; to include their neighbors' orders with their own; and even when their own subscriptions are attended to for the year ahead, to find at least one new subscriber for our lists.

If you indorse the general principle of cooperation, won't you do your share by helping to make it a success in your neighborhood?

Nov. 8, 1923.

THE WASHINGTON FARMER,
Review Building, Spokane, Wash. .....**1923.**

I desire to take advantage of your Cooperative Plan in securing new and renewal subscriptions.

I enclose herewith $.....for a.....year subscription to **THE WASHINGTON FARMER.**

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News for Breeders

HOLSTEIN BUSINESS IN SKAGIT.

To the Editor of The Washington Farmer: I have kept closely in touch with the progress of the Holstein business in this territory for the last 12 years, and can confidently state that at no time has the buyer of choice Holsteins had a better opportunity in making his selection than now. In 12 years the number of purebred Holstein females in Skagit county has grown from about 25 head to approximately 2000 head ,and is rapidly increasing. Some of the very first A. R. O. records in this state were made by cows in this district in 1909. Since then good official records have become quite the common thing for our cows, many having held state and world records.

The owners of one or more purebred females now number over 100 true dairymen and are, practically without exception, sincere in their operations.

As to the health of our cattle, I can say that the percentage of reactors to the tuberculin test is insignificantly small. Many of our herds, including my own, have been fully accredited by the state and federal departments. As to abortion and the reproductive vitality of our stock, the very large number of strong, thrifty calves seen on practically every farm is striking and conclusive evidence.

Shipments of dairy cattle, mostly milk cows, are being made frequently and to many different localities, but they do not seem to thin out our herds too much. It serves, rather, only to strengthen our breeding operations with a noticeable improvement in herd bulls and young stock.

Burlington, Wash. R. E. WAUGH.

ALL STOCK IS PUREBRED.

All live stock on the David Rankin farm, near Selah, is purebred and is kept in addition to 13 acres of orchard. The 10 head of cattle are Jersey and trace back to the Rosaires Olga Lad and Golden Glow breeding. Mr. Rankin has been working with these two families and is developing a number of promising calves, some of which are being shown at the state fair.

The five head of horses are Shires, and the 2-year-old stallion, Glad Surprise, is sired by Gay Lad Surprise and out of Henrietta Pride, a well-known champion of the northwestern fairs in her time. Holly Reliance, a 2-year-old mare, is to be one of the brood mares. She traces back to Reliance on the dam's side.

The horses and cows are kept on blue grass pasture and fed alfalfa hay produced on 20 acres of land adjoining the orchard. Mr. Rankin believes in a diversified system of agriculture and is working out his plan as best he can under his conditions.

HOLLYWOOD STOCK TO JAPAN.

Auguring other similar transactions when Japan shall have recovered somewhat from the effects of the catastrophe which recently visited her shores, the Japanese delegate to the World Dairy congress at Washington, D. C., purchased from Hollywood farm shortly after landing in this country a young bull and two heifers of typical Hollywood breeding, which are to be shipped as foundation stock to the purchaser's farm in Japan. The bull is by Goliah of Hollywood, and is out of a 798-pound 3-year-old daughter of Judge Segis, with three generations of high producers back of her. One heifer is by King Lyons 3d, the other by a son of his, and both are out of daughters of Judge Segis, with good show and production record backing.

JOIN AYRSHIRE ASSOCIATION.

Wilkie Brothers of Montesano, Wash., are now among the 18,000 members of the Ayrshire Breeders' association.

Area Plan of Testing

Testing cattle for tuberculosis under the area plan—that is testing all the cattle at once in a county or other area—is proving very popular in many parts of the country. One reason is that a county freed of this disease is a center to which cattle buyers are attracted; another is that large numbers of cattle can be tested at a lower cost than when only a few herds or a single herd are tested.

During the last year nearly 1,800,000 cattle were tested under this plan, and this was more than 50 per cent of all the cattle tested in the United States. A summary of 72 counties reported as having finished testing all of the cattle within their borders shows that the work was done at a cost of approximately 34 cents a head, which included all expenses, exclusive of indemnity.

So far 81 counties have finished testing all of the cattle once, an increase of 50 counties over the preceding year. Seventeen counties—one in Indiana, two in Tennessee, four in Michigan and 10 in North Carolina—have been approved as modified accredited areas and cattle may now be moved from within their borders when properly identified without a tuberculin test for a period of three years to such states as will accept this class of cattle.

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NEAR CARSTENS' PACKING PLANT.

Why pay cash for something when you can trade for it? See the "Want" ads this issue.

Breeders' Dept.

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Where the high records are made. Several exceptionally well bred bulls for sale at most reasonable prices, sired by Chimacum King Korndyke Sadie Vale or Carnation King Matador Mutual, son of a world record senior yearling.
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Cows, heifers, bulls and calves.
LINN CO. HOLSTEIN ASSOCIATION.
GEO. A. McCART, Sec. Harrisburg, Ore.

Milking Shorthorns
FARMERS! Why not diversify, work from both ends? Produce beef as well as milk at a minimum cost. We are offering bull calves from profitable milking cows of approved Shorthorn type. Herd headed by Gretna Challenger, grand champion Washington state fair and Western Royal, 1922. Visit the herd or write
NORTHWOOD FARMS. Redmond, Wash.

Milking Shorthorns Senior herd bull, Foothills Corporal 150415, weight 2400; dam Glenrose Pearl, record 12,353 milk, 492 fat. Sire Corporal Clay. Kamaduk Herd.
J. E. DANILLS, Murphy, Ore.

Richly Bred Jersey Bull
Oxford Lad of Ingleside, dropped July 6, 1922. Sire, LaBelle's Oxford Lad, half brother to ex-world record cow, St. Saviour Belle, and first prize aged bull, Pacific International, and headed first prize herd, 1920. Dam, Lady Jamieson of Ingleside, 520 lbs. fat at 3 yrs., 1 mo., milked twice a day, herd care. Type and production combined.
B. C. ALTMAN, Gresham, Ore.

Jersey Bull Calf Full brother junior champion, S. W. Wash. fair, 1923. Sire, son of Poppy's St. Mawes, a gold medal bull. Dam, daughter of Poppy's Golden St. Mawes, sire to two world record cows.
A. T. FLAGG, Rt. 2, Chehalis, Wash.

Hewitt Farms Jerseys
Bulls ready for service of Rinda Lad and St. Mawes Lad breeding, from register of merit dams.
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Registered Herefords cows and heifers, yearling and bull calves of popular breeding; priced very reasonable.
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The Royal Designer herd of the best blood lines. We offer 5 March boars, 1 two-year-old boar and a number of March gilts, tried sows and fall pigs at weaning time. Write for prices. Satisfaction guaranteed.
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F. M. CURTISS, Prop., Fruitland, Wash.

200 Purebred Holsteins

AT AUCTION

Under the auspices of the Washington State Holstein-Friesian Association, Monday and Tuesday, December 3 and 4, at the Puyallup Fair Grounds, nine miles from Tacoma.

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These cattle are consigned by reliable Washington breeders, and are selected by the Washington State Holstein-Friesian Association. They are the pick of the herds in Washington. All cattle are of good type, and tuberculin tested.

FRESH COWS, SPRINGERS, HEIFERS AND BULLS

Buy them individually, or in carload lots.
For further information and catalogue write Geo. A. Gue, sales manager, Auburn, Washington, or H. C. Stimson, secretary, Hollywood, Washington.

SALE UNDER SUPERVISION OF
Washington State Holstein-Friesian Association

For Sale: Two Registered Holstein Bulls
One year old. Chief of the Ormsbys, the sire of these bulls, is a grandson of Sir Pietertje Ormsby Mercedes and Ormsby Korndyke Lad, the two leading bulls of the breed, each with 15 daughters with records above 1000 pounds of butter in a year. His mother has a two-year-old record of 1011 pounds of butter and 1040 in the next lactation period. His grandmother, Spring Brook Bess Burke and the full sister to his sire, Bess Johanna Ormsby, are the only two cows of any breed with four records above 1000 pounds of butter in a year and Bess Johanna Ormsby is the only cow with four 305-day records above 1000 pounds of butter. She also has a 44-pound, 7-day record. The dam of one of the bulls offered traces twice to Sir Pietertje Ormsby Mercedes and has a four-year-old seven-day record of 26 pounds of butter. The dam of the other bull is a granddaughter of King Hengerveld Segis and has a nine-year-old 26-pound, 7-day butter record.
Both bulls are good individuals from good type cows and are guaranteed to give satisfaction.
GLENCLIFF STOCK FARMS, Sunnyside, Wash.

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We have boars, sows and gilts for sale at reasonable prices. Five splendid young boars, extra quality, at $25 to $50 each. Open and bred gilts. Write for description and prices.
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J. W. PARKER, Yamhill, Ore.

American Hampshire Sheep Association
has a valuable booklet with illustrations telling you the superiority of this breed. We believe the Hampshire to be the best all round sheep in the world. Also have list of breeders; some near you. This literature is free. Write
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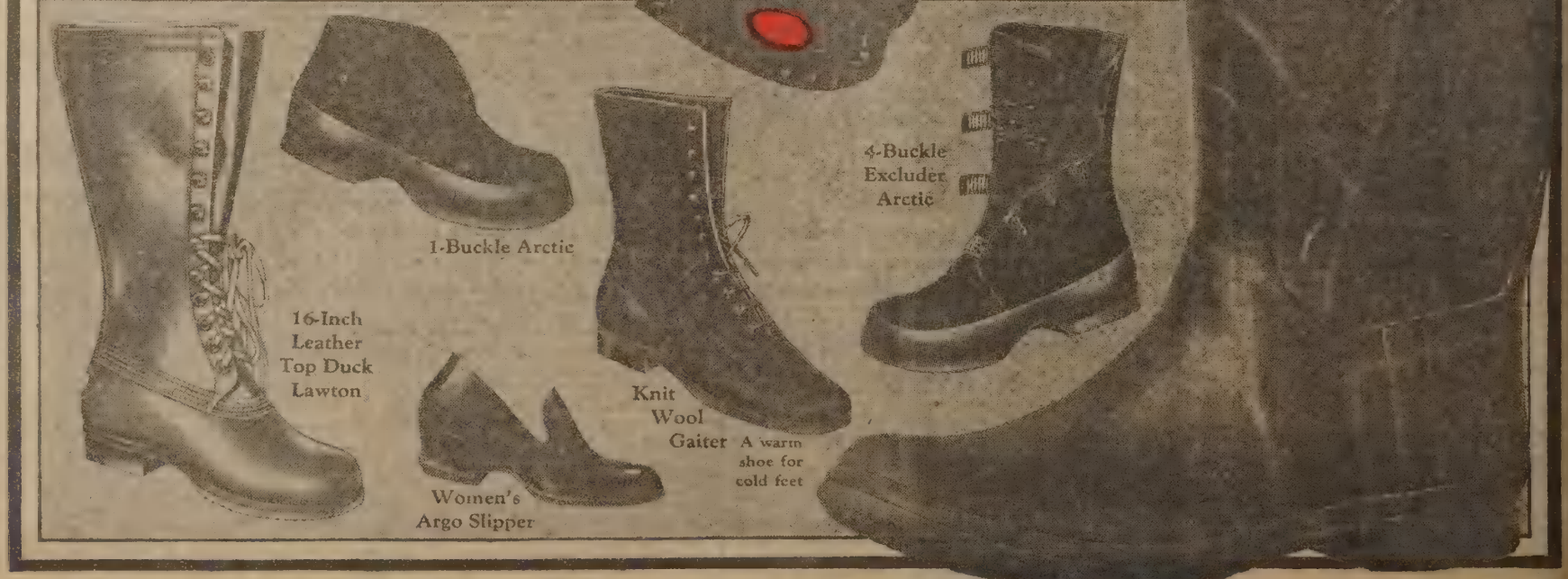

NOVEMBER 15, 1923. Washington's Great Farm Magazine EVERY THURSDAY

THE WASHINGTON FARMER

ESTABLISHED 1894

SPOKANE. SEATTLE.

Pick of Livestock at the Pacific International Livestock Exposition---Page 6

Dairy Judging

Washington State College Wins

With only Utah missing, which sends an animal husbandry students' judging team one year and a dairy students' the next, the annual dairy husbandry students' judging contest at the Pacific International at Portland was participated in by the same colleges which sent representatives last year, the list including Washington State college, University of Idaho, University of California, University of British Columbia and Oregon Agricultural college.

The five teams finished in the order given, the student experts from Pullman including the first and third high men of the contest, high man on Holsteins and first and third high men on Jerseys, and their scores totaling 3407.5 out of a possible 4500.

This was only a comfortable margin over the team from Idaho, which scored 3345 points, and Idaho led California by only 67.5 points.

As a whole the contest, which was the sixth annual under the auspices of the Western Dairy Instructors' association, was adjudged the best that has yet been held. It was run off with military precision under the general direction of J. E. Dorman of the western office of the United States dairy division at Salt Lake City, Utah, who declared it one of the best educational features of the show.

The judges, who are the coaches of the several teams, were well pleased also and the men in the contest show better training each year. There were some splendid classes of dairy cattle for the men to work on. "We think the class of dairy cattle shown this year a little better than in any year since the show started," said Dorman. "At least they brought out some dandies for the students. Such a contest trains coaches as well as men and makes them better instructors. It was close, clean and interesting this year."

Teams consisted of three men each, and each team was asked to pass on the merits of three classes of four breeds each—Holsteins, Jerseys, Guernseys and Ayrshires.

The winning W. S. C. team, coached by J. C. Knott, consisted of C. L. Wallmark, J. A. Porter and Lloyd Gunstone, who at the banquet of instructors and students at the Multnomah hotel on Monday night of stock show week received the Western Dairy Instructors' association plaque, most prized award of the year in dairy student circles. Wallmark was high man of the contest, with a total score of 1203.75, and received one of the three gold medals which are awarded the three high men. He was high on Jerseys also, though under the rules he might not receive the silver medal offered that winner. Porter was third high man of the contest, with a score of 1136.25, and received one of the other gold medals. He was third high man on Jerseys also, but, like Wallmark, received only the single award. The team as a whole was high on Holsteins, with a score of 888.75, and on Jerseys, with 966.25. It received a silver cup from the Holstein-Friesian Association of America for its showing on that breed, but the national Jersey breed association does not recognize the contest as do the other leading associations.

The Idaho team, coached by F. W. Atkeson, head of the dairy department at Moscow, consisted of C. R. Richards, Clarence Fales and Henry Hansen. The latter, with a total score of 1152.5 on all four breeds, was second high individual of the contest and took the third gold medal offered for individual prowess, and the team, scoring highest on Guernseys, won the plaque offered by the American Guernsey Cattle club. Fales of Idaho ranked fourth in the contest, next to Porter of W. S. C., but received no award. However, he was second high man on Holsteins, scoring next to Wallmark, hence he received the silver medal, and Richards was awarded the silver medal for being high man on Jerseys. Wallmark, Hansen and Porter all outscored him, but under the rules could not take the award. Fales was first on Guernseys also, scoring second highest of any individual on a particular breed, but having been awarded the Holstein medal could not take another.

L. R. Johnson of California, who scored 333.75 on Guernseys, took it instead, and the California team won the silver cup offered by the Ayrshire Breeders' association for high team judging Ayrshires. R. A. Sylva and J. J. McNamara were the other members, and the California team's total score was 3177.5. W. M. Regan, head of the dairy department at Davis, coached it.

Percy Murray of the Oregon Agricultural college team was the only other individual to win an award. He scored second to Hansen on Ayrshires and received the silver medal. F. E. Nelson and H. B. Aldrich were the other members of the O. A. C. team, which was coached by Roy C. Jones, professor of dairy production, and A. W. Aylard, K. A. Hay and R. G. Blair made up the British Columbia trio, which was coached by W. N. Jones. Aylard and Blair tied for third high score on Guernseys.

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Sixty-Five Boys and Pauline Sherman

Representing Twenty-Two Smith-Hughes High School Departments in the Stock Judging Contest at the Pacific International Livestock Exposition

Sixty-five boys and Pauline Sherman of Cottage Grove, Ore., representing 22 Smith-Hughes high school agricultural departments from the states of Washington, Oregon, Idaho, California and Montana, participated in the vocational students' judging contest on opening day, which was won by the Santa Rosa, Cal., team, coached by W. C. Patchett, with a total score of 2664 out of a possible 3000. The Redmond, Ore., team, coached by Borden Beck, was second with a total score of 2210, and the Walla Walla, Wash., team, coached by C. B. Wilson, was third with 2189. The teams from Union and Ontario, Ore., were close up in fourth and fifth places, respectively, the former scoring 2188 and the latter 2149.

Pauline Sherman of Cottage Grove, member of the live stock judging team from the high school there which competed in the vocational students' contest at the Pacific International. She was the only girl among 66 high school live stock experts competing.

It was "easy pickings" for the California team when it came to totals, for this aggregation of three young live stock experts comprised the three high individuals of the contest. Don Weatherington lacked only 41 points of a possible 1000 perfect score; Wesley Jameson was second high with 895 points, and William Braun third with 810. It is seldom indeed that an agricultural high school student scores 595 points in one of these contests, which engage the best juvenile judges of the entire territory, and it is seldom also that the three high individuals of an entire contest will be found on one team. The real contest in this case was for second position, and here the good average work of Marvin Hibbard (739), Gerald Davidson (762), and Gordon Galbraith (709), members of the Redmond team, triumphed. None of the three was among the five high men, but all did good, consistent work, and their total was 21 points above their nearest competitors, Everett Thomas (664), Vernon Baker (809) and Howard Fenton (716) of the Walla Walla team.

H. M. Skidmore of Washington, D. C., agent for the federal board of vocational education in 11 western states, was in general charge of the contest, supervisors from competing states assisting him. All told, there were three more teams than last year, and the supervisors were very much pleased with the showing. Montana was represented for the first time, two teams, in charge of Supervisor N. J. Abbey, coming from Hamilton and Kalispell. They were picked in a state contest held last January at Bozeman, 84 teams competing and the first and second prize winners winning the trip to Portland. Supervisor William Kerr had one team from Idaho, that from Boise, selected at a preliminary contest at the Twin Falls county fair at Filer. Idaho had two teams at the show in 1922, but Moscow did not come this year. The Walla Walla team that won third was one of three from the state on the north in charge of Supervisor J. A. Guitteau. Others were from Pullman and Elma.

Supervisor E. E. Elliott had 15 teams from Oregon, which was one less than last year. The schools represented include Cottage Grove, Seaside, Knappa, Corvallis, McMinnville, Newburg, Forest Grove, Woodburn, Gresham, Dufur, Prineville, Redmond, Union, Ontario and Prairie City. Fred L. Griffin, in charge of teacher training in California, was at the show with the Santa Rosa team.

As in the case of the college students' live stock judging contest, this was the first year in the history of the show that femininity has appeared in the ranks of the high school student teams. Pauline Sherman of Cottage Grove was a member of the group from the Lane county city, and gave a good account of herself by comparison with the young fellows working around her.

At the left H. M. Skidmore of Washington, D. C., agent for the federal board in 11 western states, who had charge of the Smith-Hughes students' judging contest at the Pacific International this year. Among those assisting him, appearing in the picture, were N. J. Abbey of Montana, E. E. Elliott of Oregon, J. A. Guitteau of Washington, William Kerr of Idaho, supervisors in their respective states, and Fred L. Griffin, in charge of teacher training in California.

Nearly 70 Smith-Hughes students, representing 22 high schools of Washington, Oregon, Idaho, Montana and California, who took part in the judging contest

Wheat Conference

Favors a Tariff of 45 Cents

At a wheat conference called in Colfax, Wash., Wednesday, by Congressman John W. Summers, 175 representatives of interests connected with the industry passed a resolution calling on President Coolidge to at once exercise his powers and raise the tariff on wheat to 45 cents a bushel.

The tone of the meeting emphasized determination of wheat producers, distributors and financial interests in Washington to cease mourning over disappointing prices and take constructive action to put their industry on an equal basis with other activities. "There has been too much talk and not enough action," was the message of speaker after speaker. The method to secure immediate results puzzled the conference, but it expressed its purpose in the following resolutions:

"That this meeting go on record as indorsing the cooperative marketing of wheat and that we recommend an increase in the tariff on wheat sufficient to raise the wheat-growing industry to a par with other industries. As a necessary adjunct to the tariff we recommend some form of government control for the exportable surplus.

"That, whereas, immediate action is vital, we urge creation of an export commission and that President Coolidge raise the tariff on wheat to 45 cents a bushel."

A further resolution, submitted by E. L. French, state director of agriculture, and adopted, was:

"This convention urges Henry Wallace, secretary of agriculture, to hold public hearings in the north Pacific coast states for the purpose of adopting new grades or standards for wheat and hay raised in Washington; these standards to more nearly give true grades and a fair chance on the world's markets."

Congressman Summers suggested and the meeting agreed that a permanent committee be formed by selection of representatives from the following groups: Farm bureau, farmers' union, grange, State College of Washington, University of Idaho, national banks, state banks, intermediate credit banks, business interests, legal counselors, cooperative wheat growers and unorganized farmers. State Senator F. J. Wilmer of Rosalia was elected permanent chairman and will name his committees soon.

The committee on resolutions was J. M. Reid, Pullman; E. J. Doneen, Garfield; Roy Jones, Dusty; Harry Goldsworthy, Rosalia, and S. W. Hester, Dayton.

Potato Growers

Meet in Spokane November 20

The fourth annual meeting of the Pacific Northwest Potato Growers' association and the potato growers' conference will begin at 1:30 p. m. Tuesday, November 20, in Spokane.

Following the presidential address of George J. Cannon, W. C. Edmundson will talk on "Five Years' Experiments With Potatoes at the Federal Field Experiment Station at Greeley, Col." "The Seed Potato Industry of the Cut-Over Land of the Inland Empire" will be duscussed by A. C. Ulman of Westmond, Idaho.

Dr. G. K. K. Link, pathologist, United States department of agriculture, will open Wednesday afternoon's session on "What To Do About the Virus Diseases."

Potato disease reports will be made by H. E. Morris of Montana; C. C. Tice, British Columbia; H. B. Heald of Washington; M. B. McKay of Oregon and C. W. Hungerford of Idaho.

Then J. M. Reader of the Idaho experiment station is down for a talk on "Sulphur Treatment for Scab" and H. R. Hyslop of the Oregon Agricultural college on "Cultural Methods in Relation to Diseases."

There will be special interest in "Market day," November 22, when a conference will open with an address by D. H. Anderson of Spokane on "The Potato Business From the Brokers' Standpoint." This will be followed by W. L. McEachran, also of Spokane, on "The Potato Business From the Retailers' Standpoint." "Marketing From the Growers' Standpoint" will be discussed by J. E. Larson of Vancouver, Wash. Dr. A. H. Upham, president of the University of Idaho, will be toastmaster at the annual dinner Thursday.

Four important papers are scheduled for Friday, beginning at 1:30 p. m.: "Seed Potato Certification," by C. C. Tice of Vancouver, B. C.; "Relation of Seasonal Growing Conditions to the Potato Crop," N. G. Coe, Bend, Ore.; "Results of Test Plots of Seed Potatoes in Washington," J. C. Currey, Olympia, Wash.; "The Potato in Place of Summer Fallow on Wheat Land," I. C. Longteig, Craigmont, Idaho.

A business session will wind up the conference.

WATER AND SALT FOR CALVES.

Many feeders fail to realize the importance of providing the young calf with plenty of water. It is a mistake to think that because the calf drinks milk it does not need water. After the calf is two weeks old it should have access to plenty of fresh, clean water at all times, and when it is old enough to eat roughage it should have access to salt.

THE WASHINGTON FARMER

Successor to
THE RANCH, PACIFIC DAIRYMAN, HORN AND HOOF.
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A Welcome Response

The Red Cross membership drive is a welcome call to every man and woman, to every boy and girl, whose soul is not bounded and shriveled by self.

Joyfully answering this bugle call every American finds himself on a level with every other American.

Beginning with Armistice day and closing with Thanksgiving day the United States exemplifies democracy in its happiest phase.

New Variety Kale

A new variety of kale has just been established and put on the market by the Western Washington experiment station at Puyallup. It is known as "Station No. 19" and is a very leafy, low-headed kale which has the ability to hold the lower leaves better than any of the common varieties, according to M. E. McCollam, agronomist of the station.

The new kale has a much greater leaf surface than the common kale and promises to produce better crops to the acre.

Whatcom Poultry Industry

Whatcom county is rapidly becoming a poultry center as one can readily see as he travels through the country. The soil and climatic conditions are particularly well adapted to the poultry industry, and the people are the kind who believe in working together in order to get results.

This is the only county in the state that supports two branches of the Washington Cooperative Egg and Poultry association, both of which are operating their entire plants in order to market eggs and dressed poultry, as well as to furnish poultry and dairy feeds to the members.

Decentralization

For some years it has been the opinion of The Washington Farmer that the huge organization known as the United States department of agriculture needs to be decentralized in order to decrease the large waste of effort by long-arm administration. This farm journal has also seriously inquired if the administrative details of the United States department of agriculture could not be better handled from headquarters in Chicago than from Washington. Chicago is the greatest agricultural center in the United States and probably in the world.

Now comes the statement that former Secretary of the Interior Albert B. Fall advocated the removal of the entire reclamation administration organization (which great agricultural activity is located within the bounds of the interior department) to Denver, Col., or to some other western point convenient to the principal projects.

Former Secretary Fall also found, as announced from Washington, that a scientist is not always a good business man, nor is a good engineer also a good manager. He advocated that officials more conversant with the problems of a farmer be placed in charge of the government activities.

Washington Cheese Scores High

A score of 92.5 per cent was given to a Washington made cheese, which was a tie score with Montana at the monthly scoring contest conducted by the United States Department of Agriculture at Salt Lake, Utah with 14 samples scored 90.67 per cent, California with eight samples scored 90.5; Idaho scored 88.5 per cent.

The cheese on an average was very much better this month than previous months. Cooler weather, which allows the milk to be received at the factories at a much lower temperature, and managers and cheesemakers putting forth a greater effort to educate and instruct the farmers in better milk production account for improved cheese.

Pacific County Agent Work

Tuberculin testing in Pacific county during the past year resulted in the detection of six reactors out of 4263 head tested and in the accrediting of two new herds. Dairy rations have been worked out for seven farmers for a total of 97 cows, two purebred sires have been placed and one silo constructed.

This, however, is only part of the county agent's work.

Poultry flocks totaling 3000 hens have been culled, 1725 fowls have been vaccinated and 290-egg (or better) hens have been placed. Seventy-six acres of vetch this season showed great possibilities in this crop and several new varieties of grain are being studied. Partial drainage has greatly improved 25 acres of land and drainage has been laid out for 125 acres more.

In the realm of the housewife, also, progress was noted. Four septic tanks and one water system have been installed; two kitchens were remodeled and many homes have been brightened by interior changes. Four boys' and girls' clubs had a total membership of 34 and the members of the daily club did such good work that they made a trip to the Pacific International.

The total value of extension work, estimated in dollars and cents, is placed at $6000.

Fertilizer Tests

An interesting experiment with seven different kinds of fertilizers applied to berry crops has been partially concluded by H. D. Locklin, horticulturist of the Western Washington experiment station at Puyallup. Sulphate of potash gave the best results when all factors were considered, while the complete fertilizer ranked second. Nitrate of soda was the third best application, while super-phosphate stood fourth. It is interesting to note that the sulphate of potash evidently is much better suited for berries than muriate of potash, the latter standing fifth on the list. Lime and sulphur each gave very little better production than was shown on the check plots which received no fertilizer.

The experiment took into consideration yield, earliness, weight of 100 berries, firmness of fruit and the length and diameter of the canes. The results obtained this year show only the effect of the fertilizer on this year's crop. They indicate which one is the most promising fertilizer. More definite conclusions can be made at the close of next season, since some of the plots may be better able to bear fruit than others.

The complete fertilizer produced the highest yield, while sulphate of potash produced the earliest berries shown by the first three pickings. The size of the berries was affected mostly by the nitrate of soda and was shown by the weight of 100 berries. Firmness, length of canes and diameter of canes all showed up best with the sulphate of potash. Conclusive results can only be ascertained next season, since it is possible that some of these fertilizers will not have their complete effect the first season.

Washington State Gleanings

The first car of sugar beets loaded this season at Walla Walla left October 14 for the refinery at Toppenish. The valley will produce about 90 cars of beets this year, according to H. C. Rosenfelt, representative of Idaho-Utah Sugar company.

APPLE PICKER CLAIMS RECORD.

Picking 225 boxes of Romes in one day by Lee Carpenter on the A. J. Seibel ranch in the Edgemont district was considered a good record, but now attention is called to the record of Ben Wynn on the White-Peacock place, six miles west of Wapato. Wynn picked 306 boxes in one day of less than 10 hours and averaged over 250 boxes a day through the Rome harvest. Further, he far outdistanced the Ellensburg man by picking more than 225 boxes of Winesaps daily.

TWO SPANGLE FARMS SOLD.

The Morris M. Knight farm, containing 160 acres, lying five miles southwest of Spangle, has been sold for a reported consideration of $11,000 cash. The buyer is William Wheatenbaugh of Spangle, who has a farm adjoining the Knight place that he has owned 40 years.

The David Harness tract, three miles southwest of Spangle, sold for $25,000 cash to Peter Reilly of Spangle and John Reilly of Spokane, brothers. The Reillys have owned land adjoining the Harness place for 45 years.

FARM BUREAU HEAD TO RETIRE.

Considerable speculation is being evidenced at Yakima regarding a successor to H. D. Hull, county president of the farm bureau, who has announced he will not be a candidate for reelection next month. Among those who have taken active interest in the farm bureau and mentioned for the office are C. Percy Wickersham and J. Elton Hall, both of Tietonview; Dr. P. W. Cornue, Selah; E. S. Robertson, Donald; E. E. Corwin, Parker; F. A. Norton, Grandview; J. C. Childs, Donald; William McGonagle, Selah; A. D. Paddison, Ahtanum, and W. F. Medaris, Parker.

WHEAT BREEDING COURSE.

Rattan Singh, a graduate of Punjab Agricultural college at Lyallpur, India, has written Professor E. F. Gaines, of the State College of Washington, asking if it will not be possible to arrange for him a correspondence course in wheat breeding work with special reference to the control of smut in that hilly country.

Singh is agricultural assistant to the economic botanist of Punjab, and says his attention was attracted to what the state college is doing in breeding smut resistant wheats by Mr. Gaines' article on "Genetics of Bunt Resistance in Wheat," published February 10 in the Journal of Agricultural Research.

TO REMOVE FILLER TREES.

Half of the fillers on the orchard property of the American Fruit Growers, near Wiley City, will be removed before next season. Every other tree in diagonal rows through the square planting will be removed. This will open up sun spaces all through the orchard and the removal of this number of trees should mean no diminution in the yield of fruit, said I. E. Griner, superintendent of orchard properties. There will be some spread of the trees into this open space and in two years the rest of the fillers will be removed. Distributing the removal of the fillers in that way will cause no interruption in the amount of bearing in the orchard, he said.

APPLE PICKING RECORDS.

Excellent records may have been made at the Big Y plant at Yakima, but Walter B. Dauber, manager of the Sunnyside plant, claims even higher records for his crew. On October 23 a crew of 10 packers at that house packed 2339 boxes of Rome apples in 10 hours. Of this number Mrs. John Madison packed 297, Mrs. Walter Dauber 288 boxes and Mrs. D. E. Norris 257 boxes. Five others in the crew packed more than 200 boxes. Mrs. Madison's average during the week was 237 boxes, Mrs. Dauber's 232 boxes and Mrs. Norris' 213 boxes. The 10 packers put out 11,797 boxes during the week the Romes were packed and had two short delays when changing from one variety to another, said Mr. Dauber.

STOCK ASSOCIATION ELECTS.

The Peola Live Stock association, at the annual meeting November 3, elected the following officers: Warren Howard, president; W. J. Bentley, vice president; William Brockman, secretary-treasurer; William Howard, E. C. Ruchert, A. L. Dick, W. J. Bentley and Warren Howard, advisory board.

It was decided to ask Forest Supervisor J. C. Kuhns of Pendleton to call a meeting of stockmen at an early date to consider a proposition to enlarge the range for cattle in that part of the national forest used by the members of the Peola association. This territory includes three divisions, known as Pomeroy, Peola and Tucannon, which, combined, grazed 1033 cattle and 106 horses this year.

FAIRBANKS HAS FARM BUREAU.

At a meeting at the schoolhouse at Fairbanks October 31 a farm bureau was organized by State Secretary W. H. Talley, with Brick Burford, secretary of the Whitman county farm bureau, assisting. The meeting was well attended and the following officers chosen:

S. R. Warwick, president; George Engle, vice president; Mrs. S. M. Lathrum, secretary-treasurer; Mrs. S. R. Warwick, committee on entertainment; George Pittman, organization; S. M. Lathrum, committee on legislation.

Plans will be made for the winter with the study of community problems. This is one of the live districts of this region and has many substantial and successful farmers.

Brick Burford, secretary of the Whitman farm bureau, organized a boys' pig club at Oakesdale November 1. The leader will be Harold McCoy, and other members are: Glenn Jones, president; Byron Doneen, secretary; Lloyd Doneen, W. Jones, Martin Hendrickson and Leslie Ellis. Others are expected to join soon.

No boy is taken who will not agree to have a sweet clover or alfalfa patch for his hog and to keep close account of the time and material used in producing the hog. Purebred hogs only will be used and grown to show the production of pork, as against production for sale as purebred animals. Chester White, Poland China and Durocs will be chosen.

Cooperation Anew

President Coolidge's Interest Brings Subject Forward Earnestly

President Coolidge's recently announced purpose to use the department of agriculture and other federal agencies to help the cooperative movement among farmers has thrust that subject anew upon the attention of the American people. Opinions range all the way from enthusiasm down the scale to skepticism, and from skepticism still further down the line to downright knocking. "Cooperative marketing will solve the wheat growers' problems," say the enthusiasts. "It won't be worth a tinker's darn," declare its critics, including the grain-dealers.

Three notable articles by three notable authorities on farm cooperatives have recently appeared in American periodicals. Aaron Sapiro, attorney for several cooperative organizations, who has spoken before audiences in Pacific northwest, says the average farmer has never really tried cooperation. Farmers have organized, it is true, but their organizations have been local. What is called cooperative marketing is in reality only cooperative packing, grading, buying or manufacturing. These organizations did some good locally. They secured local sales for local produce and stopped petty larceny, but they never even conceived the real problem of marketing. Real cooperative marketing, Mr. Sapiro says, is illustrated by the California fruit growers, the first group who conceived the idea of distribution on a commodity basis. Tobacco, potato, rice, bean and nut growers, dairymen and stockmen are now organized on a commodity basis. Other groups are following.

That is a clear statement of a thought frequently expressed by THE FARMER as to the efficiency of the cooperative movement in the Pacific northwest. To a large extent, as we have pointed out, cooperative organizations are competing with each other. Part of the fruit growers, for instance, in one orchard district will be organized, while other growers will deal with private sales agencies. The same divided condition exists over in another orchard valley, and in another, and another. And the net result is that they cut each other's throats competing for markets.

In another periodical E. C. Lindeman explains the cooperative method in Denmark, where it has been brought to a high degree of efficiency. But the cooperatives in Denmark are built on educated loyalty in the local community groups. "In this country," he says, "there exists among cooperative organizers a theory which leaves the community emphasis until last. This," says Mr. Lindemann, "leaves the weakest point, the most vulnerable point in the entire structure undeveloped and unguarded." The legal contract binding the farmer to deliver his products to the cooperatives, which has become so popular, is in itself insufficient to produce the cohesion and loyalty necessary for a cooperative movement which will endure, according to this authority.

C. L. Christensen of the United States department of agriculture also deals with Denmark's experience of over 40 years. Eighty-six per cent of Danish farmers are members of some cooperative organization. The organizations operate on a strictly business basis, and sufficient patronage must be assured before beginning business. Control is democratic and there is capable technical and business management.

ONE CROP AND TENANCY.

Farm and Ranch: A significant fact disclosed in the 1920 census on farms, but overlooked by most writers, is found in the figures which show that the largest increases in tenacy are found in those sections devoted to the production of one crop.

Unstable as Water

Thou Shalt Not Excel--Is Taught by Scripture and History

Unstable as water, thou shalt not excel.—Genesis 49:4.

Probably more words have been spoken and more pages printed descriptive of the woes of life following the lack of purpose among men than upon any other line of conduct.

Just look up some of the many words in the language defining one phase or another of the lack of stability in character: Unsettled, fluctuating, restless, capricious, fitful, spasmodic, desultory, afloat, transient, changeable, variable, checkered, vagrant, wayward.

Stability is at the basis of business as well as at the basis of morals; in fact, it is the one basis upon which business and morals are alike builded.

Stability means responsibility, a deep-seated sense of obligation to duty to God and to our fellow man.

A price must be paid for stability of character. No man's word is as good as his bond unless that man has paid the price of denying himself in order to keep his word; unless he has curbed his desires and has them so well in hand that he can command them to be still, and a calm of soul follows.

Anybody can be as unstable as the waters without half trying.

To be capricious is the easiest thing in the world. To float with the tide requires no effort.

From all this restlessness it is but a step to waywardness and all that word implies.

To be of stable character is an achievement; to have a program in life and follow it is to take rank with the chosen minority.

FARM BUSINESS AND MARKETS OUTLOOK

WHILE barometers of trade and industrial activity have declined about 10 per cent from the high level of last spring, such elements in the situation as building operations, manufacturing volumes, and trade turnover are above normal and high enough to maintain the urban prosperity characteristic of the last year and a half. The labor shortage of six months ago has been replaced by a small surplus in scattered places, but no great degree of unemployment is noted anywhere.

Money and credit conditions, usually considered fundamental in controlling the tendency toward business expansion or depression, are without strain. The peak of the crop moving season brought no pinch as the absence of car shortage reduced the amount of funds needed. Furthermore, according to bank reports, farmers are paying their debts as crops are sold, thus helping to ease the money situation.

High costs, especially for labor, are acting as a drag upon expanding activity, but the recent slowing down has stilled the clamor for workers, eliminated the payment of bonuses in some of the trades where skilled men were hardest to obtain and restored a more normal ration between the rate of advances of wages and of the selling prices of goods. At the same time there appears to be no occasion for enough change in employment conditions to cause a slump in the volume of consumption.

Since sentiment had a good deal to do with the letdown since last spring, it is significant that business optimism is returning. The ranks of the prophets of disaster seem to be gradually thinning out. A distinct change of belief as to what the next year or two may hold seems to be taking place. Six months ago the opinion was widespread that business expansion would continue probably until the early part of 1923, by which time a depression might set in. The moderate relapse since that time apparently has revised the schedule.

It is now recognized that, to a large extent, the factors underlying the boom of last spring are still effective and will cause a continuation of a high rate of activity. For example, another year or two will be required to complete the construction work now under consideration. Any recession in costs of labor and materials will simply increase the amount of this work to be undertaken. Extensive highway construction is under way, great development in the hydro-electric field is contemplated and the railroads are still adding to their equipment. No large reserve stocks of manufactured goods are overhanging the market, while broad consumption of these goods is continuous, necessitating a correspondingly high rate of production.

Better Undertone in Cattle.

Cattle prices sagged down to the low point of the season last week, but a firmer undertone is noticeable, although weighty short-feds are hard to move. Total receipts have declined slightly for two weeks, the peak of the range run has been passed and pressure from short-feds was less pronounced, although the country remains bullish on corn. Eastern slaughterers have been buying more in the middlewest and a wider outlet for stockers and feeders has given support.

Whether the trend has definitely turned for the season or not is uncertain, as enough westerns are still back to keep up a free movement during most of November and the cornbelt is in a mood to put a lot of warmed-up steers on the rails at every favorable opportunity, so that the market is not apt to display much strength for several weeks.

Cows and heifers make up the bulk of western receipts and the market remains surfeited as the fall cleanup from all sections is under way, while the veal calf market appears not to have struck bottom thus far. In the first nine months of 1923 3,390,327 calves were slaughtered under federal inspection, compared with 3,142,375 last year, an increase of nearly 8 per cent.

The decline in the corn market has revived the demand for thin steers.

Hogs Lowest of Season.

Hog prices declined moderately last week and are at the season's low point, with the Chicago average around $7. Receipts are extremely heavy, there is but little letup on the breaks and minor upturns start a deluge again. It is doubtful if bottom has been reached, although it may be uncovered during November, as opinion is prevalent that the big run will arrive early this year as a result of high-priced corn. Cholera is reported in parts of the cornbelt, but the outbreaks are not severe.

Lamb Market Slightly Lower.

Lamb prices are lower than a week ago. Total receipts at 10 markets were nearly 40 per cent less than three weeks ago and the smallest since late August, while the dressed lamb market was sharply higher in the east. More of the arrivals were in killing condition, however, and the appetite of cornbelt feeders for thin lambs has been fairly well satisfied. The total feeder movement has been and remains a phenomenally large one, however, as Colorado is filling up at present. In the eight weeks ended October 26 1,762,279 head were shipped out from 12 leading markets, compared with 1,162,293 head in the same period last year, an increase of 52 per cent.

Sales of wool last week were at firm prices, especially on medium to low wools.

Wheat Trend Uncertain.

Wheat prices have been reactionary during the last week, but the amount of decline was relatively small. Whether or not governmental assistance will be extended remains a factor in shaping speculative sentiment and probably has an influence on demand for flour as well as on the rate at which wheat is being pressed on the market by growers. Following the issuance of the report of the Meyer and Mondell commission the market sagged, but suggestions from official sources that distress in Germany would lead to the extension of aid from this country which, at the same time, would furnish a market for our wheat and hog products revived this factor again at the close of the week. Most of the forms of assistance suggested would require legislation, so that no immediate results are in sight.

Irrespective of any assistance from the government, wheat prices appear to be low enough to have discounted much of the apparent excess of export surpluses over import needs. Enough of the surplus in this country has already been shipped that the remainder is not much of a problem, with nearly eight months in which to dispose of it. In the Pacific northwest, where the bulk of the remaining surplus is believed to be located, prices have been holding up extremely well as a result of excellent demand from the orient.

Corn and Oats.

After a sharp slump in the corn market prices have rallied briskly in the last few days.

The oats market shows little independence of action. Primary receipts have declined, so that the visible supply is probably near its peak.

The flax crop is about two-thirds larger than last year, but is below average domestic consumption. Prices compare favorably with last year.

Seed and Feed.

Clover seed prices averaged lower last week. Receipts have increased, although the movement is much below normal for this season of the year. Timothy seed prices are holding their own much better than red clover.

Feed markets are reported as dull and irregular. Prices at western milling points are fairly steady, but wheat feeds in eastern markets are weak.

Cash Grain Markets.

The range of cash grain prices for the week ended November 7 was:

CHICAGO—Wheat—No. 2 hard, $1.07@1.11 3-4; No. 3, $1.03 1-2@1.09; No. 3 red, $1.05@1.09. Corn—No. 2 mixed, 84@92c; No. 3, 84 1-2c; No. 2 yellow, 93c@$1.02; No. 3, 86@92 1-2c; No. 2 white, 92@97c. Oats—No. 2 white, 42@44 1-2c; No. 3, 41@43 1-2c; No. 4, 40@43c. Rye—70 1-2@71 1-2c. Barley—58@67c.

Receipts of Hay Increase.

The premium on choice timothy hay has attracted increased receipts, but the market is firm. Low grade are too abundant to sell advantageously. Receipts of alfalfa hay are light.

Bulge in Egg Prices.

Cold storage holdings of eggs on November 1, according to the preliminary report of the bureau of agricultural economics, amounted to 6,658,000 cases, the largest on record for the corresponding date. The figure compares more favorably with the total on November 1, 1922, of 5,726,000 than was generally expected, however, causing a reversal of sentiment among many "bears."

Butter and Cheese.

A shortage of fancy fresh butter was responsible for the advance in prices last week to the highest levels for the season.

The level of prices makes foreign butter again attractive to American buyers. About 2500 casks of Danish are reported on the way and as much more is reported scheduled to sail this week.

Liberal offerings of all styles of cheese and lower country prices resulted in sharp declines in distributing markets last week.

Fruits and Vegetables.

Carlot shipments of potatoes from producing sections have fallen off nearly 30 per cent compared with three weeks ago. Arrivals at consuming centers remain heavy, however, and prices are only steady with last week. Maine, Minnesota, North Dakota, Wisconsin and Michigan are the leading shippers. Northern round whites are quoted at 90 cents to $1.15 per 100 pounds sacked and bulk in Chicago and $1.25 to $1.50 in the east.

Carlot shipments of apples from producing sections have declined sharply in the last week, but are still heavy and arrivals at consuming centers are burdensome. Demand is not as keen as would be desirable in view of the large supply on the market. Prices are practically steady, however. Michigan and Illinois Jonathans are bringing $5 to $6 a barrel in midwestern cities. Washington medium to large extra fancy Jonathans are bringing $2 to $2.25 a box at Chicago, with fancy at $1.75 to $2, extra fancy Delicious at $2.75 to $3 and fancy at 2.50 to 2.75.

LATEST QUOTATIONS.

PORTLAND, Ore., Nov. 10.—Cattle—Beef steers, good grade, $7@7.60; medium grade, $6@7; common, $4.50@6; beef cows and heifers, good grade, $5@5.50; medium, $3.75@5; common, $3.25@3.75; canners and cutters, 1.50@3.25; bologna and butcher bulls, $3@4; feeder steers, $5@5.50.

Calves—Medium to choice, 190 pounds down, $9.50@10; 190 to 200 pounds, $7@9.50; 260 pounds up, $5.50@7; cull and common, $3.50@5.50.

Hogs—160 to 200 pounds, medium, good and choice, $7.25@8; 200 to 250 pounds, $6.75@7.25; 250 pounds up, $6@6.75; packing hogs, smooth, $5.50@7; packing hogs, rough, $4@5.50; slaughter pigs, $6.75@7; feeder pigs, 6.50@7.

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Pick of Live Stock the Country Over

Progress of Pacific International Is Ever Upward and Onward Into a Stupendous Show

"From north and south and east and west they come,
From every land beneath the sun,
To tell of mighty victories won——"

"Biggest and best"—"greatest show on earth"—all ordinary superlatives—appear to have lost their potency in description of the huge exposition that annually at North Portland brings together from every nook and corner of the great west, as well as from many other sections of the Union and from Canada, the finest flesh in horses, cattle, sheep and swine.

Resort is had, therefore, to poetry, and while John Oxenham, author of the lines quoted and stolen from the beautiful text of "The Wayfarer," may have had something quite apart from pigs and chickens in his mind when he penned them, nevertheless the words describe with an accuracy which no collection of statistics can approximate, the sort of show that the Pacific International Live Stock exposition, in the fifth season of occupancy of its new quarters, has grown to be. That it compares most favorably with the other great shows of its kind, be it Chicago International, Kansas City Royal, Denver exposition, or what not, that America has to offer, is no longer anything but granted. It is simply stupendous; it can not be described; and it is not to be understood by any one who has not visited the grounds, studied the magnificent specimens of live stock and land products assembled there, and caught the spirit of the great show—the spirit of a forward and upward movement in the live stock breeding industry—of the department of agriculture, the agricultural college, the purebred bull association, the cow testing association, the breed association, the boys and girls' club, all blended into one great big inspiration for the live stock grower, the poultryman, the farmer or the mere lover of the beautiful in animals to imbibe. It is a show of shows.

If there was a single outstanding feature of the 1923 exposition—aside from the weather, which could not have been more perfect, from Saturday to Saturday, if it had been made to order—it was perhaps the spirit of optimism which prevailed among the breeders of live stock generally who exhibited and attended. Sheep, cattle, horses, swine, poultry—all have had their rounds with Old Man Gloom, and some of them went just about through the ropes. But they are climbing back, if general good nature and readiness to joke about their troubles is any indication; and the prices attained at the annual sales of breeding stock constituted perhaps the first wallops which they have delivered to depression. They were prices, particularly for dairy cattle, which have not been attained for many a long day. To $1000, $1500, $2000 they climbed, and the averages were such as to inspire contributing and observing dairymen with new confidence.

The night horse show, which fairly scintillated this year, gave nightly performances and several matinees.

From north and south and east and west, literally, the entries came, in numbers 200 more than at the great show of 1922, and with a quality and finish which it seemed had never before been equaled at this show. From faraway New Hampshire came Devons and milking Shorthorns; from Iowa and Idaho proud Percherons; from Utah and California dainty Jerseys; from Washington, Oregon, Montana and British Columbia many breeds of sheep, Brown Swiss and Hereford cattle, and many swine. And theirs were names to conjure with—Alberta Panama, Canadian champion; Tillamook Daisy, purple ribbon winner at the National Dairy show; May Rose Cherub, $10,000 winner at a score of eastern shows; Edna May's King, $12,000 son of Kentucky's greatest saddlers—champions of the show ring, at the pail and on the block, the bluest blood of the myriad splendid strains that are represented in American purebred animals.

Then there was the eighth annual Manufacturers' and Land Products show, which has come during its short tenure of the newest building to be almost as much a part of the exposition as the cows and horses themselves, and the third annual Northwest Grain and Hay show, housed this year for the first time where it belongs, under the same roof with the county displays of agricultural products from all over Oregon, rather than in a tent as a neglected side issue of a contest between bucking horses. Not reported in this issue, but a great big feature all by itself was the display of boys and girls' club live stock, which again overflowed the quarters assigned to it and attracted no end of attention from thousands. Details of the awards are available to those who desire them, in succeeding columns. Prizes were distributed totaling $90,000.

Attendance at this year's show for the week approximated 125,000 persons, according to a statement by the treasurer. This was some 20,000 better than the best previous attendance.

THE BEEF CATTLE SHOW.

With all three of the leading beef breeds having a larger number of entries than a year ago, and with probably the best average quality this show has ever had, there was a beef cattle show for the Pacific International and its sponsors to be proud of. Entries that came from six different states and British Columbia battled for supremacy in a show ring deeply fringed with fanciers of the different breeds and friends of different animals. Cattle that had been grand champions in their home state, and often on the entire fall circuit, here met the best from other circuits, and won or went to defeat. There was not a single instance in which one exhibitor completely dominated a breed, but good natured rivalry, close competition and a general division of the awards not only made matters more pleasant for all concerned, but showed the high average quality of the entries. Judging that was recognized as competent and fair was done on all the breeds and the judges, some of them here for the first time, were surprised at the splendid lot of entries no less than at the magnitude of the show. Herefords had perhaps a few more than the Shorthorns, but each was great in numbers, as well as in the quality of the entries, and the Angus show was equally as good in quality.

Shorthorns.

Another great show—greater in numbers than last year—of the premier breed was again made this year. California, Washington, Colorado and Montana all had herds competing. Large classes greeted the judge all down the line and, in most instances, competition was so close as to leave the observer uncertain until the ribbons had been placed. There were few unfit cattle, even where sale entries were shown. In many cases the difference between first and those below was extremely slight. And, with a first to the Pacheco Cattle company, and Thomas L. Miller, both of California, and one to F. M. Rothrock, the placing of the senior and grand championship on bulls was a most interesting event. But Pacheco Lad, the Pacheco company's entry, was so perfectly fitted and showed such smoothness for his four years, that he won over both the younger firsts. The Warnock entry, Pride of the Rockies, that was made junior champion, has a very strong back on a grand set of legs; shows breed character in a fine head and was fitted about as well as a junior yearling can be. The Pacheco company had the senior and grand champion female, also, on their Knight's Lassie, a 2-year-old of much scale, but with sweet femininity and splendid fitting. Rothrock won junior champion honors on the big, smooth, deep, finely fitted senior yearling, Hercules Sylvia 3d, with much breed character, good hair and an all-round good heifer.

Judge: John Robbins, Horace, Ind.

Group of three bulls owned by exhibitor—1, Pacheco Cattle company, Hollister, Cal.; 2 and

(Continued on page thirteen.)

New Stars Appear in the Boys' and Girls' Live Stock Judging World

A brilliant contest in which former team and individual champions went down to defeat before new stars in the juvenile live stock judging world, and in which teams from California and Washington outdid the best that any team among the many from Oregon could do, was the boys' and girls' club live stock judging contest for the honor of being the premier club judging team of the west and for possession of the Pacific Northwest Farm Trio trophy, a silver cup, won in 1920 by Marion county, Oregon, in 1921 by Linn county, Oregon, and in 1922 by Klickitat county, Washington. Notwithstanding that each of these counties was again represented by skilled young judges, including, in two instances at least, one or more members of the teams that had previously won, and notwithstanding the remarkable showing of Edith Pugh, girl member of the Linn county team, who was high individual of the entire contest with a total score of 800 points, the team from King county, California, consisting of Fred Giacomazzi, Raymond Hall and George Marah, and the one from Whitman county, Washington, consisting of Ralph J. Cole, Anton Harms and John Hinrichs, tied for first place with total scores of 2288 points each and shared the judging honors of this year's exposition. The following Oregon counties finished next in the order named: Clackamas (2270), Linn (2240), Marion (2233), Malheur and Washington (2197 each). Klickitat county, Washington, scored 2190, and Yakima county 2185.

Probably never before in the west has so large a number of boys' and girls' club live stock judging teams representing as many different states and counties been assembled for a contest, the brilliancy of which was enhanced by the fact that Gordon H. True, live stock expert of the University of California, was in charge of it as judge, and by the precision with which it was run off under the general direction of L. J. Allen, live stock club leader in the state of Oregon. H. C. Seymour, state club leader in Oregon, and visiting club leaders in charge of competing teams all complimented the management on the way the contest was handled and the results announced by 5 o'clock on the same day.

Not only was California very much represented by the team from King county, and Washington by teams from nine counties, including Klickitat, Adams, Skagit, Wahkiakum, Whitman, Kittitas, Yakima, Grays Harbor and Spokane, but Idaho sent a team from Latah county and Oregon 17 teams from as many different counties in every district into which the state is naturally divided, including Yamhill (one member), Benton, Marion, Linn, Polk, Washington, Multnomah, Clackamas, Lane, Josephine, Jackson, Tillamook, Clatsop, Lincoln, Union, Umatilla and distant Malheur. There were 27 counties, all told, in the contest, with full teams of three members each, besides Yamhill with one, making a total of 82 boys and girls competing.

Although two of the club experts among the members of the winning teams were among the high individuals, it was a general average of good work on the part of all members that won for King county and Whitman county the leading honors of the contest. Fred Giacomazzi of King county, scoring a total of 785 points, was third high individual of the contest and was largely responsible for his team placing where it did. His placings of Duroc and Poland China swine and of Shorthorn and Hereford cattle were all perfect, and he scored 90 points out of 100 on reasons, but evidently he was not very familiar with dairy cattle or sheep. His teammate, Raymond Hall, who scored 753, likewise placed both breeds of beef cattle correctly, also Poland China swine and Lincoln sheep, but fell down on other breeds. Marah scored 100 per cent on Durocs and Shorthorns. Cole and Harms of the Whitman county team both were perfect on Durocs, Lincolns and Shorthorns, Harms also on Poland Chinas, and their respective scores were 775 and 780, while Hinrichs, though perfect on both breeds of swine, faltered in the other departments and let his total down to 733.

Left to right—Governor Walter M. Pierce congratulating Edith Pugh of the Shedd (Oregon) Calf club judging team upon being high individual in the boys and girls' club judging contest, and Governor Louis F. Hart of Washington.

Edith Pugh, whose remarkable performance was chiefly responsible for the Linn county team being in fourth place, correctly placed Durocs, Jerseys, Shorthorns and Herefords, scored 90 per cent on reasons for Jersey placings, and was well up on all other breeds except Holsteins. Roy Harms of Clackamas county, who was second highest individual with a total score of 795, and whose splendid showing lifted his team into second place, was perfect in his placings of Durocs, Jerseys, Lincolns and Shorthorns, but fell down on his reasons for placing Lincolns. Other members of this team were Wilmer Harms and Ferdinand Kranberger, and Edith Pugh's fellow members of the Linn county team were Ralph Malson and Dellis Cornutt. The latter has been for at least three years on a team that was a top-liner at the exposition. In 1921 he and a brother helped win the cup for Linn county, and in 1922 he and two brothers formed the team that stood second only to the one from Klickitat county, Washington. Homer Bray of Marion county, who scored 783 and took fourth place among individuals this year, is an old-timer in club judging, also, as is Homer Mouncer of Grays Harbor county, Washington, who won the blue ribbon Holstein calf offered by Governor Louis F. Hart for the best juvenile judge of Holsteins at the Washington state fair this fall. Bray made four perfect placings. Harvey Varnum of the Yakima county, Washington, team, and young Harms of the winning Whitman county team, who tied for fifth place among individuals, made three and four perfect placings, respectively, but neither of them knew dairy cattle. Klickitat county, which sent a championship team last year and one which took second place in 1921, returned one which scored a total of 2190 points, but which reached only seventh place. It was made up of Kenneth Hinshaw and James Coffield, members of last year's winning team, and of Howard Norris, brother of the third member in

(Continued on page twenty-one.)

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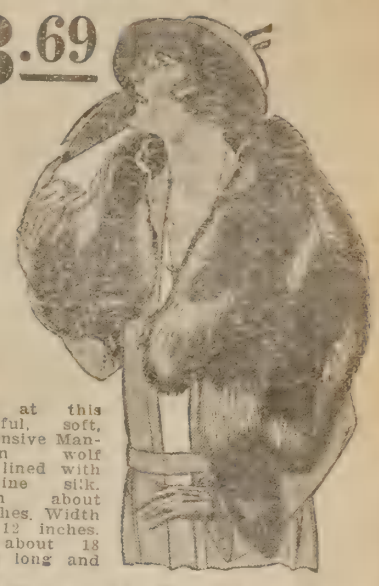

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Another sensational value in a warm winter coat. This becoming model is of splendid Thibet cloth in choice of rich brown or navy blue. The ample collar is of genuine brown Coney fur. Coat is finished with all-around self material belt and two patch pockets, trimmed with pretty buttons. Imitation cuff is also button trimmed. Coat measures about 48 inches long, and comes in sizes 34 to 44 bust.

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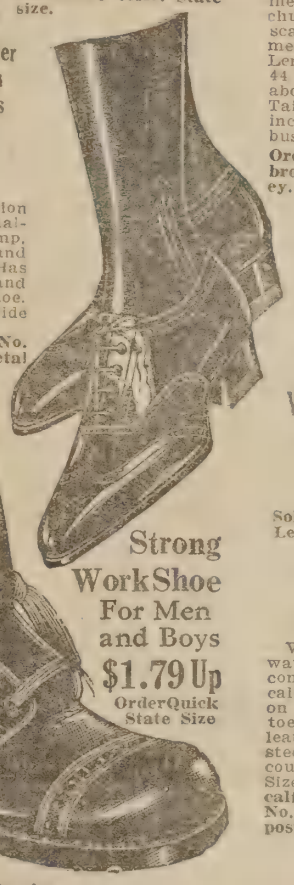

Made with imitation shield tip and medallion perforated vamp, perforated lace stay and circular foxing. Has medium rubber heel and medium pointed toe. Sizes 2½ to 8. Wide widths.

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Extremely dressy boot of serviceable calf finished leather. Pretty wing tip with medallion on full rounded toe, perforated vamp, quarter and eyelet rows. One-piece extension oak sole and low heel with rubber top lift. Wide widths. **Child's sizes 8½ to 11, No. 52S439. Price $1.79. Misses' sizes 11½ to 2, No. 52S440. Price $1.98. Growing girls' sizes 2½ to 8, No. 52S441. Price $2.49. Send no money. Pay bargain price and postage ■■ arrival. State size.**

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LIVESTOCK AND DAIRY

Pool Cattle

The advantage of pooling cattle grazed on the national forest ranges of Colorado last year over individual handling is brought out in a cost study just completed by the United States department of agriculture. Three hundred eighty-three ranchmen in 10 pools, comprising a total of 23,451 head of cattle, grazed their cattle at an average cost of $1.87 per head. Seventy-one individual operators outside of pools grazing 18,803 head of cattle paid an average of $2.26 per head.

Under the pooling system the members cooperate with one another and hire a rider or several riders to look after the cattle while on the reserve. All expenses of herding and salting cattle, maintaining drift fences, constructing new drift fences, camps or trails are pro-rated at the end of the grazing season. One or two hired riders do all the riding for as many as 50 members in some pools. The main savings made by the pools as compared with the individual system were in the cost and transportation of salt, feed for saddle horses and in construction and maintenance of trails, drift fences and camps.

The average cost of carrying the total of 42,254 head of cattle, both pools and individual profits, was $2.04. Grazing fees, labor and board of the laborers constituted from 75 to 85 per cent of the cost. The grazing fee was 27 per cent of the cost, the direct labor bill paid out to riders was 43 per cent of the cost, and groceries 10 per cent.

LOSES OUT IN THE MILK GAME.

Unfortunately, periods of maximum milk yield and maximum milk consumption do not coincide. The dealer must keep a number of cows that leave him a surplus of whole milk for the major part of the year, and dispose of the surplus, at less profit, for manufacturing purposes, or he must depend for the period of maximum consumption upon a supply obtained elsewhere, when milk is at a premium. The dealer who is not equipped to convert his surplus into manufactures is losing out in the milk game.

Learns Value of Tankage

"I am willing to admit that I am a beginner with hogs, but I have learned a lesson that will save me many dollars in the future and would have saved money for me in the past had I known more about the value of tankage," said Steve Woodhouse of Ellensburg, a breeder of registered Chester White swine. "I had one bunch of hogs which were kept in a pasture all to themselves and had access to a self feeder, but to which no tankage was added. The other lot had the same number of hogs, but they had tankage supplied by means of a separate section in their self feeder.

"When the hogs were marketed and the returns figured I found that the ones which had no tankage were sold at a loss of $6.62 for the six head, while the ones that were supplied with 10 per cent tankage in their ration netted a profit of $6.61 for the lot. All of the feed was purchased, but Mr. Woodhouse believes that he can in this way utilize much of his grain that is raised on the farm if he adds the right amount of tankage to the self feeder. Both pens had access to alfalfa pasture during the entire fattening period.

Mr. Woodhouse explained that much of the drudgery attached to the raising of hogs was eliminated by the use of the self feeder and this is an important item when labor is so hard to get and the wages higher than the average farmer can afford to pay. He believes that he can get a better price for his grain by grinding and feeding to the hogs than by attempting to raise more grain and sell it in the usual manner. The plan is a good one and is well worth a trial and could easily be taken advantage of by many other wheat farmers.

LIFE PRESERVERS FOR LIVESTOCK

By DR. E. E. WEGNER, W. S. C.

OUR ANIMAL FOOD PRODUCTS.

Little is said in the press about the danger of certain diseases being transmitted from animals to man, yet we know that certain ones may do this. Not infrequently we hear of some animal disease being transferred to a human being and for this reason we should know something about the dangers that are found in this association between man and his animals. I do not wish to emphasize this so greatly that any one will become panic stricken, but we have this condition to deal with and should look it squarely in the face.

Too frequently certain persons react to this subject by saying that we should dispose of all animals, and not be exposed to this danger; while others think that they should not eat meat or milk food products. Both of these reactions are wrong and the common sense ground is to take as much care as possible to see that we do not expose ourselves to the animal that has a disease that is transmissible, and to further protect ourselves by adding our influence to the movement to have all animal food products inspected before they are delivered to us for food, to assure ourselves that our animal food products are from healthy animals and are prepared in a cleanly manner.

Tuberculosis.

Probably the disease that attracts the most attention in connection with this subject is tuberculosis. We have known for many years that this disease was capable of being transmitted from animals to man and have taken the precaution to minimize this danger as much as possible. There are places, however, where nothing is being done to prevent this dreaded infection, and where the people do not know whether the milk that they drink or the meat that they eat is supplied from healthy animals or not.

Tuberculosis is easily taken up into the body through the digestive tract, mouth, throat, stomach and intestines, and usually gets in with the foods that we eat. How many people now reading this can say that they know the animals supplying them with their animal food products are

(Continued on page twenty-eight.)

GENERAL ADVERTISING.

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Edison enabled us to enjoy the benefits of electric light, Count Welsbach's mantle made it possible to have the incandescent gas light, but it remained for a Swedish engineer named Johnson, now living in Chicago, to devise a lamp that would burn ordinary, every day kerosene oil and produce a light said by the many scientists who have seen it to be whiter than electric. The lamp is as simple to operate as the old style oil lamp, burns without odor, smoke or noise and is proving a sensation where oil light is needed.

Mr. Johnson offers to send a lamp on ten days' free trial and will even give one to the first user in each locality who will help introduce it. A letter addressed to W. R. Johnson, 31 N. Fifth St., Portland, Ore., will bring full particulars about this wonderful new lamp. He has an interesting agency to offer, too.—Adv.

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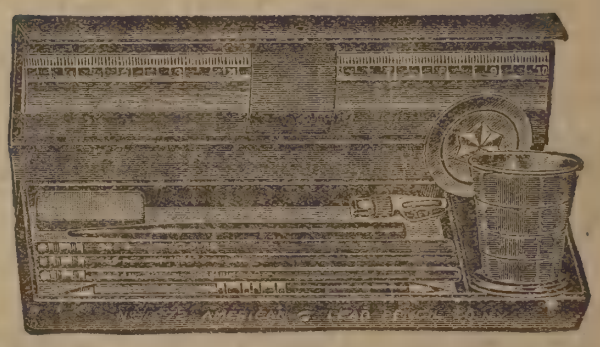

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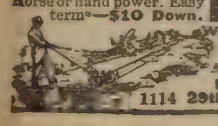

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VETERINARY

By DR. S. B. NELSON.

Ringbone Treatment—I have a horse which is troubled by ringbone. Will you publish a cure in your paper? G. A. R.
White Salmon, Wash.

If the ringbone is small and newly formed a heavy blister applied over it may be of value. The blister should be composed of red iodide of mercury, one part; powdered cantharides, one part; lard, six parts. Clip the hair off the area over the ringbone and rub it with the hands so as to get a good circulation into it. Then apply the blister with some friction, a little at a time, and rub for five or 10 minutes. Cover over the area with sufficient blister to make it about as thick as the back of a knife blade. The horse should be tied up so that he can not get at it with his mouth and blister his lips and tongue. In three or four days apply a little sweet oil or vaseline. The animal should have from two to three months' rest.

If the ringbone has been there a long time and is a fairly good sized one, in addition to this, before the blister is applied, he should be operated on by performing the operation known as "point firing." For this you would need the services of a veterinarian.

Sore Udder—I have a heifer fresh since May. About six weeks ago two or three small lumps formed in her left hind teat. These lumps seem to close the milk off. For a while the teat was sore inside, but does not seem to be now. N. B. R.
Ceres, Wash.

Paint the teat with tincture of iodine after each milking for a week or 10 days. If this does not improve you may have to use the following treatment:

If the trouble is caused by the closing of the membrane at the base of the teat near the udder, then you may have to use a "teat splitter." This instrument is closed and inserted, after it has been boiled, into the teat and pushed up through the membrane at the base of the teat, then the small knife is pushed out of the instrument and with the knife out drawn down through the membrane. The instrument is closed, pushed on up, turned half way around and opened and drawn down again. This is repeated by next turning it quarter of the way and then half the way again. When the wound heals the edges will contract and leave an opening sufficient for the milk to come down.

Sore Eyes—My cows have sore eyes. At first the lower part of the eye gets sore and then develops into a white growth over the whole eye and makes the cow blind. It seems to be very sore. I have been bathing the eyes with salt and water, but it does not help. Could you tell me what is the cause and what can be done for it? A READER.
Auburn, Wash.

Since you have a number of your cows affected with this disease, it is quite possible that it is ceratitis, a disease which runs a regular course through a herd of cows. You will find it valuable to separate the affected cows from the well ones. Also keep the affected cows in a dark place for some time. The following treatment is of value. Drop a 2 per cent solution of argyrol in water into the eyes two or three times daily.

For Sick Pig—I am writing about a pig of ours that seems to be sick. He won't eat; his legs seem to be paralyzed; he won't walk, and he has a cough. We feed him boiled potatoes, corn and a great deal of milk.
Hillyard, Wash. MRS. W. J. E.

Give the pig three grains of santonin, and two grains of calomel per 100 pounds of weight. Next day, give it one to three tablespoons of castor oil, according to its size. You are not liable to give an overdose. On the third day, begin giving five grains of potassium iodide in the feed once daily.

Asks About Kittens—I have two kittens that have something in their ears. The objects are as big as a bean and gray in color. They look like horse ticks. They don't seem to stick to their ears, for I have taken several out. There are small ones and big ones.
Toppenish, Wash. MISS H. P.

Try applying a 10 per cent solution of copper sulphate in water to the ear every two or three days. Be careful not to get any of the solution into the drum of the ear. Apply the solution with cotton and just hold it against the affected part.

Try Different Shoe—I have a mare that has a blood spavin on her hind leg. Could you give me a remedy for it. When she pulls hard it makes her limp. E. K.
Olympia, Wash.

You might try cutting the inside front quarter of the hoof off pretty thin. Then shoe her with a shoe where the inside toe has been hammered down fairly flat and the heels pretty thick. Maybe she will go better with that kind of a shoe than what you have on her. Try it.

Worms—I have a horse 9 years old that has worms. What will cure him? O. H.
Ridgefield, Wash.

Give your horse two teaspoonsful of dried iron sulfate on his feed morning and evening for one week; then starve him one meal and give him one quart of raw linseed oil with one ounce of turpentine well mixed with the oil as a drench.

Shoot a box of Remington Heavy Duck Loads

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POULTRY AND RABBITS

Big Poultry Output

In the eight and one-half months, up to September 15, the Lynden branch of the Washington Cooperative Egg and Poultry association has shipped 47,429 cases of eggs, or 94 carloads, out of the county, most of which went to New York, Detroit and other eastern markets. The production this year is running approximately 300 cases per week over the production of last year, which amounts to nearly 1350 cases per week.

"Around Christmas and the second week in May we usually get our highest production of eggs," said Mr. Beernink, manager of the Lynden plant, "and our highest production has been 1606 cases, which was recorded last year. The Bellingham plant produced over 4000 cases that same week, which made a total of over 5500 for the two plants, which does not include all of the eggs in the county. Our membership in the county has reached over 1100, which includes a large portion of the 421,000 hens that were listed in the county on the last unofficial count. Ninety-eight per cent of these were White Leghorns."

In rearranging the candling room for greater efficiency in handling eggs, Mr. Beernink found that it was more convenient as well as a saving of time to have the egg cases pushed directly out into the mailing room through an opening in the partition in the candling room. The method, although very simple, eliminates much handling of the eggs on the part of the 10 candlers and they are therefore able to do more work each day. The new plan has been found very practical and it is being adapted by other plants, according to Mr. Beernink.

In the south half of the building the storage room is used for live poultry crates and it is here that the birds are fattened before going into the killing room. Storage is provided in the basement, and all dressed poultry carefully weighed, crated and packed before going into final storage, or shipped. Up to September 1, the Lynden plant has killed and dressed 89,121 hens and 46,329 head of broilers. This shows a great increase over the production of dressed poultry last year.

"We have developed our feed department largely to fill the demand for the members, and we find that the plan works out very successfully," said Mr. Beernink. "We have a separate building which takes care of all of this work and gives us all of the old building for the handling of eggs and dressed poultry. We have recently installed a large batch mixer which is used in preparing all of our mashes and dairy feeds. Our latest addition is a large grinder which will handle almost any kind of grain in large amounts and will save time as well as expense in the preparation of our different kinds of feed."

PREPARING TURKEYS FOR MARKET.

Dressing of turkeys for market should be carefully done to bring good prices. The feathers come off easily if the bird is killed by being hung up by both feet and then stuck through the roof of the mouth and so through the brain. Use a sharp, pointed knife. In packing many turkeys for the market, pack the hens and toms separately. They look better that way.

Laying Contest

The high hen in the State College of Washington egg-laying contest, which closed October 31, is owned by Fish Brothers of Seattle. It is a single comb White Leghorn and she laid a total of 314 eggs in the 365 days of the contest. She was closely followed by a hen from the pen of J. A. Duff of Tukwila, Wash., which laid 313 eggs during the year.

Third place in the individual bird record was won by hen number 50 of the Hollywood Paultry farm with a total of 309 eggs. There were three hens that tied for fourth place, all of which were single combed White Leghorns, and laid 304 eggs each. They were owned by H. J. Karcher of Olalla; the B. Z. R. Poultry farm at Puyallup and the Piatt's Poultry farm of Corvallis, Ore. The high pen records were Fish Brothers first, with a total of 1348 eggs; B. C. Young & Co. of Bellingham, with 1324 eggs, and J. A. Duff, 1291 eggs; Mrs. D. Tancred of Kent, with 1270 eggs.

There were three pens that made a run for the student's cup, which was given by the alumni students of the winter short course in poultry raising, which is given each year at the station. C. W. Shaffer won the cup with a pen record of 1177 eggs. The other two contestants for this prize were Riverside Poultry farm of Auburn, Wash., and S. D. Sanders of Puyallup. These contestants were the only alumni of the short course who entered the contest this year. Mrs. Covington of Vashon, Wash., now has possession of the cup, having won it last year. It is to become the permanent property of the person who wins it three years in succession.

The rules of the contest which has just been completed are more stringent than other contests which are held throughout the United States. No floor eggs, eggs that are laid in the litter, are counted, but only eggs that are found with the bird in the trapnest are credited to her record. Heretofore the floor eggs were counted up each month, and the total divided among the number of birds in the pen, crediting each hen with an equal share. While this is being done in some of the other contests it was not allowed at Puyallup last year, nor will it be allowed this year.

A further rule requires that all eggs laid after the fourth month must be 50 per cent standard eggs. Six birds are allowed in a pen, but only the record of the five highest birds are counted in the final contest. No substitute bird can be counted unless she has been in the pen during the entire year.

It is interesting to note the increase in production as shown by the steady progress of the contest. In the first contest which ended October 31, 1920, there were two birds that laid 312 eggs, while this record was raised to 313 the following year. The third year the world's record was beaten beyond all expectations with 335 eggs, which still stands unbeaten at any official contest. In the second contest there were seven birds over 300, while there were eight last year, and nine in the contest which is just finished.

A word might be said about the next year's contest which began November 1. There are a total of 122 entries, or 13 more than were entered last year. All possible room which could be used for this purpose has been pressed into service and the station officials will not be able to enlarge the contest until more buildings are provided. The contest was full October 1, and there were a large number of applications turned away who came in after that date.

Of the 122 entries that have been entered for the 1924, the fifth annual contest, 63 are from Washington breeders and 25 from Oregon. California has eight entries, while Idaho, Utah and Missouri each have four entries, and Canada three. The following states have one entry each: Montana, Illinois, Kentucky, Colorado, Ohio, New Jersey, Iowa, New York and Tennessee. The White Leghorns are the largest represented with 80 pens, while Barred Rocks rank second with 11 entries. There are ten pens of White Wyandottes, five of the Rhode Island Reds and five Single Combed Buff Leghorns. The other breeds represented are the Rose Comb Rhode Island Whites, Columbian Plymouth Rocks, Blue Andalusian, Ancona, Rose Comb Brown Leghorn, White Rock and Black Jersey Giant.

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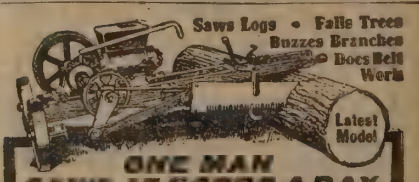

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ORCHARD AND GARDEN

Protect the Bees

If you expect your bees to go through the winter in the best of shape the colonies should be protected against the cold weather, especially on the east side of the Cascades. The extension service of the state college gives the following directions for the protection of bees in eastern Washington. A four-colony packing case for bees may be constructed by making the bottom 44 inches by 52 inches; sides of case 53 5-8 inches by 35 3-8; ends of case 44 by 38 3-8 inches and telescope cover 48 by 56 inches. Make a 3-8-inch runway from hives to holes bored in case, made of two boards fitted together so 3-8 inch is left between them. Leaves, clover, chaff or shavings may be used as packing. Four inches below, six inches on all sides and eight inches on top is the best thickness of the packing.

For western Washington the following suggestions have been made: a six-inch rim of cedar boards on second story of hive. Place wire screen over hole in inner cover. Place cushion of clover chaff or sphagnum moss surrounded by a half gunny sack in this rim. Wrap tar paper around two stories and rim. This leaves seven inches sticking up above all. Cut corners, fold paper over cushion, place on metal cover. If no telescope cover, make one of tar paper. Contract entrance 4x3-8 inches. Strip two inches wide and width of hive cut out for entrance.

Apple Outlook

New York is regarded as the foremost competitor of northwestern apples. Not only is New York's apple crop short but the fruit this year is small and of poor quality, due to the drouth. The production of apples in the middle west was also reduced by the hot weather and the quality lowered. H. M. Gilbert, a pioneer Yakima orchardist and business man, who thus summarizes the situation, sees a bright outlook for the Winesaps, Yakima valley's leading apple crop. He finds that the weather in the east is turning cold, increasing the demand for apples during November, the greatest apple-consuming month. The high wages still prevailing in the east make more money to spend for fruit and other luxuries.

The Yakima orchardists were a little discouraged over the market for early varieties this year, notably the Jonathans, due to the fact that both Yakima and Wenatchee forced their apples in great quantities upon the eastern centers while the weather was still warm and the demand poor, according to Mr. Gilbert. Mr. Gilbert adds: "What we need here in the Yakima valley, and the need in Wenatchee is even more pronounced, is more storage facilities.

The latest estimates place the output of Yakima valley orchards this year at 21,130 cars of apples and other fruits, the greatest yield in the history of the district. It is estimated that this output will return about $18,000,000 to growers. The soft fruit tonnage from the Yakima valley has already reached 7630 carloads, including 3000 cars of pears. Of the three million trees in the Yakima orchards, 2,100,000 are apple trees, about 360,000 each of pear and peach trees and the rest are prunes, plum and cherry trees.

The valley has facilities to store 11,795 cars of apples, divided as follows: 4490 cars in cold-proof storage; 6150 cars in frost-proof storage, and 1155 cars in common, non-frost proof storage.

Fall Weeds in Berry Patch

Fall weeds in a berry patch are not serious unless they become too large and it is often better to leave the patch uncultivated, since cultivation prolongs the growth of the plants. In our mild climate of western Washington we want the canes to stop growing and harden off before the cold weather sets in, according to H. D. Locklin, horticulturist of the Western Washington Experiment station at Puyallup. A good discing at this time will prevent most weeds seeding and the tops will act as a cover crop when plowed under.

As soon as possible after harvest all old canes of raspberries and loganberries should be removed by cutting off a few inches above the ground. This practice lessens the chances of the young canes becoming infested with insects and diseases from the old canes, besides allowing the sun and air to better harden up the canes before winter freezes come. These are both very important points, as western Washington berry growers are finding out.

Most good berry land needs more vegetable matter. This material can best be supplied by a winter cover crop of common vetch and fall rye seeded at the rate of 40 pounds of vetch and 80 pounds of rye to each acre of berries. Drill or broadcast in late August or early September. This cover crop is plowed under the following spring during late March or April.

Barnyard manure is still the best all-around fertilizer we have. Practically all berry land needs manure. Apply in the fall at the rate of eight to 10 tons per acre and plow under, leaving the dead furrow in the center between the rows to act as a drainage ditch. Re-plowing in the spring, throwing the dirt from the vines, puts the ground in a good water-holding condition and lessens the amount of space to be hoed. Plowing should be delayed to late October or early November.

Now is a very good time to mark or dig out weak and diseased hills. While the leaves are still on much more can be told regarding the health and productiveness of the plants. All plants which are dead or which have not made a reasonably good growth, whose leaves have curled back from the tips, or are mottled and abnormally narrow, should be dug out and burned. One sick plant in 10 will cut your yields down 10 per cent, to say nothing of the chances of infecting surrounding plants.

Creeping Bent-Grass

Creeping bent-grass is proving to be a very good lawn and pasture grass for western Washington, according to M. E. McCollam, agronomist of the western Washington experiment station. This grass is better known as the fine-leaved running grass that grows along the tide flats. When planted in a lawn it increases rapidly and crowds out other grasses and will stand much bad usage.

"While creeping bent-grass can be seeded in the usual manner in well-prepared soil, it can also be started by scattering sections of the stems and roots over the top of the soil and rolling them in," said Mr. McCollam. "When planted in this manner the stalks will take root at every joint and scatter their growth over the entire surface of the ground in a short time. In some of the eastern states where turf is needed for football fields, they will frequently contract for the grass to be in shape in six months' time. In such cases the contractors make small furrows and lay the roots in them and let the growth spread out over the rest of the surface of their own accord."

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Pacific International Horse Show

The breeding classes of the horse show at the Pacific International compared favorably with former years, both as to numbers and quality. While there was no sensational advance, there was a decided improvement, which was the most marked in the Percheron division, where the carload entries from the breeding farm of Singmaster & Son of Keota, Iowa, tried out conclusions with the best in the west. It must be admitted that the eastern horses generally won. The Percherons made the largest show, but Shires and Belgians developed sharp competition, and the one Clydesdale exhibitor showed previous champions and their offspring. It was an excellent, well-balanced show, of which the management and the state may well be proud.

While no record of the light horse show, which furnished the night entertainment, is given here, it is well to mention the fact, attested by good judges, that no better show of the kind has been held this year in America. The high jumpers, light and heavy harness and gaited saddlers represent much investment of money, rich blood lines and perfection of action. There is no question of the interest in the night horse show, as shown by the great attendance, commencing with the first night and ending with the last one. The four and six draft horse driving contests were held at night. They were not finished when this was written, but were, as last year, one of the chief attractions of the show, and some beautiful driving was witnessed. Taken as a whole, the horse show indicates that the horse is "coming back," to a considerable extent, at least.

PERCHERONS.

Compared to last year there was a distinct improvement in the Percheron show, in spite of the fact that last year's show was of very high average quality, and this in spite of the fact that last year's grand champions were both absent. Each of them would probably have won in class and D. F. Burge's wonderful filly colt would probably have been junior champion, in the opinion of most of the ringside talent. But there was the entire string of Singmaster & Son of Keota, Iowa, most of which went to the top of their classes, and A. C. Ruby had about seven new mares and most of them stood at the top. The effect was apparent, and the claim of a better Percheron show than ever before is reasonable. Competition was sharp and close in almost every class, but the type was uniform enough to make decisions satisfactory, after they were made. The senior and grand champion stallion, Maple Grove Coco, has size, bone and substance. He has action and, while his legs are long enough, he looks massive and drafty. The junior champion, Maple Grove Sensation, is a growthy yearling of a beautiful steel gray color, with fine action and weight and breed character. Both are Singmaster & Son entries and they won both the female championships.

The Awards.

Herd sire, 8 years or over—First, D. F. Burge, Albany, Ore., on Casino; second, A. C. Ruby, Portland, Ore., on Viscount; third, C. W. Bowers & Co., Sacramento, Cal., on Romulus. Four years and under 8—First, second and fourth, J. O. Singmaster & Son, Keota, Iowa, on Maple Grove Coco (senior and grand champion), Maple Grove King and Maple Grove Cricket; third, D. F. Burge, Albany, Ore., on Careno; fifth, Ruby on Aclide Jr. Three-year-olds—First and second, Singmaster & Son on Maple Grove Abe and Iowa Lagos. Two-year-olds—First and second, Singmaster & Son on Maple Grove Sensation (junior champion); second, Ruby on Casidore. Stallion colts—First, Ruby on Presto; second and third, Burge on Careno Jr. and Casino Jr.

Brood mare, 8 years or over—First, Burge on Coquette; second, Ruby on Blark Beauty. Four years and under 8—First and second, Singmaster & Son on Fairholme Lagoretta and Pearl; third and fourth, Ruby on Nedrane 2d and Iris; fifth and sixth, Burge on Julep and Greavette. Three-year-olds—First, Singmaster & Son on Maple Grove Carteline (senior and grand champion); second and fourth, Ruby on May Belle and Lola; third, E. T. Evans, Monmouth, Ore., on Liberty Queen. Two-year-olds—First, Ruby on Cassano; second, Evans on Gallant's Beauty. Yearlings—First, Singmaster & Son on Maple Grove Maggie (junior champion); second, Ruby on Kosseus. Filly colt—First, Charles Webber, Brownsville, Ore., on Carmelle.

Mare and colt—First, Ruby; second, Burge. Get of sire—First and second, Singmaster & Son; third, Ruby. Produce of dam—First and second, Singmaster & Son; third, Ruby. Five animals—First, Singmaster & Son; second, Ruby.

BELGIANS.

While the Belgian show was not large, every class had one or more entries, and six exhibitors made real competition. A. C. Ruby of Portland was the largest exhibitor and, while he was the heaviest winner, awards were pretty well divided, three exhibitors from Idaho taking home one championship and a fair share of the money. W. J. Kennedy of Sioux City, Iowa, who judged both Belgians and Clydesdales, declared both breeds had a decidedly creditable lot of entries and that competition among the Belgians made it an interesting show. Grand championship on stallion went to J. E. Miller of Idaho Falls, Idaho, on the 10-year-old herd sire, Mack, a horse of much substance, with bone and remarkably clean legs for his age. Junior honors were won by J. M. & L. F. Mueller of Oregon City, Ore., on Brilliant d'Or, a very promising yearling. The great mare, Christabel, owned by A. C. Ruby, now almost 17 years old, and never yet defeated, still showing a good back, plenty of vitality and breedy looking, was made senior and grand champion. She had strong competition in class and at the head of the other classes, but took the judge's eye. Ruby also won junior championship on his unnamed filly colt.

The Awards.

Stallions: Herd sire, 8 years or over—First, J. E. Miller, Idaho Falls, Idaho, on Mack (senior and grand champion). Four years and under 8—First, A. C. Ruby, Portland, on Pride of Oregon; second, Richard Martin, Idaho Falls, Idaho, on Marius du Mal; third, Miller on Gen. Pershing. Three-year-olds—First, J. M. & L. F. Mueller, Oregon City, Ore., on Iams. Two-year-old—First, Miller on Cristal. Yearling—First, Mueller on Brilliant d'Or (junior champion). Colt—First, C. R. Linger, Idaho Falls, Idaho, on Confidence.

Females: Brood mare, 8 years or over—First and second, Ruby on Christabel (senior and grand champion) and Derner; third, Martin on Tutsy; fourth, Mueller on Corinne. Four years and under 8—First and second, Linger on Black Beauty and Lady Irene; third, Martin on Mabel; fourth, Ruby on Ina. Three-year-old—First, Ruby on Irma. Two-year-old—First and second, Ruby on Margery and Duchess; third, Linger on Queen of Sunnycrest. Yearling—First, Ruby on Frances. Colt—First, Ruby on unnamed (junior champion); second, Linger on Tutsy 2d.

Mare and foal—First, Martin; second, Ruby; third, Linger. Get of sire—First, Miller; second; Ruby. Produce of dam—First and fourth, Linger, second, Ruby; third, Miller. Five animals—First, Ruby; second, Linger.

SHIRES.

The Shire show was characterized by uniformity of type and average quality very gratifying when it is considered there were six exhibitors. The champions can hardly be said to be outstanding animals, but they are Shires whose breed character would mark them anywhere, and none has any serious faults. Galtmarsh, senior and grand champion stallion, stands up well under his nine years and has bone and substance as well as type. He was the only entry of his owner, R. W. Milligan of Idaho Falls. The same is true of Martha Washington of the M. W. Merritt string. She has made a big circuit this year, has never been defeated in class and has won a number of championships. The junior champions were each found in the colt classes, and the quality they showed made the selections popular.

The Awards.

Herd sires, 8 years or over—First, R. W. Milligan, Idaho Falls, Idaho, on Galtmarsh Duke (senior and grand champion); second, H. W. Merritt, Rosalia, Wash., on Champ Clark; third, A. C. Ruby, Portland, Ore., on George B. Four years and under 8—First, Ruby on Mountain King. Three-year-old—First, Merritt on Forest Prince. Two-year-old—M. W. Merritt, Rosalia, Wash., on George Cooper; second, H. W. Merritt on Sire Gould. Yearling—First, W. A. Clark, Tekoa, Wash., on Rothwell Rambler. Colt—First, M. W. Merritt on Prince Albert (junior champion); second, H. W. Merritt on Henry Ford.

Brood mare, 8 years or over—First, M. W. Merritt on Moricoa Pride; second, H. W. Merritt on Primrose Victoria. Four years and un-

(Continued on page eighteen.)

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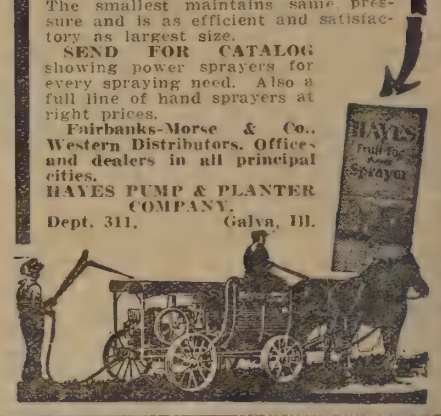

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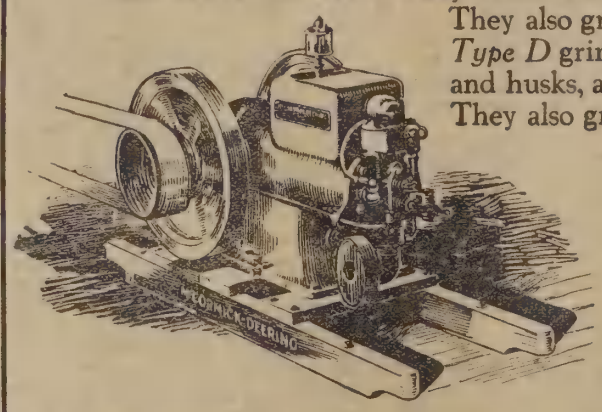

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The Pacific International

(Continued from page six.)

6, F. M. Rothrock, Spokane, Wash.; 3, R. D. and W. L. Warnock, Loveland, Col.; 4, Thomas T. Miller, Hollister, Cal.; 6, George Bertrand, Castle Rock, Wash.; 7, E. M. Varin, Victor, Idaho; 8, J. D. McGuire, Tenino, Wash.; 9, G. W. De Lay, Sublimity, Ore.; 10, A. D. Dunn, Wapato, Wash.

Group of two bulls bred and owned by exhibitor—1, Pacheco Cattle company; 2, 4 and 6, Rothrock; 3, Miller; 5, Warnock; 7 and 9, McGuire; 8, Bertrand; 10, De Lay.

Bulls: Aged—1, Pacheco Cattle company; 2, Bertrand; 3, Varin; 4, DeLay; 5, Warnock; 6, H. R. Richards & Son, The Dalles.

Bulls: Aged—1, Pacheco Cattle company on Pacheco Lad 215th; 2, Bertrand on Max Mill Criterion; 3, Varin on Silver Cloud; 4, DeLay on Hercules Cornerstone; 5, Warnock on Chancellor; 6, H. R. Richards & Son, The Dalles, Ore., on Royal Master; 7, Dunn on Matchless King; 8, Huntington & Hull, Castle Rock, Wash., on Gay Radiator. Two-year-old—1, Miller on Milmar Sultan 5th; 2, Warnock on Gold Sultan; 3, T. J. Dannen, Shedd, Ore., on White Cup 2d. Senior yearling—1 and 3, F. M. Rothrock, Spokane, Wash., on Hercules Marshall and Hercules Gainford; 2, Napier & Will, Sprague, Wash., on Hercules Radiance; 4, Oregon Agricultural college, Corvallis, Ore., on Craigielea Guard; 5, De Lay on Missie's Villager; 6, A. Bendler, Cornelius, Ore., on Hercules Gallant. Junior yearling—1, Warnock on Pride of the Rockies (junior champion); 2, Pacheco Cattle company on Collynie Kingwood; 3 and 6, F. M. Rothrock company on Hercules Brilliant and Hercules Beau; 4, O. A. C. on Gainford Goods; 5 and 12, Bertrand on Criterion 7th and Criterion 8th; 7 and 9, McGuire on Oakgrove King and King's Perfection; 8, Varin on Mt. Dell Lord; 10, Miller on Milmar Stamp 6th; 11, Antone and Eugene Harms, Pullman, Wash., on Villager's Radiance; 13, Dunn on Red Cumberland. Senior calf—1, 2 and 3, Rothrock on Hercules Emblem, Hercules Favorite and Hercules Royal; 4, Montana State college, Bozeman, Mont., on Village Brace; 5, McGuire on Baron Hope; 6, Miller on Caledonia Stamp; 7, Dunn on Tony Boy; 8, Mountcrest ranch, Hilt, Cal., on Dale's Masterman; 9 and 10, Hutchinson & Sherman, Union, Ore., on Proud Charmer and Goldstick. Junior calf—1 and 6, Rothrock on Hercules Cumberland and Hercules Gloster; 2, Pacheco Cattle company on Pacheco Lad; 3, Miller on Milmar Stamp 11th; 4, McGuire on Oakgrove Gainford; 5, Washington State college, Pullman, Wash., on Gainford Sultan; 7 and 10, Warnock on Supreme Choice and Model Supreme; 8 and 9, De Lay on Gainford Royal and Gainford Stamp; 11, Varin on Cloud's Baron.

Females: Aged cow with calf—1, Pacheco Cattle company on Pacheco Doris 2d; 2, Varin on Silver Belle; 3, Warnock on Lothian Countess; 4, McGuire on Chief's Hope; 5 and 6, De Lay on Ruberta's Missie and Scottish Jane; 7 and 8, Mountcrest ranch on Red Glossie and Mayflower 7th; 9, Hutchinson & Sherman on Jessica; 10, Bertrand on Erma Criterion. Aged cow—1, Warnock on Royal Rose; 2, McGuire on Escana Lady; 3, Hutchinson & Sherman on Bonnie Bessie; 4, De Lay on Dunbro Maid; 5 and 7, C. F. Green, Union, Ore., on Scottish Girl and Cheney's Best; 6 and 8, Huntington & Hull, Castle Rock, Wash., on Knight's Missie 2d and Silver Lady. Two-year-old—1, Pacheco Cattle company on Knight's Lassie (senior and grand champion); 2, Warnock on Boyndie Princess; 3, Bertrand on Cup King's Pride; 4, McGuire on Mayflower Rose; 5, Gerald Varnum, Mabton, Wash., on Red Rose B.; 6 and 7, Varin on Little Mayflower and Silver Duchess; 8, Hutchinson & Sherman on Flora Welcome 2d; 9 and 10, De Lay on Scottish Jane and Village Missie. Senior yearling—1 and 3, Rothrock on Hercules Sylvia 3d (junior champion) and Hercules Missie 5th; 2, Pacheco Cattle company on Pacheco Lass 293d; 4, Varin on Mt. Park Graceful; 5, Warnock on Nonpareil 52d; 6 and 10, De Lay on Scottish Jane 6th and Village Duchess I.; 7, McGuire on King's Hope; 8 and 9, Harold Holmes, Mabton, Wash., on Craigielea Coral and Bessie Criterion. Junior yearling—1, Warnock on Lady Victoria 2d; 2, 3 and 5, Rothrock on Golden Margaret, Hercules Lillie 2d and Zephyr 3d; 4, Pacheco Cattle company on Pacheco Flagrant; 6 and 7, Miller on Queen of Scots 55th and Milmar Mistletoe 3d; 8, Dunn on White Dorothy; 9, McGuire on Oakgrove Lady; 10, Varin on Lady Nonpareil; 11, De Lay on Gainford Beauty. Senior calf—1, 3 and 4, Rothrock on Hercules Missie 6th, Hercules Sylvia 5th and Hercules Rose 4th; 2, Pacheco Cattle company on Pacheco Lass; 5 and 6, Miller on Milmar Mayflower and Milmar Queen; 7, McGuire on Oakgrove Rose; 8 and 9, De Lay on Gainford Amelia and Scottish Jane 7th; 10, Varin on Mt. Park Matchless; 11, Warnock on Queen of Beauty 42d. Junior calf—1, Warnock on Secret Susan 2d; 2 and 6, Napier & Will, on Burnside Flossie and Burnside Lady; 3, Bertrand on My Sir Criterion; 4, Varin on unnamed; 5, Mountcrest ranch on Dale's Rosary.

Graded herd—1, Pacheco Cattle company; 2, Warnock; 3, Varin; 4, De Lay; 5, Bertrand. Yearling herd—1 and 4, Rothrock; 2, Warnock; 3, Pacheco Cattle company; 5, Miller; 6, Varin; 7, McGuire; 8, De Lay; 9, Bertrand. Pair of calves—1, Pacheco Cattle company; 2 and 3, Rothrock; 4, Warnock; 5, Miller; 6, Varin; 7, McGuire; 8 and 10, De Lay; 9, Hutchinson & Sherman.

Herefords.

An even larger show of Herefords than a year ago was made by the white-face breeders. Besides Oregon, entries came from California, Idaho, Montana, Washington, Utah and Colorado and from British Columbia. The Boggs herd, from the British territory, showed the highest fitting of any herd, perhaps, that has yet been shown here. It is of high quality throughout, but reaches its acme in the mature bull, Alberta Panama, that was made senior and grand champion. He is so massive, with such a deep chest, so strong a back, so smooth all over and so nearly faultless as to make him apparently invincible. Awards were well divided and junior championship went to the junior calf, Mountcrest Mixer 2d, a Mountcrest ranch entry from California. He has masculinity, size and true Hereford type. The senior and grand champion cow, Princess Panama 2d, has great scale, great quality and remarkable breed character. She defeated Catherine 10th in class, that had stood above her at all previous shows this year, and then had no trouble in winning over the younger cows. Princess Ada, the junior champion heifer, another Mountcrest entry, is a well-fitted, breedy, thick, typy heifer of much scale for age.

Judge: James L. C. Painter, Roggan, Col.

Bulls: Aged—1, O. A. Boggs & Sons, Daysland, B. C., on Alberta Panama (senior and grand champion); 2, Diamond B ranch, Lowell, Ore., on Don Fairfax; 3, Herbert Chandler, Baker, Ore., on Debonair 119th. Two-year-old—1, A. B. Cook, Townsend, Mont., on Panama 140th; 2 and 6, Weatherford Brothers, Dayton, Wash., on Majestic Fairfax and Don Blanchard 3d; 3 and 5, Boggs & Sons on Dudley Panama and Alberta Panama 3d; 4, Chandler on Bonnie Prince 2d; 7 and 8, William P. Emery, Macleay, Ore., on Ikey and Marion Donald. Senior yearling—1, Diamond B ranch on Don Rupert 7th; 2, Mountcrest ranch, Hilt, Cal., on Prince Perfect; 3, Henry Thiessen, Sweetwater, Idaho, on Bonnie Master; 4, Chandler on Prince Donald; 5, Winterton Brothers, Charleston, Utah, on Debonair 26th. Junior yearling—1 and 2, Mountcrest ranch on Beau Sunshine and Ranger; 3, Winterton Brothers on Debonair 31st; 4, Oregon Agricultural college, Corvallis, Ore., on Anxiety March; 5 and 6, Diamond B ranch on Choice Gomez and Oregon Gomez; 7, Chandler on Rupert Debonair 2d; 8, University of Idaho, Moscow, Idaho, on Hopeful Brummel; 9 and 10, Cook on Donald Panama 3d and Donald Panama 2d. Senior calf—1, Mountcrest ranch on Mounterest Mixer 2d (junior champion); 2, Cook on Carlos Panama; 3, Winterton Brothers on Debonair 42d; 4, Weatherford Brothers on Don Blanchard 25th; 5, Cook on Panama 161st; 6, Boggs & Sons on Columbus Don Jr.; 7, Chandler on Donald Rupert 9th; 8 and 10, Henry Thiessen on Bonnie Pearl and Bonnie Grove; 9, Emery on Sherlock Donald. Junior calf—1, O. A. C. on Anxiety Junior; 2, Cook on Donald Panama 6th; 3, Thiessen on Ideal Bonnie 2d; 4, Chandler on Prince Weston; 5 and 6, Weatherford Brothers on Don Blanchard 27th and Don Blanchard 30th; 7, Diamond B ranch on J. S. Gomez.

Group of three bulls owned by exhibitor—1, Mountcrest ranch; 2, Cook; 3, Diamond B ranch; 4, Boggs & Sons; 5, Thiessen; 6 and 9, Chandler; 7, Winterton Brothers; 8, University of Idaho.

Group of two bulls bred and owned by exhibitor—1, Boggs & Sons; 2 and 4, Mountcrest ranch; 3, Cook; 5, Winterton Brothers; 6, O. A. C.; 7, Thiessen; 8, Diamond B ranch; 9, Weatherford Brothers; 10, Chandler.

Females: Aged—1 and 2, Cook on Princess Panama 2d (senior and grand champion) and Catherine 10th; 3 and 6, Boggs & Sons on Panama Lady 2d and Miss Panama; 4, Mountcrest ranch on Florence Debonair; 5, Chandler on Semoline 2d; 7, Weatherford Brothers on Rub Lass; 8 and 9, Thiessen on Miss Rupert 2d and Perfect Queen 24th. Two-year-olds—1 and 5, Cook on Lady Panama 105th and Princess Joy; 2 and 9, Mountcrest ranch on Bonnie Jane and Blossom Joy; 3, Diamond B ranch on Illah Fairfax; 4 and 6, Boggs & Sons on Panama Lady 3d and Miss Columbus Panama 2d; 7, Thiessen on Princess Debonair; 8, Winterton Brothers on Belle Marie 4th; 10, Chandler on Princess Donald. Senior yearling—1, 2 and 3, Mountcrest ranch on Miss Frances, Betty Blanchard and Lady Annabelle; 4, Cook on Lady Panama 109th; 5 and 7, O. A. C. on Sister Perfection and Marie Rupert; 6, Thiessen on Bonnie Rupert; 8, Harold Holmes, Mabton, Wash., on Eliza 2d. Junior yearling—1, Chandler on Bonnie New Year; 2 and 7, Mountcrest ranch on Lady Eileen and Wild Cherry; 3 and 4, Boggs & Sons on Panama Lady 4th and Lady Dudley 2d; 5 and 6, Cook on Joy 4th and Zool Panama; 8, Diamond B ranch on Lady Gomez; 9, Weatherford Brothers on Betty Blanchard 24th; 10, Thiessen on Bonnie Mabel. Senior calf—1, 4 and 5, Mountcrest ranch on Princess Ada (junior champion), Mountcrest Pansy and Hortensia 8th; 2, Weatherford Brothers on Betty Blanchard 35th; 3, Chandler on Miss Golden; 6, Thiessen on Perfect Lassie; 7, Boggs & Sons on Miss Columbus Panama 3d; 8, Cook on Sweet Panama; 9 and 10, O. A. C. on Phoebe and Caroline. Junior calf—1 and 3, Cook on Lady Panama 120th and Joy 7th; 2, Thiessen on Bonnie Maid; 4, Weatherford Brothers on Betty Blanchard 37th; 5, Montana State college, Bozeman, Mont., on Gwennie 6th; 6 and 8, Diamond B ranch on Princess Gomez and Blanch Gomez; 7, Winterton Brothers on Princess Lady 3d; 9, Chandler on Peaceful 2d.

Graded herd—1, Cook; 2 and 3, Boggs & Sons; 4, Chandler; 5, Weatherford Brothers. Yearling herd—1 and 2, Mountcrest ranch; 3, Cook; 4, Chandler; 5, Thiessen; 6, Boggs & Sons; 7, O. A. C. Pair of calves—1, Mountcrest ranch; 2, Cook; 3, Winterton Brothers; 4 and 10, Chandler; 5, Thiessen; 6, O. A. C.; 7 and 8, Weatherford Brothers; 9, Boggs & Sons. Get of sire—1, Boggs & Sons; 2 and 4, Mountcrest ranch; 3, Cook; 5, Winterton Brothers; 6, Thiessen; 7, Chandler; 8, Weatherford Brothers; 9, Diamond B ranch; 10, O. A. C.

Aberdeen Angus.

The show of the blocky blacks was probably the best yet made here. Two exhibitors showed full herds and two others showed a few. The Congdon & Battles herd was at least as good as it ever showed and the J. A. Scollard herd decidedly better. Awards were fairly well divided, with Congdon & Battles the heaviest winner. Scollard had senior champion bull, with the big, deep-fleshed Erickman C. B. 5th, and Congdon & Battles had both junior and grand on the senior yearling Blackmore 16th. He is wonderfully smooth, and the judge pronounced him exceptionally good over both shoulders and rump. Both female championships went to Congdon & Battles. Pride of Rosemere 37th, the senior, is a smooth, well-covered, very deep-bodied cow. But the senior yearling, Barbara C. B. 2d, is such a wonderfully developed heifer and so smooth, deep and breedy that she was made grand champion. The awards:

Judge: W. J. Kennedy, Sioux City, Iowa.

Bulls: Aged—1, J. A. Scollard, Chehalis, Wash., on Erickman, C. B. 5th (senior champion); 2, Congdon & Battles, Yakima, Wash., on Prizemere 10th. Two-year-old—1 and 2, Congdon & Battles on Blackbirdman of Rosemere and Queenmere 14th; third, Scollard on Blackmeade 2d. Senior yearling—1 and 2, Congdon & Battles on Blackmere 16th (junior and grand champion) and Erickman C. B. 8th. Junior yearling—1, Scollard on Gloriamead; 2 and 3, Congdon & Battles on Blackmere 15th and Prideman C. B. 22d. Senior calf—1 and 2, Congdon & Battles on Barbarian of Rosemere 7th and Prideman C. B. 25th; 3, Washington State college, Pullman, Wash., on Jerome's Queenman; 4, Scollard on Barbarian of Rosemere 6th. Junior calf—1 and 3, Congdon & Battles on Irenemere 6th and Prizemere 30th; 2, Scollard on Blackmeade 3d.

Three bulls owned by exhibitor—1 and 3, Congdon & Battles; 2, Scollard. Two bulls owned and bred by exhibitor—1 and 2, Congdon & Battles; 3, Scollard.

Females: Aged—1, Congdon & Battles on Pride of Rosemere 37th (senior champion) 2, Scollard on Broadmeade Mammy; 3, Harvey Barnum, Mabton, Wash., on Doris of Dundee. Two-year old—2, 3 and 4, Congdon & Battles on Barbara of Rosemere 33d, Pride of Rosemere 40th and Queen of Rosemere 15th; 2, Scollard on Blackcap of Breadmead. Senior yearling—1 and 2, Congdon & Battles on Barbara C. B. 2d (junior and grand champion) and Erica C. B. 6th. Junior yearling—1 and 2, Congdon & Battles on Queen of Rosemere 16th and Pride of Rosemere 47th; 3 and 4, Scollard on Eric 4th of Broadmead and Bonnie Rose of Broadmead. Senior calf—1 and 3, Scollard on Gloria of Broadmead 7th and Heather of Broadmead; 2 and 4, Congdon & Battles on Blackcap of Rosemere 21st and Blackcap of Rosemere 20th. Junior calf—1, Scollard on Blackcap of Broadmead 4th.

Graded herd—1, Congdon & Battles; 2, Scollard. Yearling herd—1 and 3, Congdon & Battles; 2, Scollard. Pair of calves—1, Scollard; 2 and 3, Congdon & Battles. Get of sire—1 and 3, Congdon & Battles; 2 and 4, Scollard.

DAIRY CATTLE.

Holsteins.

The black-and-white breed this year lost the position of eminence in numbers which it attained last fall, but it maintained the high average of quality which was set a year ago, as evidenced by the fact that the eastern judge who has officiated at nearly a score of state and district fairs this fall asserted—and backed up his assertion by comparisons right down the line—that the lineup of females at the Pacific International was not surpassed anywhere.

In one or two instances, at least, he put prize winners at the National below animals brought out here and he openly complimented breeders at the ringside on the quality displayed by the group of female contenders for championship honors. He said he had not seen its equal for several years. There were those who did not agree with his selection of Tillamook Daisy Butter King De Kol for first prize aged cow, senior and grand champion, over Model Segis Prilly Gelsche, the only other contender, but his explanation of the award and his development of it later at the Holstein judging school satisfied most.

Carnation Stock farms, the biggest exhibitor, swept the boards clean of championships and its winnings all through were heavy. Its animals won three blues in the bull classes to two by John L. Smith's, principal competitor, and five in the female classes to three of the Spokane man's entries. The latter "upset the dope" by winning the $1000 six-piece silver teaset offered by the eastern Holstein guests of 1921 for produce of dam bred by exhibitor, which has been won once by Carnation and must be won twice to become permanent property, and Hollywood farm won a leg on the Matador Segis Walker trophy, the beautiful silver cup offered by Carnation Stock farms for the best breeder's young herd, thus prolonging for another year, at least, competition on a trophy that was thought to be Smith's, almost for a certainty. "John L." took home for keeps one tea set, however, that was offered by President I. E. Staples of the Oregon Purebred Live Stock association for best calf herd. The Idaho breeders who were out last year were missed from the ring. Bull classes, on the whole, were mediocre.

Judge: R. E. Haeger, Algonquin, Ill.

Bulls: Aged—1 and 2, Carnation Stock farms, Seattle, Wash., on Matador Segis Walker 6th (senior and grand champion), and Matador Segis Walker Gerben; 3, J. Luscher & Son, Fairview, Ore., on King Segis Matador Veeman; 4, Vandecoevering & Evers, Forest Grove, Ore., on Matador Segis Walker Lad; 5, Ward Gano, Moscow, Idaho, on King Segis Violet Posch Idaho; 6, Clyde Madsen, Salem, Ore., on College Belle Mercedes. Three-year-old—1, Albert J. Evers, Forest Grove, Ore., on Verboort Prince; 2, Max Arp, Eugene, Ore., on Aaggie Colantha Gerben. Two-year-old—1, John L. Smith, Spokane, Wash., on Hazelwood Heilo Butter King; 2, James C. Chamberlain, Ceres, Wash., on Harry Waldorf of Cerealia; 3, Hollywood farm, Hollywood, Wash., on Goliah of Hollywood. Senior yearling—1, Carnation Stock farms on Ensign Matador Model Abbekerk (junior champion); 2, R. S. Fulton, Seattle, Wash., on Prince Diona Matador; 3, J. Luscher & Son on Segis Ruby Bonheur. Junior yearling—1, Smith on Hazelwood Fayne Ormsby Posch; 2, Adams' Eden farm, Warren, Ore., on Adamseden Pietertje Lyons De Kol. Senior calf—1 and 4, Carnation Stock farms on Harvest Jewel Matador and Commodore Matador; 2, Thomas J. Owens, Kirkland, Wash., on Firloch Piebe Veeman; 3 and 5, Hollywood farm on Goliah of Hollywood 2d and Judge Segis 20th; 6 and 7, Smith on Hazelwood Stella King and Hazelwood Heilo Butter Boy; 8, Arp on unnamed; 9, Germaine Van Basteleare, St. Johns, Ore., on Judge Hartog Segis Ormsby; 10, Washington State college, Pullman, Wash., on Chinook Piebe Ike. Junior calf—1, H. R. Shoultes, Adna, Wash., on Sir Adna Perfection; 2, Smith on Hazelwood Segis Pontiac; 3, Hollywood farm on Goliah of Hollywood 3d; 4, Arp on unnamed; 5, Peerenboom & Evers, Forest Grove, Ore., on unnamed; 6, Carnation Stock farms on Matador Segis Walker 13th; 7, Chamberlain on Korndyke Burke of Cerealia; 8, Adams' Eden farm on King Walker Aaggie; 9, J. Luscher & Son on King Matador Aaggie.

Females: Aged—1 and 3, Carnation Stock farms on Tillamook Daisy Butter King De Kol (senior and grand champion), and Tillamook Lola May De Kol; 2, C. J. Berning, Mt. Angel, Ore., on Model Segis Prilly Gelsche; 4, Hollywood farm on Snowball Powers Mutual; 5 and 6, Arp on Celusa Belle Korndyke and De Kol Wayne Rags; 7, Chamberlain on Donnybrook Harriet Waldorf. Four-year-old—1, Smith on Hazelwood Pauline Fayne; 2, William McKeown, Gresham, Ore., on Beauty Oregon Artis; 3, Chamberlain on Frances Cornucopia of Cerealia; 4 and 6, Hollywood farm on Segis Belle Pontiac and Hollywood Segis Adventuress; 5, Carnation Stock farms on Carnation Matador Queen. Three-year-old—Smith on Hazelwood Leda Heilo Korndyke; 2 and 5, Arp on Mercedes Wayne Alcartra and Lucy Freela Pontiac 3d; 3, Evers on Josephine Segis Walker Lass; 4, Carnation Stock farms on Carnation Matador Addie Segis. Two-year-old—1, Smith on Hazelwood Bessie Pauline Heilo; 2, Hollywood farm on Hollywood Dudley; 3, Carnation Stock farms on Rancocas Pohlcrest Maid; 4, Chamberlain on Laurie Prilly of Cerealia; 5, Evers on Johanna Josephine Walker; 6 and 8, Arp on Johanna De Kol Wayne Rags and Johanna May Korndyke Fayne; 7, Adams' Eden farm on Adamseden Canary Segis Fayne. Two-year-old (never having freshened)—1 and 2, Arp on Johanna Bonheur Korndyke Sena and Johanna Alcartra Mead. Senior yearling—1 and 4, Carnation Stock farms on Carnation Matador Mercedes Solah (junior champion) and Highland Grove Longfield Daisy; 2 and 5, Hollywood farm on Hollywood Segis Colantha Maid and Hollywood Segis Beryl Fayne; 3, Vandecoevering & Evers on Jennie De Kol Segis Walker; 6 and 7, Smith on Hazelwood Heilo Fayne Bessie and Hazelwood Ormsby Duchess. Junior yearling—1 and 2, Carnation Stock farms on Queen Pontiac Matador and Segis Matador Bonnell; 3, Hollywood farm on Netherland Segis Ruby; 4, Smith on Hazelwood Bessie Pauline Posch; 5 and 7, Chamberlain on Harriet Waldorf Boone of Cerealia and Bonnie Ormsby of Cerealia; 6, Madsen on Von Holingen Jewel De Kol. Senior calf—1 and 7, Carnation Stock farms on Carnation Matador Adeline Segis and Carnation Burton Brookside De Kol; 2 and 3, Smith on Hazelwood Heilo Johanna Skylark and Hazelwood Fobes Heilo; 4 and 5, Hollywood farm on Hollywood Segis Palmer Aaggie 2d and Hollywood Adventuress Lyons; 6 and 9, Arp on unnamed; 8 and 10, Chamberlain on Josephine Ormsby of Cerealia and Little Sadie Vale of Cerealia. Junior calf—1 and 2, Carnation Stock farms on Carnation Matador Parthenea and Carnation Walker Mercantile; 3 and 4, Smith on Hazelwood Segis Bonheur and Hazelwood Stella Segis; 5 and 10, Arp on unnamed; 6, Hollywood farm on Hollywood Marion Segis; 7 and 8, Luscher & Sons on Bessie Hengerveld Segis Veeman and Marie Johanna Segis; 9, Chamberlain on unnamed. Cow with official record begun at 5 years or over—1, Berning on Model Segis Prilly Gelsche; 2, Hollywood farm on Snowball Powers Mutual; 3, Carnation Stock farms on Tillamook Lola May De Kol; 4, Chamberlain on Donnybrook Harriet Waldorf. Cow with official record begun under 5 years—1 and 4, Carnation Stock farms on Tillamook Daisy Butter King De Kol and Carnation Matador Queenie; 2, Smith on Hazelwood Leda Heilo Korndyke; 3, Hollywood farm on Hollywood Segis Belle Pontiac; 4, 5 and 6, Evers on Johanna Josephine Walker and Josephine Segis Walker Lass. A. R. cow with 2 progeny—1, Chamberlain on Donnybrook Harriett Waldorf; 2, Carnation Stock farms on La Reina Hengerveld 3d.

Get of sire—1 and 4, Carnation Stock farms; 2 and 6, Smith; 3 and 5, Hollywood farm; 7, Evers; 8, Arp; 9, Luscher & Son. Produce of dam—1 and 5, Carnation Stock farms; 2 and 9, Smith; 3, Chamberlain; 4 and 6, Hollywood farm; 7, Adams' Eden farm; 8, Evers. Exhibitor's herd—1, Carnation Stock farms; 2, Smith; 3, Hollywood farm; 4, Chamberlain. Young herd—1, Carnation Stock farms; 2, Hollywood farm; 3 and 4, Smith; 5, Chamberlain. Calf herd—1, Smith; 2, Hollywood farm; 3, Carnation Stock farms; 4, Arp; 5, Luscher & Sons; 6, Chamberlain. Dairy herd—1, Carnation Stock farms; 2, Hollywood farm; 3, Arp.

JERSEYS.

With 212 head, besides 10 club calves, Jerseys outnumbered any other dairy breed. The outstanding feature, and the one which gave Jersey breeders the greatest satisfaction, was the fact that the Jerseys were, as a show, so much smoother and of so much finer quality than in any previous year. In fact, steady improvement in the entire Jersey show has been patent to every observer the last few years. Washington, Idaho, California and Utah measured swords with Oregon on her own ground and this time the outsiders won decidedly the larger share of blues and all the championships. But this was not accomplished without a battle royal, and the Oregon breeders could take much satisfaction in the fact that the world record cow for all ages, Darling's Jolly Lassie, a strictly Oregon product, was on exhibition in the same curtained booth where another Oregon cow, Lad's Iota, then the world record holder, stood a year ago. Lassie was not showing at her best, but her record was pasted in figures all could read.

Nine aged bulls made a great contest in the very first class. There was show quality clear to the end of the string, but Noble's Majesty of L, that had been grand champion for two years, again stood at the head. When the class leaders met, Waikiki farm's two-year-old, Waikiki's Oxford Count, was made senior champion. He is exceptionally smooth, with a beautiful head, straight back, capacity, good shoulders and long, straight hips. But the majority of the ringside talent were with the other bull, perhaps partly from sentiment, as the owner is a small breeder and this is the first year he has shown any but the one bull. Junior championship went to Gamboge's Count of La-Lomita, a wonderfully nice senior calf,

(Continued from preceding page.)

owned by Ferdinand R. Bain of Los Angeles, Cal.

There were 23 aged cows in the ring.

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(Continued from preceding page.)

It was a show of quality clear to the bottom, and when they were placed, La Creole's Alta, an Oregon bred cow owned by Mossdale farm, Lockeford, Cal., stood at the top, with another California cow in second place. The class in four-year-olds brought another California cow to the top, in Imp. Val Velveteen, owned by Mr. Bain. There were cows of most correct Jersey type in every class, all having beauty of head, straightness of back, capacity and quality, but none could compare, in the judge's eye, with "Claire," and she was made senior and grand champion, to the general satisfaction of the crowd. Mossdale farm won junior championship on the beautiful senior heifer calf, Frisco Frisco of Mossdale. The grand champion cow headed the first prize dairy herd of five cows.

Judge: William Regan, Davis, Cal.

Bulls: Aged—1, J. M. Heldt, Roseburg, Wash., on Noble's Majesty of L.; 2, W. E. Wiltshire, Chilliwack, B. C., on Melia's Oxford of Coifild; 3, Harry D. Iliff, Independence, Ore., on The Maori; 4, Pickard Brothers, Marion, Ore., on Darling's Gallant Boy; 5, Mossdale farm, Lockeford, Cal., on Jolly Senator Raleigh; 6, Waikiki farm, Spokane, Wash., on Glen Tana Perfection; 7, Fox Brothers, Silverton, Ore., on Foxhall's Chief Engineer; 8, A. C. Power, Sandy, Ore., on La Belle's Noble Fern. Three-year-old—1, Waikiki farm on Belle's Pilot of Waikiki; 2, C. F. Bates, Salem, Ore., on Gertie's Royal St. Mawes; 3, G. H. Dammeier, Portland, Ore., on Dubel Volunteer; 4, B. J. Bagley, Vancouver, Wash., on Sophie's Oregon Pogis. Two-year-old—1, Waikiki farm on Waikiki's Oxford Count (senior and grand champion); 2, D. C. Howard, Beaverton, Ore., on Captain Tristram's St. Mawes; 3, Sears & Little, Winlock, Wash., on Fussy's Fern Noble 55th; 4 and 6, Ferdinand R. Bain, Los Angeles, Cal., on Pearl's Sybil's Gamboge and Gomboge's Majesty's Falcon; 5, Glen Tana farm on Glen Tana Morocco Wonder. Senior yearling—1, Bain on Gamboge Majesty's Duke; 2, Iliff on The Maori's Hector; 6, Will J. Behrmann, Jr., Forest Grove, Ore., on La Creole's Golden Pogis; 7, Dr. J. H. Connard, Bend, Ore., on Sultana's Fig. Junior yearling—1, Waikiki farm on Waikiki's Genesta's Pilot; 2, Glen Tana farm on Glen Tana Morocco Majesty; 3, Mossdale farm on Jolly Prince of Mossdale; 5, Washington State college of Washington on Chinook Monmouth Abe. Senior calf—1, Bain on Gamboge's Count of La Conite (junior champion); 2, Fox Bros. on Imp. Eagle's Double Boy; 3, Mossdale farm on Oxford's King of Mossdale; 4, Glen Tana farm on Glen Tana Wonderful Star; 5, Bates on Dorothea's St. Mawes; 6, W. O. Morrow, Independence, Ore., on La Creole's Chief General; 7, Lew Mar Price, Provo, Utah, on unnamed; 8, C. J. Reid and L. S. Lorenzen, Dayton, Ore., on unnamed; 9, Behrmann on unnamed. Junior calf—1, Mossdale farm on Monte's Star of Mossdale; 2, Waikiki farm on Waikiki Genesta King; 3, I. Nordstrom, Bandon, Ore., on Lady Fern's Noble Rex; 4, Howard on Tristram's Double; 5 and 10, Sears & Little on Fussy's Sailor and unnamed; 6, Glen Tana farm on Glen Tana Wonder Glory; 7, W. S. C. on Chinook Monmouth Ben; 8, Power on La Belle's Noble Duke; 9, O. P. Dosland, Grays River, Wash., on Pauline's Fern Lad.

Females: Aged—1, Mossdale farm on La Creole's Alta; 2, Bain on Imp. Sybil's Oxonia; 3, 5 and 9, Howard on St. Mawes Beauty's Gertie, Noble's Tinkles Mabel and St. Mawes Blossom's Rosaire; 4 and 8, Dammeier on Imp. Golden Oxford Lady and Imp. Golden Noble Rosebay; 6, Morrow on Golden Cicero's Happiness; 7, Pickard Bros. on Darling's Jolly Lassie; 10, Waikiki farm on St. Saviour's Fancy Floss. Four-year-old—1, 2 and 3, Bain on Imp. Claire Val Velveteen (senior and grand champion), Imp. Sybil's Gamboge Terry Maiden and Imp. Sybil's Gold Lock; 4, Dammeier on Imp. Oxford Noble Daisy; 5 and 8, Behrmann on Fussy Fern's Sweet Eyes and Fussy Fern's Anota; 6, Reid & Lorenzen on Chimes' Waltz; 7, Sears & Little on St. Mawes Zila Pansy. Three-year-old—1, Morrow on La Creole Chief Happiness; 2, Bain on Oxford Brown Lilly 2d; 3, Dosland on Alta's Dame Pauline; 4, Pickard Bros. on Vive La France 2d; 5, Waikiki farm on Pilot's Buttercup of Waikiki; 6, Glen Tana farm on Glen Tana Dorothy; 7 and 10, Dammeier on Oregon's Peeress Maid and Rosaire's Olga Betty; 8, Howard on St. Mawes Susette of M. L. P.; 9, Mossdale farm on Girlie of Mossdale. Two-year-old—1, Iliff on St. Mawes Lad's Susy; 2, Bain on Sultana's Hespy Lass; 3, Mossdale farm on Wardress of Mossdale; 4, Pickard Bros. on Darling's Vive Glow; 8 and 10, Reid & Lorenzen on Elora Maid of Poppy and Virginia St. Mawes Princess; 6, Glen Tana farm on Glen Tana Morocco Inez; 7, Dosland on Peer's Little Alta; 8, Dammeier on St. Mawes Anna Rosaire; 9, Waikiki farm on Imp. You'll Do Icona. Senior yearling—1 and 8, Howard on Dream of St. Mawes and Mirth of St. Mawes; 2, M. N. Tibbles, Independence, Ore., on Graymere Erdine; 3, Bain on Island Rosabelle Empress; 4 and 10, Glen Tana farm on Glen Tana Morocco Lady and Glen Tana Morocco Louise; 5 and 9, Dammeier on Xenia's Oxford Girl and Oregon's Golden Fern; 6 and 7, Waikiki farm on You'll Do's Pretty Mabel and Raleigh's Duchess Annie; Junior yearling—1, Bain on Island's Rosabelle Maid; 2, Pickard Bros. on Darling's Jolly Lassie 3d; 3, Heldt on Beauty Noble of T. T.; 4, Glen Tana farm on Glen Tana Morocco Fairy; 5, F. A. Durrah, Grays River, Wash., on Valley View Bluebell; 6 and 8, Waikiki farm on Waikiki's Hazelwood and Waikiki's Scotch Beauty; 7, Sears & Little on Dawn's Yellow Daisy; 9, Berger Olsen, Grays River Wash., on Miss Genesta of Elizabeth; 10, Dammeier on St. Mawes Rosy Glow. Senior calf—1 and 2, Mossdale farm on Frisky Frisco of Mossdale (junior champion) and King's Rose of Mossdale; 3 and 5, Waikiki farm on Beauty's Aloha of Waikiki and Waikiki's June Pet; 4 and 8, Glen Tana farm on Glen Tana Wonderful Doothy and unnamed; 6, Pickard Bros. on unnamed; 7, A. J. Firkins, Nampa, Idaho, on Red Bird's Jewel; 9, Heldt on Rinda Noble Irene of Tiptop; 10, Behrman on unnamed. Junior calf—1 and 10, Bain on unnamed and Queenie 2d and La Lomita; 2, Bates on Loreta's Princess; 3, Dammeier on Loris Rosebay; 4, Sears & Little on Midfield's Maiden Fern; 5, Mossdale farm on Alta of Mossdale; 6 and 9, Waikiki farm on Waikiki's Scotch Girl; 7, Behrmann on La Creole's Daisy Belle; 8, R. L. Burkhardt, Albany, Ore., on Gamboge's Gray Lass.

Cow having official record begun at 5 years or over—1, Mossdale farm on La Creole's Alta; 2 and 5, Howard on Noble's Tinkle's Mabel and St. Mawes Blossom Rosaire; 3, Waikiki farm on Jolly Amy of Waikiki; 4, Dosland; 6 and 7, Behrmann on Popelora and La Creole's St. Saviour Belle. Cow having official record begun under 5 years—1 and 2, Morrow on Golden Cicero's Happiness and La Creole's Chief Happiness; 3, Dosland; 4, Pickard Bros. on Darling's Jolly Lassie; 5, Behrmann on Noble Fern Helen; 6, Glen Tana farm on Glen Tana Sybil 2d; 7, Iliff on St. Mawes Lad's Susie; 8 and 9, Howard on St. Mawes Beauty's Gertie and St. Mawes Susette of M. L. P. A. R. cow with progeny—1, Morrow on Golden Cicero's Happiness; 2 and 3, Howard; 4 and 5, Behrmann on La Creole's St. Saviour Belle and Popelora.

Get of sire—1, Bain; 2, Mossdale farm; 3, Dosland; 4 and 6, Waikiki farm; 5, Glen Tana farm; 7, Heldt; 8, Bates; 9 and 10, Sears & Little. Produce of dam—1 and 4, Dosland; 2 and 7 Waikiki farm; 3, Pickard Bros.; 5, Mossdale farm; 6, Tibles; 8, Dammeier; 9, Heldt; 10, Glen Tana farm. Exhibitor's herd—1, Bain; 2, Iliff; 3, Dammeier; 4, Glen Tana farm; 5, Mossdale farm; 6, Waikiki farm; 7, Sears & Little. Young herd—1 and 3, Waikiki farm; 2, Mossdale farm; 4, Glen Tana farm; 5, Howard. Calf herd—1, Waikiki farm; 2, Mossdale farm; 3, Sears & Little; 4, Howard. Dairy herd—1, Bain; 2, Dammeier; 3, Howard; 4, Waikiki farm; 5, Reid & Lorenzen; 6, Behrmann.

Guernseys.

California was represented among the fawn-and-whites this year for the first time, and there were three exhibitors from that state, although most of the animals wearing Troutmere farm blankets, including the world record Edna of Mountain View, were northwest Guernseys purchased at recent Yakima valley sales. The single entry of W. H. Dupee of Riverside, that has been grand champion at several state fairs in the east and missed it at the National only by being "fractious," easily took the purple honors here.

Cottonwood farm of Tillamook, that made its last exhibit before the dispersal, and River Banks farm of Grants Pass were large Oregon exhibitors, and the latter won junior champion bull. One herd from Idaho and three from Washington gave the show a Pacific coast air, and among the latter was that of A. Macrae Smith of Bellingham, which took all female championships—senior and grand on an animal that was beaten last year by Jewel of Rose City, twice grand champion, but that came back and beat the 3-year-old which defeated Jewel at the Oregon state fair.

There were about 125 head of Guernseys in the show, and the beautifully decorated exhibit quarters made an attractive setting for them. The breed booth was in charge of E. L. Westover, western representative. In the ring, aged cows did not make as good a showing as last year, though in general the quality was fully up to standard. The young classes of both sexes were strong all through.

One of the interesting features was the permanent award of the Lady Oregonian trophy, presented by the late F. S. Peer for the best group of four females, to Dr. Smith, who won it last year after Appletree Point farms had taken the first "hitch" on it in 1921. The tea set offered by President Staples of the Oregon Purebred Live Stock association for best calf herd also went to Dr. Smith.

Judge: Gordon Hall, Cranford, N. J.

Bulls: Aged—1, Troutmere farms, San Francisco, Cal., on Chicona Lover Bold; 2, A. B. Humphrey, Escalon, Cal., on Nobleman of Maple Hill; 3, A Macrae Smith, Bellingham, Wash., on Kulshan Hayes May King; 4, River Banks farm, Grants Pass, Ore., on Victor's Glenwood of Thorn Hill. Three-year-old—1, Fred Yohann, Aurora, Ore., on Clover's King. Two-year-old—1, W. H. Dupee, Riverside, Cal., on May Rose Cherub (senior champion); 2, River Banks farm on River Banks Bonnie Jay; 3, F. M. Jordan, Seattle, Wash., on Oregon Ultra King; 4, Cottonwood farm, Tillamook, Ore., on Fawndale Marose. Senior yearling—1, Humphrey on Escalon Ricardo. Junior yearling—1, Smith on Fircrest French Boy; 2, River Banks farm on River Banks Golden Fancy. Senior calf—1, River Banks farm on Summerfield's Victor (junior and grand champion); 2, W. A. Goodin, Cornelius, Ore., on Yeksa Hope's Khedive of Rose City; 3, Humphrey on Escalon Valiant; 4, Smith on Fircrest LaFrance Wanderer. Junior calf—1, 3 and 5, Smith on Fircrest Golden Boy, Fircrest Sultan and unnamed; 2, Humphrey on Escalon Bell Boy and Escalon Fairy's King; 6 and 8, River Banks farm on River Banks Victor's Genius and River Banks Victor's Duke; 7 and 9, Shannon B. Shafer, Deer Island, Ore., on Columbia Pat of Clover Hill and Billy Boy of Clover Hill; 10, Goodin on unnamed.

Females: Aged—1 and 5, Smith on La France of Bralee (senior and grand champion) and Brookdale's Pink; 2, 3 and 6, Cottonwood farm on Oregon Queen, Gail of Sequoia and Janis of Sequoia; 4 and 8, Troutmere farms on Middledale Grace Darling and Edna of Mountain View; 7, Jordan; 9, Humphrey on Escalon Fairy; 10, Harry W. Bateman, Bellingham, Wash., on Kulshan Hayes May Rose. Four-year-old—1, River Banks farm on Sunny Lady of River Banks; 2, Humphrey on Escalon Lady Rose; 3 and 4, Bateman on Kulshan Hayes May Rose 3d and Kulshan Secret May Rose. Three-year-old—1, River Banks farm on Imp. River Banks Valentine; 2, Francis Hughes, Oswego, Ore., on Red Wing Doctor's Phillipa; 3, Humphrey on Pearl Souffle of Revada; 4, Thousand Springs farm, Wendell, Idaho, on Moore Villa's Marie. Two-year-old—1 and 8, Humphrey on Escalon Nancy and Escalon Joan; 2, Goodin on Lady Allegiance; 3, Smith on Fircrest La France Pride; 4, Cottonwood farm on Evangeline's Princess; 5, Jordan on Yeksa Rose of Olympic Farm; 6, River Banks farm on River Banks Nella Girl; 7, Troutmere farms on Anchor Rose of Fawndale; 9, Shafer on May Rose Babe of Clover Hill; 10, Bateman on Kulshan Sultana. Senior yearling—1, Goodin on Rose City Beauty; 2 and 3, Humphrey on Escalon Pollyanna and Escalon Lottie; 4, River Banks farm on River Banks Nella Jay; 5, Troutmere farm on Ruby Dell Butter Queen; 6 and 7, Jordan on Olympic Alyssum and Yeksa Jewel of Olympic Farm; 8, Bateman on unnamed. Junior yearling—1, Bateman; 2 and 4, Humphrey on Escalon Beauty and Escalon May Belle; 3, 5 and 10, Cottonwood farm on Gail's Annabelle, Rosebud's Prospect and unnamed; 6 and 9, Smith on Fircrest Little Jewel and Fircrest Goldie May; 7, Shafer on Columbia Corene of Clover Hill; 8, River Banks farm on River Banks Secret Lady. Senior calf—1 and 2, Smith on Fircrest French (junior champion) and Fircrest Jewel; 3, 4, 7 and 8, River Banks farm on River Banks Valentine Jewel, River Banks Lenora, River Banks Victor's Duchess and River Banks Nella Girl's Sister; 5 and 9, Humphrey on Escalon Bettie and Escalon Itchen May; 6, and 11, Goodin on unnamed and Rose City Bonnie Lassie; 10, Shafer on Columbia Sue of Clover Hill; 12, Thousand Springs farm on Virginia of Thousand Springs. Junior calf—1, River Banks farm on River Banks Victor's Leona; 2 and 9, Humphrey on Escalon Favorite Rose and Escalon Dairy Maid; 3, 8 and 11, Cottonwood farm on Buttercup of Cottonwood, Lady Molly of Cottonwood and unnamed; 4 and 10, Smith on Fircrest La France and Fircrest Beautiful Blossom; 5, Shafer on Columbia Twilight of Clover Hill; 6 and 7, Goodin on unnamed. Cow with official record begun at 5 years or over—1 and 5, Humphrey on Escalon Fairy and Escalon Lady Rose; 2, Smith on Brookdale's Pink; 3 and 6, Cottonwood farm on Janis of Sequoia and Rogue's Heroine of Hawthorne; 4, River Banks farm on Sunny Lady of River Banks; 7, Bateman. A. R. cow with progeny—1 and 2, Smith on La France of Bralee and Brookdale's Pink; 3, Humphrey on Escalon Fairy; 4, River Banks farm on Sunny Lady of River Banks.

Get of sire—1 and 2, Smith; 3 and 4, Humphrey; 5, Cottonwood farm; 6 and 8, River Banks farm; 7, Goodin; 9, Shafer; 10, Bateman. Produce of dam—1 and 5, Smith; 2 and 7, Humphrey; 3 and 10, Cottonwood farm; 4, Goodin; 6 and 8, River Banks farm; 9, Jordan. Exhibitor's herd—1, Smith; 2, Humphrey; 3, River Banks farm; 4, Cottonwood farm; 5, Bateman. Young herd—1, Smith; 2, Humphrey; 3, River Banks farm; 4, Cottonwood farm. Calf herd—1, Smith; 2, River Banks farm; 3, Humphrey; 4, Rieben Brothers, Banks, Ore. Dairy herd—1, Humphrey; 2, Cottonwood farm; 3, Bateman.

Ayrshires.

There were not quite as many Ayrshires here as a year ago, but the quality was just a little better. Five exhibitors made the show, but only two had full herds, Walter Domes and E. W. VanTassell. While there was some division of blue ribbons, VanTassell was the heaviest winner and had all the champions. His senior champion bull, Cavalier's Scottish Emperor, would be hard to beat in any show if he had a little more flesh and more upraised Ayrshire horns. But it was in the junior and grand champion, Wenatchee White Cavalier, a junior calf, that the acme of Ayrshire type, combined with smoothness, masculinity, straight lines, capacity and dairy temperament seemed to combine. Perhaps the same thing should be said of the junior and grand champion female, Stewart Girl of Wenatchee, a senior calf, except to use the word femininity in place of the masculine adjective. Wenatchee Blossom, the 2-year-old that was made senior champion, has had the honor about half way around the circuit, with her older stable mate, Empress Lady of Wenatchee, being the other winner. Lady has the more refinement, Blossom the more substance and capacity, with either one a worthy object of the prize. VanTassell won the Staples trophy for best calf herd.

Judge: R. E. Haeger, Algonquin, Ill.

Bulls: Aged—1 and 2, E. W. VanTassell, Wenatchee, Wash., on Cavalier's Scottish Emperor (senior champion) and Queen's Scottish Cavalier. Junior yearling—1 and 2, Walter J. Domes, McCoy, Ore., on Shortie of C. H. A. F. and Panagin of C. H. A. F. Senior calf—1, Wilford Domes, McCoy, Ore., on Bussie of C. H. A. F.; 2, VanTassell on Wenatchee Cavalier; 3, Walter J. Domes on Big Sentagin of C. H. A. F. Junior calf—1, VanTassell on Wenatchee White Cavalier (junior and grand champion); 2, Washington State college on Chinook Robin Hood; 3 and 4, Walter J. Domes on Shortie II. of C. H. A. F. and Patsy Boy of C. H. A. F.

Females: Aged—1, E. W. Van Tassell on Lady Bruce 2d; 2, Walter J. Domes on Fondula Girl of C. H. A. F. Four-year-old—1, Walter J. Domes on Little Miss Sentinel of C. H. A. F. Three-year-old—1, Walter J. Domes on Happy Daisy; 2, Van Tassell on Empress Lady of Wenatchee. Two-year-old—1 and 2, Van Tassell on Wenatchee Blossom (Senior and grand champion), and Stewart Lassie of Wenatchee. Senior yearling—1 and 2, Van Tassell on Elfen Scot of Wenatchee and Wenatchee Snowball; 3, Walter J. Domes on Beauty of C. H. A. F. Junior yearling—1, Van Tassell on Wenatchee Cherry; 2, Walter J. Domes on Bessie Bell of C. H. A. F. Senior calf—1 and 2, Van Tassell on Stewart Girl of Wenatchee 3d (junior champion), and Wenatchee Bluebell; 3, Walter J. Domes on Dolly Again of C. H. A. F.; 4, W. S. C. on Chinook Robinhood Alice; 5, Wilford Domes on Dula Again; 6, Earlcrest Stock farm, Eagle Creek, Ore., on Earlcrest Gem. Junior calf—1 and 2, Van Tassell on Wenatchee Scottish Bruce and Wenatchee Scott; 3 and 5, Walter J. Domes on Miss Peter Pan 2d and Miss Sentagin; 4 and 6, W. S. C. on Chinook Robin Hood Carrie and Chinook Robin Hood Bridget. Cow with official record begun at 5 years or over—1, Van Tassell on Lady Bruce 2d. Cow with official record begun under 5 years—1 and 2, Van Tassell on Lady Scott of Wenatchee and Empress Lady of Wenatchee.

Get of sire—1 and 2, Van Tassell; 3 and 5, Walter J. Domes; 4, W. S. C. Produce of dam—1, 2 and 4, Van Tassell; 3 and 5, Walter J. Domes. Exhibitor's herd—1 and 2, Van Tassell. Young herd—1, Van Tassell; 2, Walter J. Domes. Calf herd—1, Van Tassell; 2, Walter J. Domes. Dairy herd—1, Van Tassell; 2, Walter J. Domes.

Brown Swiss.

With seven exhibitors, three more than last year and three of the seven at the big show for the first time; with numbers 50 per cent greater than last year and greater by one or two than at the National Dairy show, and with quality that showed decided improvement over previous years, the "Switzers" made greater proportionate strides at the Pacific International this fall than any other breed, and the men backing them felt proportionately elated.

The Bohart string, which furnished half of the show in 1922 and which took a majority of the leading awards, was one of three of about the same size this fall, but won heavily again, yielding six of the 15 blue ribbons, however, to western Oregon breeders. The latter took all the purple awards on bulls also, but Bohart's females proved superior when it came to championships and he won the first awards in five group classes. His winnings were contested all the way, however, every class furnishing some competition and many of them being close.

The state of Washington was represented by Pawnee farm of Snohomish, which got into the money along with an eastern Oregon breeder, Ed Myersick of La Grande. A new feature of the Brown Swiss competition this year was that for the tea set offered by President Isaac E. Staples of the Oregon Purebred Live Stock association, for the best calf herd. The set went to Brugger & Son of Gresham, Ore., along with the senior and grand champion ribbon on bulls.

Judge: R. E. Haeger, Algonquin, Ill.

Bulls: Aged—1, T. Brugger & Son, Gresham, Ore., on Jessie's Lot (senior and grand champion); 2, John Boeckli, Linnton, Ore., on Sunnyhill Bob; 3, W. O. Bohart, Bozeman, Mont., on Zell A. W. Three-year-old—1, Joe Schumacher, Slayton, Ore., on Queen's Baby; 2, Bohart on D's Dick; 3, B. M. Hillis, Snohomish, Wash., on Velvad St. Patrick. Two-year-old—1, Bohart on Alice's Beauty; 2, Ed Myersick, La Grande, Ore., on Victor Granger. Senior yearling—1, A. Grossen, Linnton, Ore., on Tassa M's Beauty (junior champion); 2, Boeckli on Weissenstein; 3, Brugger & Son on Buckskin Buster. Junior yearling—1, Bohart on Nick's D; 2, Schumacher on Bozeman 2d; 3, Hillis on Lord Barn. Senior calf—1, Bohart on Nellie's Beauty 2d. Junior calf—1 and 3, Schumacher on Sublimity's Pride and Golden's Baby's Prince; 2, Bohart on Nick's D 2d; 4, Myersick on Buckskin Ned; 5, Brugger on Admiral A.

Females: Aged—1 and 6, Bohart on Nellie B. Cook and Zell's Beauty; 2 and 3, Brugger & Son on Adaline and Ruby's Gem; 4, Schumacher on Eva M.; 5, Boeckli on Jenny; 7, Myersick on Trixy 2d. Four-year-old—1, Bohart on Katherine's Heifer (senior and grand champion); 2 and 3, Boeckli on Limmat and Aare; 4, Brugger & Son on Rosebud. Three-year-old—1, Bohart on Nick Master's Nellie; 2, Boeckli on Rhone; 3, Schumacher on Idella; 4, Brugger & Son on Lueible; 5, Myersick on Julie July. Two-year-old—1, Brugger & Son on Bella T; 2, Schumacher on Golden Rose; 3, Bohart on Beauty's Nick C.; 4, Myersick on Daisy Alice; 5, Boeckli on Glatt; 6, Hillis on Lady Lucille. Senior yearling—1, Bohart on Dick's Helen (junior champion); 2 and 3, Boeckli on unnamed and Rander; 4, Hillis on Lady Nellie; 5, Schumacher on Eva M's Beauty; 6, Brugger & Son on Tilly May. Junior yearling—1, Schumacher on Idella's Lotty; 2 and 3, Myersick on Nick's Rosebud and Mona; 4, Bohart on Beauty's Alice H. Senior calf—1 and 5, Bohart on Miss Roundup and Dick's Nick C.; 2, Brugger & Son on Caroline Tell 2d; 3 and 4, Schumacher on Eva's Queen of Mistland and Idella's Lotty. Junior calf—1 and 2, Bohart on Delia H. and Beauty's Jura; 3, Brugger & Son on Hilda; 4, Myersick on Velvet Victoris; 5, Boeckli on Crissie's June; 6, Alfred Yaun, Boring, Ore., on Boring Lassie; 7, Schumacher on Julia Daisy of Mistland. Cow having official record begun at 5 years or over—1, Bohart on Nellie B. Cook. Cow having record begun under 5 years—1, 2 and 3, Bohart on Katherine's Heifer, Nick's Master Nellie and Zell's Beauty. A. R. cow with two progeny—1, 2, 3 and 4, Bohart on Nellie B. Cook, Zell's Beauty, Katherine's Heifer and Nick's Master's Nellie.

Get of sire—1, Boekli; 2 and 4, Bohart; 3, Schumacher; 5 and 6, Brugger & Son. Produce of dam—1 and 2, Dohart; 3, 4 and 5, Boeckli; 6 and 7, Schumacher. Exhibitor's herd—1, Bohart; 2, Brugger & Son; 3, Schumacher; 4, Boeckli; 5, Myersick; 6, Hillis. Young herd—1, Bohart; 2, Schumacher; 3, Boeckli; 4, Brugger & Son. Calf herd—1, Bohart; 2, Brugger & Son. Dairy herd—1, Bohart; 2, Boeckli.

THE DUAL-PURPOSE SHOW.

The advocates of dual-purpose cattle certainly had their innings at this show. With a splendid string of Devons from New Hampshire, one good herd of Red Polls and a remarkable lot of milking Shorthorns, the idea of "both beef and milk" had more exponents than some dairy breeds and as much quality as some of either. They occupied a good position in the beef barn and had their full share of attention.

Judge: W. A. Simpson, Lyndonville, Vt.

Milking Shorthorns.

With five exhibitors and nearly 100 head of milking Shorthorns, that strain had more cattle on exhibition than ever were here before, and the universal agreement was that they averaged higher in show, quality, type and fitting. Innisfail herd of Davis, Cal., not only was the largest winner, but took three of the four championships. Innisfail Superb, their bull calf that was made junior champion, shows unmistakable dairy temperament, but is masculine and is smooth, long and deep and not leggy. Their heifer calf, Innis-

(Continued on page sixteen.)

The PIKE'S PEAK of the Poultry Business

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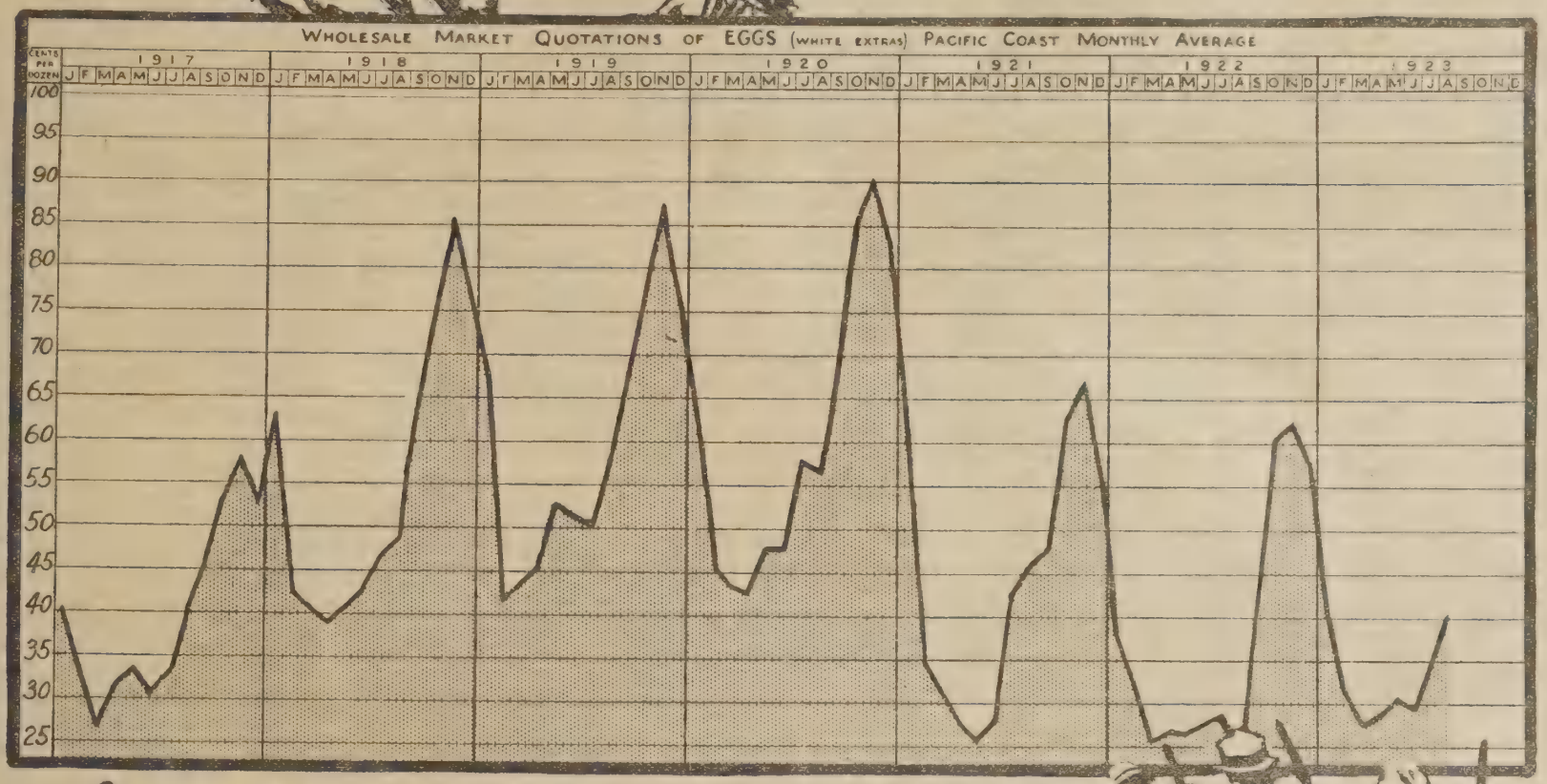

In NOVEMBER

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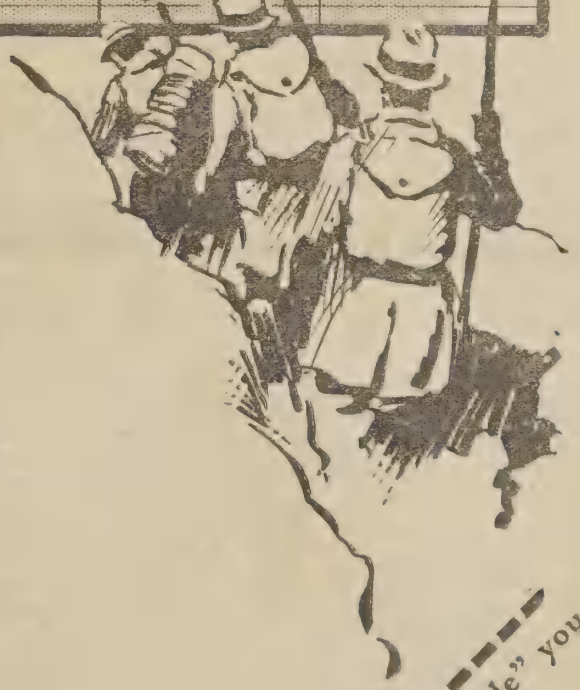

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The Pacific International

(Continued from page fourteen.)

fail Amy, that won junior female championship, has all the smoothness of the bull, with a sweet femininity, depth of body and fine hide. Their senior and grand champion female, Innisfail Betty, is only a 2-year-old, but she was grand champion at Chicago International last year, as a calf, and is expected to be again this year. She has an udder as perfect as an Ayrshire, a hide like silk, a neat head, and yet is a well-covered beef animal. She is a remarkable cow. Bachelder farms had the senior and grand champion bull in Manor Supreme, a bull with that almost indescribable something which marks dual-purpose Shorthorns, without detracting from their breed type.

Bulls: Aged—1, Batchelder farms, Mount Vernon, N. H., on Manor Supreme (senior and grand champion); 2, Innisfail herd, Davis, Cal., on Innisfail Perfector; 3, Northwood farms, Redmond, Wash., on Gretna Challenger; 4, Foothills farms, Carlton, Ore., on Innisfail Favorite. Two-year-old—1, Northwood farms on Northwood Pride; 2, Batchelder farms on Knowsley Batchelder 5th; 3, E. C. Truesdell, Centralia, Wash., on Walgrove Protector. Yearling—1, Foothills farm on Foothills Prior; 2, Batchelder farms on Oxford Batchelder; 3, Innisfail herd on Innisfail Beggar Boy; 4, Northwood farms on Northwood Salem. Under 1 year—1 and 2, Innisfail herd on Innisfail Superb (junior champion) and Innisfail Bellview; 3, 4 and 5, Northwood farms on Northwood Colonel, Northwood Sam and Northwood Monarch; 6, Batchelder farms on Shelburne Lad; 7, 9 and 10, Foothills farm on Foothills Concord, Foothills Sea Rover and Foothills Milkman 3d; 8, Truesdell on Roan Herdsman.

Females: Three cows in milk owned by exhibitor—1, Batchelder farms; 2, Innisfail herd. Two cows in milk bred and owned by exhibitor—1, Innisfail herd; 2, Foothills farm. Five years or over—1, 3 and 4, Batchelder farm on Portbury Margaret 9th, Imp. Lady Christina 11th and Rose; 2, Innisfail herd on Bessborough Dorothy; 5, Northwood farms on Molly. Three years and under 5—1, Northwood farms on Mary 5th; 2, Batchelder on Knowsley's Matchless; 3, Foothills farm on Foothills Kismet; 4, Innisfail herd on Gypsy Girl. Two-year-old—1 and 3, Innisfail herd on Innisfail Betty and Innisfail Daisy 3d; 2 and 5, Batchelder farms on Dorrit Batchelder and Primule Batchelder 2d; 4 and 7, Northwood farms on Oxford's Lady 5th and Northwood Winnie 2d; 6, Foothills farm on Foothills Winnie 2d; 8, Truesdell on Ora Jewel. Yearlings—1 and 8, Batchelder farms on Portia Batchelder and Newport Batchelder; 2, 4 and 6, Foothills farm on Foothills Kismet, Foothills Halcyon and Foothills Kismet 15th; 3 and 7, Innisfail herd on Innisfail Alma 2d and Gypsy Girl 2d; 5 and 9, Truesdell on Alma Jewel and Missie Jewel. Under 1 year—1, Innisfail herd on Innisfail Amie (junior champion); 2, Foothills farm on Foothills Paragon; 3 and 4, Batchelder farms on Princess Batchelder and Lovely Batchelder; 5, 6 and 7, Northwood farms on Northwood Polly, Northwood Molly and Northwood Maggie; 8, Truesdell on Knight's Jewel.

Graded herd—1 and 4, Batchelder farms; 2, Innisfail herd; 3, Northwood farms; 5, Foothills farm. Yearling herd—1, Foothills farm; 2, Batchelder farms; 3, Innisfail herd; 4, Northwood farms. Pair of calves—1, Innisfail herd; 2, Northwood farms; 3, Batchelder farms; 4, Foothills farm; 5, Truesdell. Get of sire—1, Batchelder farm; 2, Innisfail herd; 3, Foothills farm; 4 and 5, Northwood farms; 6, Truesdell.

Red Polled.

F. H. Porter of Halsey, Ore., showed the only herd, well fitted, as he always shows them. Their uniform color and placid appearance pleased all who saw them and made friends for the hornless dual-purpose breed. His awards:

Bulls: Aged—1 on Peach Knott (senior and grand champion). Junior yearling—1 on Peon 4th (junior champion). Senior calf—1 on King. Junior calf—1 on Jobe.

Females: Aged—1 and 2 on Violet (senior and grand champion) and Mamie. Two-year-old—1 and 2 on Peona 3d and Jennie. Senior yearling—1 and 2 on Pascola and Neva. Junior yearling—1 on Friette (junior champion). Senior calf—1 and 2 on Dee and Victoria. Junior calf—1 on Missie.

Porter was also awarded first on aged herd, young herd, pair of calves and produce of dam and second on produce of dam.

Devons.

It is no small thing even for the Pacific International to have a herd of cattle of a breed not usually seen from far-away New Hampshire, and the presence of the famous show herd of Batchelder farms from Mount Vernon was a distinct achievement for Manager Plummer, who is always "doing things." Mature animals and young stock all well illustrated the Devon type and the dual-purpose idea. Batchelder farm awards:

Bulls: Aged—1 on Devondale (senior and grand champion). Two-year-old—1 on Nebo Batchelder. Junior yearling—1 on Knight of Batchelder farms. Senior calf—1 and 2 on Devondale Batchelder (junior champion) and Lonewood Batchelder.

Females: Aged—1 and 2 on Last One and Laurel 3d. Two-year-old—1 and 2 on Songstress of Batchelder Farms (senior and grand champion) and Tina 3d. Senior yearling—1 on Duchess Batchelder. Junior yearling—1 on Frances Batchelder. Senior calf—1 and 2 on Batchelder's Pride (junior champion) and Cherry Red Batchelder.

Batchelder farms also received first and second on aged herd, pair of calves and produce of dam and first on young herd.

THE SWINE SHOW.

The swine show has been a little larger in one or two previous years, but no year has shown fewer hogs of poor type or poor fitting. It is interesting that at least three states competed in every breed. California had a decidedly good showing in almost every breed, while Montana, Idaho, Utah and Colorado all were represented. It was a big type show and every judge showed his preference for the stretch, bone and high back of the modern hog. While this was especially true of Poland Chinas and Duroc Jerseys, it was evident anywhere. Interest in the show was keen, and good-sized crowds watched the judging most of the time. H. C. McKelvie of Lincoln, Neb., who judged Poland Chinas and Duros Jerseys, said this show compared favorably with many of the eastern shows and that the breeders here had just as good stock, but that the average quality would not rate as high; that back there generally the stock not fully fitted or of the best was left at home. The other judge was equally complimentary. It was a great show, well displayed and well judged.

Poland Chinas.

So far as numbers are concerned, there was not much difference from a year ago, and the extreme high quality which characterized that show was again in evidence. There was not a really poor entry in the list. Big type was decidedly in the ascendency and very little else was shown. The senior and grand champion boar was found in Navy Bob 2d, a junior yearling shown by the veteran breeder, Thomas W. Brunk. He was not only of true big type, with high, strong back, good feet and plenty of bone, but he was probably the best finished boar in the show. The junior champion, a C. K. Loe entry, is a junior pig of great size, with true big type, remarkably strong back and good feet and bone. Loe had both senior and junior champion sows, as well, the grand champion being the senior, Loe's Wonder, a 3-year-old that has raised two litters within the year and is smooth, with good feet, bone and high back. She has the breedy look of a mother and almost perfect Poland China type, and she had to beat several younger ones, especially Brunk's Lady Rose 1st, that is remarkably deep and smooth, and which the judge considered in too high flesh. Loe's junior champion, Nellie 1st, is one of his winning litter in the futurity and open class, and is another growthy, smooth, heavy-boned youngster. Montana was represented by one strong herd, that of Hugh Walter of Townsend, who was a heavy winner. Prizes were fairly well divided among 11 exhibitors.

Judge: H. C. McKelvie, Lincoln, Neb.

Boars: Aged—1, R. W. Hogg, Salem, Ore., on Black Oak. Junior yearling—1, Thomas W. Brunk, Salem, Ore., on Navy Rob 2d (senior and grand champion); 2, Hogg on Petro; 3, 5 and 6, Hugh Walter, Townsend, Mont., on Ringmaster, King's Liberator 2d and Checker's Climax; 4, C. K. Loe, Silverton, Ore., on Mutt. Senior pig—1, Walter on Dempsey; 2, Loe on King Tut; 3 and 4, Oregon Agricultural college, Corvallis, Ore., on Jane's Buster and Jane's Big Bone. Junior pig—1, Loe on Clan's Equal (junior champion); 2, Clarence Herr, Silverton, Ore., on Peter's Long Giant; 3, W. C. Creech, Salem, Ore., on Fashion Bob; 4 and 6, Walter on Lucky Strike and Clansman Bob; 5, Hogg on Susie's Petro.

Females: Aged—1, Loe on Loe's Wonder (senior and grand champion); 2, Walter on Giantess Wonder 4th; 3 and 4, Hogg on Susie Equal and May Oregon Equal. Senior yearling—1, Walter on Mildred. Junior yearling—1, Brunk on Lady Rose 1st; 2 and 3, Walter on Miss Sweetheart and Giantess Belle 2d; 4, Hogg on Black Oak Susie 2d; 5 and 6, O. A. C. on Jean and Lew's B. B. Senior pig—1 and 2, Loe on Nellie's 1st (junior champion) and Nellie's 2d; 3 and 5, Walter on Alice 2d and Alice 3d; 4, O. A. C. on Big Jane 1st; 6, Stephen Rentz, Gervais, Ore., on Bustress M. Junior pig—1, Rentz on Susie's Masterpiece; 2, Walter on Tim's Lady; 3, Hogg on Susie's Delight 2d; 4 and 5, Loe on Miss Willamette and Miss Willamette 2d; 6, Creech on Bob's Quality.

Aged herd—1 and 3, Walter; 2, Brunk; 4, Hogg. Aged herd bred by exhibitor—1 and 2, Walter. Young herd—1, Loe; 2, Walter; 3, O. A. C.; 4, Creech; 5 and 6, Hogg. Young herd bred by exhibitor—1, Loe,; 2, Walter; 3, O. A. C.; 4, Creech; 5 and 6, Hogg. Get of sire—1 and 4, Walter; 2, Loe; 3, Hogg; 5, O. A. C.; 6, Creech. Produce of dam—1 and 4, Walter; 2, Loe; 3, Hogg; 5, O. A. C.; 6, Creech.

Duroc Jerseys.

With 14 exhibitors, the Duroc Jersey show was possibly a little larger than a year ago. Quality was at least as high and probably higher. Two California herds and a few head from Washington made a state competition, and California, it must be admitted, got away with a liberal share of the prizes, including two championships. Jumbo Giant, the deep-bodied, typical big type boar that was grand champion at the Oregon state fair, repeated the trick here. His size, depth of body, high back and correct type made him invincible, and this in spite of the fact that he had just come out of a bad spell of pneumonia. A. N. Doerfler felt lucky in not having lost him. Junior honors went to the very classy, big-boned junior pig, Keys Sensation Giant 2d, owned by Slocum & Sons of Hamilton City, Cal. She is a senior yearling of great size, true type and good back, feet and bone. The junior champion, Sensation Queen, owned by Jones Prater of Dayton, Ore., has about everything a young sow needs to make her great, including good feet and legs, a high back, stretch and correct type. She defeated some other youngsters in class so good a reversal would hardly have been criticized.

Judge: H. C. McKelvie, Lincoln, Neb.

Boars: Aged—1, A. N. Doerfler, Silverton, Ore., on Jumbo Giant (senior and grand champion). Senior yearling—1, Mossdale farm, Lockeford, Cal., on Charnock Sensation Leader; 2, L. S. Berry, Troutdale, Ore., on Sheik Alhamed. Junior yearling—1, H. C. Compton, Boring, Ore., on Pathfinder Dapper Dan; 2, Berry on Pathmaster's Ace; 3, Mossdale farm on Jumbo of Mossdale; 4, W. F. McCall & Co., Salem, Ore., on Unique Achievement. Senior pig—1, Berry on Robin Hood; 2, Mossdale farm on Red King of Mossdale; 3 and 5, Compton on Blitzen and Mogul; 4, C. C. Mason, Hermiston, Ore., on Pathfinder Sensation. Junior pig—1 and 2, H. P. Slocum & Sons, Hamilton City, Cal., on Keys Sensation Giant 2d (junior champion) and Keys Sensation Giant; 3 and 4, Compton on Donder and Vixen; 5, Jones Prater, Dayton, Ore., on Sensation Wonder; 6, McCall & Co. on Unique Redtop.

Females: Aged—1, Berry on Ideal Lady; 2 and 3, Mossdale farm on Diamond Bar Queen and Wonder Sensation Girl. Senior yearling—1, Mossdale farm on Charnock Mammoth Lady (senior and grand champion). Junior yearling—1 and 4, Berry on Miss Pathfinder Unexcelled and Uneeda Polly Prim; 2, Mossdale farm on King's Lady Sensation; 3, Lowell Stockard, Hermiston, Ore., on Rosie; 5, McCall & Co. on Oregon Leader; 6, Joe Kincaid, Pullman, Wash., on Palouse Duchess. Senior pig—1 and 2, Mason on Edith Pathfinder and Queen Pathfinder; 3, Mossdale farm on You'll Do Miss S; 4 and 5, Compton on Carmen and Red King's Buttercup; 6, W. F. Bartlett, Camas, Wash., on Crescent's Sensation 2d. Junior pig—1 and 5, Prater on Sensation Queen (junior champion) and Sensation Queen 2d; 2, Berry on Wild Irish Rose; 3 and 6, Doerfler on Ioka Irene and Ioka Sensation 1st; 4, Slocum on Keys Sensation Beauty.

Aged herd—1, Mossdale farm; 2, Berry. Aged herd bred by exhibitor—1, Berry. Young herd—1, Prater; 2, Compton; 3, Mason; 4, McCall & Co.; 5, Berry. Young herd bred by exhibitor—1, Prater; 2, Compton; 3, Mason; 4, McCall & Co.; 5, Berry. Get of sire—1, Slocum & Son; 2, Doerfler; 3, Prater; 4, Berry; 5, Compton; 6, Mason. Produce of dam—1, Slocum & Son; 2, Doerfler; 3, Prater; 4, Berry; 5, Compton; 6, Mason.

Chester Whites.

Big type, large bone and good size characterized the Chester White exhibit. One herd from Utah and one from Washington, competing with four Oregon breeders, gave interstate character to this show. Results were, to a great extent, a triumph for the old boar, Oregon Buster, shown for the third year by Cass A. Nichols of Salem, Ore. This boar won senior and grand championship with as much apparent ease as when first shown. His great scale, strong legs and good feet carry a body much smoother than that of most boars of his age, whatever their size. As he gets older his quality, which was questioned earlier in life, becomes more apparent. His son, Oregon Giant 2d, owned by Theodore Resch of Aurora, Ore., a junior pig of stretch, bone, strong feet and good quality, was made junior champion. Enola's Blossom, a daughter of the old boar, a senior yearling with her third litter less than 10 days old, won senior and grand championship for Nichols, who bred her, and junior champion sow was another daughter, an unnamed junior pig of the Nichols entries. While this was quite a sweep for one man and one boar, it should not indicate a weakness in the balance of the show, for competition was keen and close in almost every class.

Judge: E. H. Hughes, Davis, Cal.

Boars: Aged—1, Cass Nichols, Salem, Ore., on Oregon's Buster (senior and grand champion); 2, Lew Mar Price, Provo, Utah, on Price's Premier. Senior yearling—1, Nichols on King of Brookside. Junior yearling—1, Nichols on Brookside Monster. Senior pig—1, Price on The Sid; 2, Theodore Resch, Aurora, Ore., on Evan's Commander. Junior pig—1 and 2, Resch on Oregon Giant 2d (junior champion) and Eastern Goods; 3 and 4, Nichols on Brookside Big Boy and Brookside Hero; 5 and 6, Price on Bayview Nobleman and Bayview Meddler.

Females: Aged—1 and 2, Nichols on Miss Buster and Marjorie B; 3, Price on Maida's Model. Senior yearling—1 and 3, Nichols on Enola's Blossom (senior and grand champion) and Model E. Rose; 2, Ed Schoel, Albany, Ore., on Buster's King; 4, Resch on Satris Giantess; 5, Ralph J. Cole, Pullman, Wash., on Opal's Sensation 2d. Junior yearling—1 and 2, Nichols on Brookside Wonder and Brookside Beauty; 3 and 4, Price on Premier's Jewel and Monster's Princess. Senior pig—1 and 2, Nichols on unnamed (junior champion) and unnamed. Junior pig—1 and 5, Leslie Davis, Mount Angel, Ore., on Oregon Bess and unnamed; 2, 3 and 7, Nichols on Brookside Iola, Brookside Giantess and Brookside Princess; 4, Resch on Miss Oregon; 6, Schoel on Liberty Belle; 8, 9 and 10, Price on Bay View Constance, Bay View Delight and Bay View Pride.

Aged herd—1 and 2, Nichols; 3, Price. Aged herd bred by exhibitor—1, Nichols. Young herd—1 and 3, Nichols; 2, Resch; 4, Price. Young herd bred by exhibitor—1 and 3, Nichols; 2, Resch; 4, Price. Get of sire—1 and 3, Nichols; 2, Resch; 4, Price. Produce of dam—1, Resch; 2 and 3, Nichols; 4, Price.

Berkshires.

The Berkshire show was mainly a battle between River Banks farm of Grants Pass, Ore., and A. B. Humphrey of Escalon, Cal. Five others exhibited, including one herd from Washington and a couple of pig club boys. They all had good Berkshires, especially the Oregon Agricultural college, but the above named firms won all the championships and the lion's share of the blues. River Banks' grand champion boar, River Banks Mastadon, is the same one that won similar honors at the Oregon state fair this fall, and was declared by the judge there to be the best Berkshire boar he ever saw. His massive bone, deep body, short, straight pasturns and stretch mark him as a really great boar of the breed. Humphrey won junior championship on G. W. Charmer 2d, a senior pig of stretch, high back, good bone and feet. Escalon Artful Princess, the senior and grand champion sow, is an Humphrey entry also, a great 2-year-old, heavy with pig, which increased her great depth, but pressed down her pasterns a little. The junior champion sow, River Banks Baroness 5th, is a junior pig, growthy and with good bone and feet, a strong back and approved type.

Judge: E. H. Hughes, Davis, Cal.

Boars: Aged—1, A. B. Humphrey, Escalon, Cal., on Escalon Artful Leader 5th; 2, River Banks farm, Grants Pass, Ore., on River Banks Champion 26th. Senior yearling—1, River Banks farm on River Banks Mastodon (senior and grand champion); 2, Humphrey on G. W. Demonstrator. Junior yearling—1 and 2, River Banks farm on River River Banks Longfellow 3d and River Banks Longfellow 4th. Senior pig—1 and 5, Humphrey on G. W. Charmer 2d (junior champion) and Escalon Artful Leader 12th; 2 and 3, River Banks farm on River Banks Mastodon 7th and River Banks Mastodon 8th; 4, Oregon Agricultural college, Corvallis, Ore., on August Dominator. Junior pig—1 and 2, River Banks farm on River Banks Longfellow 5th and River Banks Longfellow 6th; 3 and 4, Humphrey on G. W. Leader 22d and G. W. Leader 23d; 5, O. A. C. on Domino; 6, A. Blokland, La Grande, Ore., on unnamed.

Females: Aged—1 and 2, Humphrey on Escalon Artful Princess (senior and grand champion) and G. W. Bernice 13th; 3 and 4, River Banks farm on River Banks Laurel 45th and River Banks Laurel 34th; 5, Kenneth Hinshaw, Goldendale, Wash., on Grapewild Fashion 5th. Senior yearling—1 and 2, Humphrey on G. W. Rose 39th and G. W. Rose 40th; 3, James Richards, Mount Angel, Ore., on Leader's Lady 18th; 4 and 5, River Banks farm on River Banks Longlady 4th and River Banks Longlady 5th; 6, Gilbert Dickson, Mount Angel, Ore., on Leader's Lady 17th. Junior yearling—1 and 2, Humphrey on Escalon May 32d and Escalon Lassie Rose 5th; 3 and 4, River Banks farm on River Banks Longlady 6th and River Banks Longlady 17; 5, O. A. C. on Ruth Dominator. Senior pig—1 and 2, River Banks farm on River Banks Baroness 4th and River Banks Baroness 2d; 3 and 4, Humphrey on G. W. Fashion 9th and G. W. Bernice 21st; 5, O. A. C. on Violet's Dominator 5th; 6, Hinshaw on Violet's Dominator 4th. Junior pig—1 and 4, River Banks farm on River Banks Baroness 5th (junior champion) and River Banks Longlady 9th; 2 and 3, Humphrey on G. W. Rose 45th and G. W. Princess 7th; 5 and 6, O. A. C. on Dominator's Violet 2d and Dominator's Violet 3d.

Aged herd—1 and 2, Humphrey; 3 and 4, River Banks farm. Aged herd bred by exhibitor—1 and 2, Humphrey; 3 and 4, River Banks. Young herd—1 and 3, River Banks farm; 2 and 4, Humphrey; 5, O. A. C.; 6, Blokland. Breeder's young herd—1 and 3, River Banks; 2 and 4, Humphrey; 5, O. A. C. Get of sire—1 and 4, Humphrey; 2 and 3, River Banks farm; 5, O. A. C.; 6, Blokland. Produce of dam—1 and 2, River Banks farm; 3, Humphrey; 4, O. A. C.; 5, Blokland.

Hampshires.

Never have the belted hogs made a better showing here, and the number of exhibitors was encouraging to the lovers of the breed. One herd came from California and one from Idaho, with five from the home state showing from a few to a full herd. Awards were fairly well divided, with J. M. Fruitts of Cambridge, Idaho, the heaviest winner. He and A. V. Buell of Carpinteria, Cal., each won two of the championships and each a purple ribbon. Senior and grand champion boar went to Buell on the 3-year-old, Dreamwold Parole, with strong back, immense bone and approved Hampshire type. His junior champion sow, Viola, a senior pig, has been grand champion three times in big California fairs. She has type, size and quality. The junior champion boar is a junior pig with stretch, wonderful feet and plenty of bone. J. M. Fruitts, who bred and showed him, has won many high awards with this dam. His senior and grand champion sow, Silver Moon, a junior yearling, is big and smooth, with ideal feet and stretch and depth.

Judge: E. H. Hughes, Davis, Cal.

Boars: Aged—1, A. V. Buell, Carpinteria, Cal., on Dreamwold Parole (senior and grand champion); 2, J. M. Fruitts, Cambridge, Idaho, on Silver King; 3, F. A. Welch, Gresham, Ore., on Lookout Silk; 4, Adams' Eden farm, Warren, Ore., on Emergency Lad. Senior yearling—1, De Young & Jones, Battle Ground, Wash., on Dandy Boy. Junior yearling—1, Welch on King Sappnire; 2, Fruitts on Tipton Chief; 3, Buell on T. N. T. Senior pig—1 and 2, Fruitts on Quargo Tipton Master and Rambling Kid 2d; 3, Buell on Spark Plug; 4 and 5, De Young & Jones on Maple Grove's Master and Maple Grove's Go-Getter. Junior pig—1 and 2, Fruitts on unnamed (junior champion) and unnamed; 3 and 4, Adams' Eden farm on unnamed and Tiptoe Lad; 5, L. H. Stone, Troutdale, Ore., on unnamed; 6, Buell on King Tut.

Females: Aged—1 and 3, Fruitts on Alabama and Fruitts Model; 2 and 4, Buell on Floreine 2d and Senator Maid; 5 and 6, Adams' Eden farm on Polly Perkins and Maggie Jiggs. Senior yearling—1 and 3, Fruitts on Midnight and Goodenough; 2 and 4, Buell on Mary Marie and Thyer; 5, Adams' Eden farm on Cherokee Lass. Junior yearling—1 and 3, Fruitts on Silver Bell (senior and grand champion) and Silver Moon; 2, 4 and 6, Buell on Our Princess of H, Nellie A and Tot; 5, Welch on Lieutenants Lassie 23d. Senior pigs—1 and 2, Buell on Viola (junior champion) and Two-spot; 3 and 4, Fruitts on Spark Plug and Snake River Nellie; 5, Adams' Eden farm on Sallie of Eden; 6, Stone on Jenny Lind. Junior pig—1 and 2, Fruitts on unnamed; 3 and 6, Welch on Welch's Oline and Welch's Doll; 4 and 5, Buell on Dolly of Hillcrest 1st and Dollie of Hillcrest 3d.

Aged herd—1 and 3, Fruitts; 2 and 4, Buell; 5, Welch; 6, Adams' Eden farm. Aged herd bred by exhibitor—1, Fruitts; 2, Buell. Young herd—1 and 4, Fruitts; 2 and 3, Buell; 5, Welch; 6, Adams' Eden farm. Young herd bred by exhibitor—1 and 4, Fruitts; 2 and 3, Buell; 5,

(Continued on the following page.)

The Pacific International

(Continued from preceding page.)

Adams' Eden farm. Get of sire—1 and 5, Fruitts; 2 and 3, Buell; 4, Adams' Eden farm; 6, Welch. Produce of dam—1 and 4, Fruitts; 2 and 3, Buell; 5, Adams' Eden farm; 6, Welch.

FAT STOCK.

Here Are the Awards on Fat Stock.

Fat Cattle.

Shorthorns (purebred, grade or cross-bred steer): Senior yearling—1, University of Idaho, Moscow, Idaho, on Seeley's Gift; 2, University of California, Davis, Cal., on Topsman; 3, A. Bendler, Cornelius, Ore., on Bender's Mildred. Junior yearling—1, T. S. Glide, Davis, Cal., on Hillcrest Jack; 2, U. of I. on Red Knight; 3 and 4, Washington State college, Pullman, Wash., on Chinook Gift 2d and Chinook Gift 3d. Senior calf—1, Mounterest ranch, Holt, Cal., on Straloch Challenger; 2, Montana State college, Bozeman, Mont., on Roan Brace; 3, George Bertrand, Castle Rock, Wash., on Criterion; 4, John Mathieson, Hot Lake, Ore., on Snowball; 5, Glide on Hillcrest Commander. Junior calf—1 and 4, U. of I. on E-dah-ho (champion), and Sultan Sunshine; 2, F. M. Rothrock, Spokane, on Hercules 3d; 3, W. S. C. on Cumberland Rex. Herd of three—1, U. of I.; 2, W. S. C.

Herefords (purebred, grade or cross-bred steer): Senior yearling—1, Montana State college on Avalon Pride; 2, O. A. C. on Belmont 2d; 3, L. E. Willard, North Portland, Ore., on unnamed; 4, U. of C. on California Lincoln Lad. Junior yearling—1, U. of I. on Everlasting; 2 and 4, M. S. C. on Montana Jack C and Augustus; 3, A. Blokland, La Grande, Ore., on unnamed; 5, A. H. Barnum, Moro, Ore., on Carlos Stamp. Senior calf—1 and 2, Mounterest ranch on Sir Colent and Beau Perfect; 3, U. of I. on Prince Donald; 4, O. A. C. on Anxiety Silk; 5, Herbert Chandler, Baker, Ore., on unnamed; 6, Barnum on Bonnie Lad. Junior calf—1, A. B. Cook, Townsend, Mont., on Panama 164th (champion); 2, M. S. C. on Floweret C; 3, U. of I. on Deserter; 4, Barnum on Bonnie Carlos. Herd of three—1, M. S. C.; 2, U. of I.; 3, Barnum.

Aberdeen Angus (purebred, grade or cross-bred steer): Senior yearling—1 and 3, Congdon & Battles, Yakima, Wash., on Black Betsy and Roseman 3d; 2, U. of C. on U. C. Jock 6th. Junior yearling—1, Congdon & Battles on Blackbirdman C. B. 20th; 2, J. A. Scollard, Chehalis, Wash., on Ericmead 5th. Senior calf—1 and 2, U. of I. on Advance of Netherwood and Ace of Netherwood; 3, Congdon & Battles on Queenmore 21st. Junior calf—1, Congdon & Battles on Queenmore 24th (champion). Herd of three—1, Congdon & Battles.

Grand champion steer of the show—University of Idaho on E-dah-ho, Shorthorn.

Car lots: Two years or over—1 and 3, Rothroth; 2, J. E. Smith, St. Paul, Ore. Yearlings—1, Rothrock; 2, Glide; 3, W. J. Townley, Hot Lake, Ore.

Feeder cattle: Two years or over—Blokland. Champion carload—Rothrock, Shorthorns. Champion carload feeding steers—Blokland, Herefords.

Fat Sheep.

Rambouillet: (Champion) Yearling wether—1 and 2, University of California, Davis, Cal.; 3, J. M. Moran, Starbuck, Wash. Wether lamb—1, Moran. Pen of 3—1, Moran.

Southdown: Yearling wether—1, 2 and 4, University of Idaho, Moscow, Idaho; 3, U. of C.; 5, J. G. S. Hubbard & Son, Monroe, Ore. Wether lamb—1 (champion) and 2, U. of C.; 3 and 4, U. of I. Pen of 3—1, U. of C.; 2, U. of I.

Shropshire: Yearling wether—1 (champion) and 2, U. of I.; 3 and 5, U. of C.; 4, Oregon Agricultural college, Corvallis, Ore. Wether lamb—1 and 3, U. of C.; 2 and 4, U. of I. Pen of 3—1, U. of C.; 2, U. of I.

Hampshire: Yearling wether—1 (champion), U. of C.; 2, Thousand Springs farm, Wendell, Idaho; 3, O. A. C. Wether lamb—1, Foothills farm, Carlton, Ore. Pen of 3—1, Washington State college, Pullman, Wash.

Oxford: Wether lamb—1 (champion), Eldon Fox, Silverton, Ore. Pen of 3—Fox.

Dorset: Wether lamb—1 (champion), Fox. Pen of 3—1, Fox.

Romney Marsh: Yearling wether—- (champion), William Riddell & Sons, Monmouth, Ore.

Cotswold: Yearling wether—1 (champion), O. A. C. Wether lamb—1, O. A. C. Pen of 3—1, O. A. C.

Lincoln: Yearling wether—1 (champion), James Coffield, Goldendale, Wash.

Grades and crossbreeds (medium wool or down types): Yearling wether—1 and 3, U. of C.; 2, U. of I.; 4, Corriedale Sheep company, Hollister, Cal.; 5, Archie C. Stewart, Aldergrove, B. C. Wether lamb—1 (champion) and 2, U. of C.; 3 and 5, Anton F. and Eugene L. Harms, Pullman, Wash.; 4, U. of I. Pen of 3—1, U. of C.; 2, Harms.

Grades and crossbreds (long wool types): Yearling wether—1, Kenneth Hinshaw, Goldendale, Wash.; 2, O. A. C.; 3, U. of I. Wether lamb—1 (champion), David Kirby, McMinnville, Ore. Pen of 3—1, Kirby.

Grand champion wether of the show—University of California.

Car lots—1 and 2, Bohoskey & Creath, Lyle, Wash.; 3, T. B. Johnson, La Grande, Ore.

FAT HOGS.

Poland Chinas: Heavy barrow—1 and 4, University of California; 2 and 3, Oregon Agricultural college; 5, W. L. Creech, Salem, Ore. Light barrow—1 and 2, Creech; 3 and 4, Walter; 5, R. W. Hogg, Salem, Ore. Pen of 3 heavies—1, O. A. C.; 2, U. of C. Pen of 3 lights—1, Creech; 2, Hugh Walter, Townsend, Mont.; 3, Hogg; 4, Kelly Ranch company, Helmville, Mont.

Duroc Jerseys: Heavy barrow—1 and 2, U. of C.; 3, W. F. McCall & Co., Salem, Ore.; 4, A. N. Doerfler, Silverton, Ore. Light barrow—1, Doerfler; 2, Mossdale farm, Lockeford, Cal.; 3, Doerfler; 4, Billy Wangaman, Hermiston, Ore.; 5, McCall & Co. Pen of 3 heavies—U. of C. Pen of 3 lights—1, Doerfler; 2, Mossdale farm; 3, W. F. Bartlett, Camas, Wash.; 4, Billy Wangaman; 5, McCall & Co.

Chester White: Heavy barrow—1, Cass Nichols, Salem, Ore.; 2, Theodore Resch, Aurora, Ore. Light barrow—1 and 2, Avrial Brown, Corvallis, Ore.; 3 and 4, Resch; 5, Nichols. Pen of 3 heavies—1, Resch. Pen of 3 lights—1, Brown; 2, Resch; 3 and 4, Nichols.

Berkshires: Heavy barrow—1 and 2, River Banks farm, Grants Pass, Ore.; 3 and 4, U. of C.; 5, O. A. C. Light barrow—1 and 2, U. of C.; 3, River Banks farm; 4, A. B. Humphrey, Escalon, Cal.; 5, Albert Strauss, Eagle Point, Ore. Pen of 3 heavies—1, River Banks farm; 2, U. of C. Pen of 3 lights—1, U. of C.; 2, Humphrey; 3, River Banks farm; 4, Elmore Tedrick, Eagle Point, Ore.; 5, Strauss.

Hampshires: Heavy barrow—1, U. of C.; 2 and 3, J. M. Fruitts, Cambridge, Idaho. Light barrow—1 and 2, Fruitts; 3, Lester Hamilton, Central Point, Ore.; 4, John Lathrop, Medford, Ore. Pen of 3 heavies—Fruitts. Pen of 3 lights—1, Fruitts; 2, Hamilton; 3, Lathrop; 4, Vernon Turpin, Medford, Ore.; 5, Richard Anderson, Central Point, Ore.

Grades and crossbreds: Light barrow—1 and 2, Howard Norris, Goldendale, Wash.; 3 and 4, Bruce Willard, Dayton, Ore. Pen of 3 lights—1, Norris; 2, Willard.

Grand champion barrow, any breed or weight—University of California on heavy Poland China.

Grand champion pen—River Banks farm on Berkshires.

Carload lots: Lights—1, J. F. McNaught, Hermiston, Ore.; 2, T. B. Johnson, La Grande, Ore.; 3, Kelly Ranch company, Helmville, Mont.; 4, Hermiston Poland China Breeders' association, Hermiston, Ore. Heavies—1, George Strohm, Hermiston, Ore.

Champion carload of the show: McNaught, on Poland Chinas.

In the horse show awards, published elsewhere in this issue, Professor E. L. Potter judged the Percherons and Shires and Professor W. J. Kennedy the Clydesdales and Belgians.

The sheep awards and other features of the Pacific International will be given in early issues of The Washington Farmer.

Corn Makes Good Yields

"Corn does well in this section of the irrigated country," remarked W. M. Zindel of Kennewick, "and if properly cared for it will make good yields. The worst enemy we have to fight is the worms that come in from the silks and eat the kernels in the milk stage. This, however, does not injure the corn to any great extent if we can use it at home for feed and it therefore opens a possibility for hog feed.

"Almost any variety of Dent corn will grow well here and I hope to find some kind that will mature early enough to ripen before the worms affect it. Corn worms seem to be the worst enemy we have here and some of the growers have used the lead arsenate powder, which is dusted onto the silks at the proper time. This, however, takes a lot of time and it adds to the chores that are necessary at that time of the year. If it is found to do the work, it would be worth while and farmers could well afford the time in order to produce a better grade of corn.

"While much of the corn grown in this district is grown for silage, there are more and more that are raising crops for the grain and they have the stover to feed to the cows or horses, or it can be put into the silo dry if water can be added in the cutter or run in with a hose when the silage is tramped. It should be remembered, however, that stover silage which has had the ears removed does not have as high feeding value as does silage made from the entire corn plant in the ordinary manner."

Barns and Dungeons!

Bright Lights, More Eggs

Keeping the Iron Hot

Lighting the Bedroom

Lighting the Living Room

A dark barn is as cheerless as a dungeon. Its gloom makes easy work harder, robs you of time for other things.

Darkness is an enemy, ever ready to lead you into accident—or worse.

Thirty-one years ago science made a wonderful discovery—the way to banish darkness on the farm. That discovery was Union Carbide. A little mixed with common water makes Union Carbide Gas, which gives the most beautiful and restful light known, and the hottest flame for cooking, ironing, or water heating. 398,000 strong has been the farmers' response!

The Colt "Gas Well" makes this Union Carbide Gas automatically

The Colt "Gas Well" is planted at a convenient place in the yard. It makes Carbide Gas just as needed. Small iron pipe carries the gas to all parts of the house, barn, and other outbuildings. No matches required for lighting. For many years, on thousands of farms in every State in the Union, Colt "Gas Wells" have been taking the gloom out of the morning and evening chores.

With the Colt "Gas Well" on *your* farm you won't have to hurry to get the night chores done while there is yet light of day. You can do more and better work—and be safer, too! You won't have to guess about that loose board—that top step—that doorsill—nor your stock, either. Colt "Gas Wells" are helping thousands make their farms pay. Why not for you, too? You buy Union Carbide direct from Union Carbide Warehouses at factory prices.

Get your Colt "Gas Well" now—take a year to pay

Get the story of what the Colt "Gas Well" is doing on other farms. Learn all that Union Carbide Gas will do for you—learn how to light up the henhouses and harvest more eggs. The first step is to send in the coupon NOW.

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Pacific International Horse Show

(Continued from page twelve.)

der 8—First M. W. Merritt on Martha Washington (senior and grand champion); second, E. P. Swarbuck, Idaho Falls, Idaho, on Primrose; third, H. W. Merritt on Lady Victoria Rose. Three-year-olds—First, Clark on Mary Pickford; second, H. W. Merritt. Two-year-olds—First, H. W. Merritt on Nancy Lee. Yearlings—First and second, H. W. Merritt on Princess Victoria and Bessie Gould. Filly colts—First and second, H. W. Merritt on Henry Retta (junior champion) and Lillie Hollis.

Mare and foal—First, M. W. Merritt; second and third, H. W. Merritt. Get of sire—First and second, H. W. Merritt; third, M. W. Merritt. Five animals—First, H. W. Merritt.

CLYDESDALES.

Robert C. McCroskey of Garfield, Wash., was the sole exhibitor of Clydesdales, but many a show with competition has had less quality. His 15 head, in charge of H. W. White, made a thoroughly representative show. In a majority of the classes he had two entries and the judge had some work in placing them. His aged herd sire, Hope's Pride, 10 years old, with lots of substance, type and quality, and standing up like a 4-year-old, was made senior and grand champion, with the 2-year-old, Sir Harry Lauder, that beat the old horse for grand champion at the Washington state fair, as junior and reserve champion. June, senior and grand champion mare, has the type, bone and breedy look that stamp a great Clydesdale. She has been a winner at many other shows, although the 3-year-old, Bonnie Brae Jean, has been placed above her at one or two fairs. The latter is smoother, but has scarcely the size or bone.

The Awards.

Stallions: Herd sire, 8 years or over—First, Hope's Pride (senior and grand champion). Four years and under 8—First, Megg's Chief. Two-year-old—First, Sir Harry Lauder (junior champion), and second, Prince.

Females: Brood mare, 8 years or over—First, Lady Ramsey 2d; second, Colony Nancy. Four years and under 8—First, June (senior and grand champion); second, Fairholme Meg. Three-year-old—First, Garfield Belle; second, Bonnie Brae Jean. Two-year-old—First, Lady May (junior champion). Yearling—First, Bonnie Brae Gem; second, Bonnie Brae Topsy. Filly colt—First, Bonnie Brae Nancy; second, Bonnie Brae Peggy.

Mare and foal—First and second. Get of sire—First and second. Produce of dam—First and second. Five animals—First.

JACKS.

A. C. Ruby, Portland, Ore., was the only exhibitor. Most of his entries had good bone and plenty of size. His awards included first on 4-year-old, 3-year-old, 2-year-old, yearling, colt, produce of dam and five jacks, also senior and grand champion on Cress, junior and reserve champion on Sam W.

Women Make Own Hats

It was not the question as to whether, "Have I money for a new hat," but rather, "Have I time to attend the meeting when they teach me how to make a new hat?" that bothered the Spokane farm women. As the result of millinery extension work conducted in Spokane by Miss E. Belle Alger, clothing specialist of the extension service of the State College of Washington, and Miss Inez Arnquist, home demonstration agent of Spokane county, 262 new hats were made, 58 remodeled and 108 newly trimmed during the summer months. Local women leaders were trained in schools and then went home to their respective communities and helped their neighbors with their hat making. Mrs. Howell, a leader at Vera, put on a class in millinery after attending the county school and trained 12 other women.

THE FIRST ARTIFICIAL TEETH.

Rubber dental plates came into use in 1855, but artificial teeth date from an earlier period. We find one of Washington's biographers authority for the statement that the settled expression of mouth acquired in later years by the great patriot was at least partly due to artificial teeth.

Your Health

By Royal S. Copeland, M. D., F. A. C. S.

This is the season when you take long walks beside the sea, in the field and woods or on the mountains. You are likely to slip and fall. As a result you may sprain your ankle. What is to be done?

Dr. Copeland.

You attempt to get home by the help of a stick or by some conveyance. Then you apply cold compresses until the pain subsides, and you are satisfied there will not be great swelling.

If the cold applications do not relieve the pain you may try hot-water compresses. The latter are more grateful and useful in some cases.

After these applications have been discontinued, the foot should be bandaged, beginning at the toes and gradually wrapping the foot, ankle and lower part of the leg. This bandage should be left in place until you can provide yourself with adhesive plaster. When it can be had, cut strips of adhesive about half an inch wide. Beginning at the great toe, apply the adhesive around the edge of the foot, back of the heel, across the top of the foot to the place of beginning.

Start the next strip a little above the first, but overlapping it.

Keep on till the foot is covered. Then carry a strip from one side of the ankle, under the heel, to the opposite side of the ankle. Overlap this with another strip and keep on till the foot is covered.

This arrangement protects the foot and ankle and thoroughly supports it. The injured person may not be able to walk on the foot, but anyhow he will be very comfortable.

After the pain, tenderness and swelling have disappeared, the part should be massaged and exercised carefully.

An injury to the knee or to another joint may cause great pain. If in the knee, it is almost impossible to bend the leg. Every effort to walk is painful.

Under these circumstances the point should be "fixed." That is, it should be so dressed that it can not be bent. It may be covered with a layer of cotton to protect the skin, and then firmly bandaged from the ankle to some distance above the knee.

It is amazing how quickly the pain disappears after fixing the joint.

LEGUMES PLOWED UNDER.

Over 652,000 acres of legumes were plowed under for green manure in 1922 by farmers following the advice of agricultural extension workers on methods of building up soil fertility, according to reports to the United States department of agriculture.

As a man eateth so is he —

THINKING moulds the mind and exercise develops the body, but food supplies the materials for building mind and body.

Grape-Nuts, made from wheat and malted barley, is a crisp, delicious cereal food, rich in wholesome nutriment.

The important mineral elements of the grains are readily available in this splendid food. The essential Vitamin-B is supplied in generous measure. The nutritious starches of the wheat and barley are partially pre-digested by 20 hours' baking.

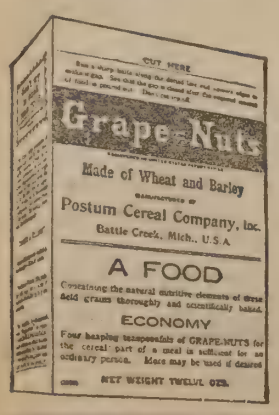
Grape-Nuts with milk or cream is a complete food. Its compact form makes a little go a long way.

Sold by Grocers Everywhere!

GRAPE-NUTS
Six Minute Pudding

1 cup Grape-Nuts
1½ cups scalded milk
1 tablespoon sugar
½ cup raisins

Cover Grape-Nuts with scalded milk. Add sugar, raisins, and a little nutmeg. Cook six minutes directly over the heat, stirring constantly, and serve with any good pudding sauce. Makes four to six portions.



Grape-Nuts
— THE BODY BUILDER
"There's a Reason"

FARMERS' WANT ADS

MONUMENTS F

COMPLETE STOCK. WRITE FOR DESIGNS and prices. Inland Monument Co., N1001 Monroe, Spokane.

HELP WANTED—MALE 3

ALL MEN, WOMEN, BOYS, GIRLS, 17 TO 65, willing to accept government positions, $117-$250, traveling or stationary. Write Mr. Ozment, 208, St. Louis, Mo., immediately.

WANTED—FARMER ON DAIRY AND HOG ranch near Spokane; salary $800 year, with house rent, fuel, feed for cow and garden patch. Write A 8, Washington Farmer, Spokane.

PERMANENT POSITION FOR ALL ROUND practical farm hand. C. E. Logsdon, Grants Pass, Ore.

SITUATIONS WANTED—Female 18

MIDDLEAGED WIDOW (SMALL BOY), DESires housekeeping, gentleman's house or cooking, small crew; modern conveniences; reasonable wages only considered. A 9, Washington Farmer, Spokane.

SCHOOLS AND COLLEGES 26

EARN $110 TO $250 MONTHLY; EXPENSES paid as railway traffic inspector; position guaranteed after completion of 3 months' home study course or money refunded. Excellent opportunities. Write for free booklet G-157, Stand. Business Training Inst., Buffalo, N. Y.

FRESH FOOD PRODUCTS 51-3

FISH—4 LBS. SMOKED SALMON, $1; 4 LBS. Alaska salmon bellies, $1; 4 lbs. black cod, $1; 3 lbs. best codfish, $1; delivered by mail. Coffin Fish Co., Seattle, Wash.

CHOICEST DRIED FRUITS, DIRECT—Prunes, cherries, loganberries. Send for complete list of prepaid prices. Kingwood Orchards, Salem, Ore.

DRIED OREGON PRUNES, $7 PER 100 pounds. Fred Kubin, Route 2, Salem, Ore.

MERCHANDISE 51-5

YOUR ANNUAL OPPORTUNITY—FOR QUICK disposal we offer salesmen's samples of woolen goods, underwear, hosiery, blankets, sheep-lined coats, mackinaws, leather vests, etc., at one-third to one-half less than regular prices. Our price list of sample goods is now ready. Send for it today. Minneapolis Woolen Mills Co., Dept. 23, 612 1st ave. North, Minneapolis.

ARMY GOODS—PURE O. D. WOOL BLANkets, $3.50; O. D. pure wool long pants, $2.95; O. D. wool breeches, $1.95; army wool shirts, $3.25; wool socks, 25c; cotton socks, 10c. Order from this ad; postage paid. Write for big illustrated catalog. Walker's Army Store, Lewiston, Idaho.

FARMERS DRY GOODS STORE, 1211 FIRST, Spokane, undersells them all on dry goods, notions, shoes, rubber footwear, bedding, household supplies etc., because we're out of the high rent district. Mail us your orders.

SPECIAL—ONE-POUND TIN "SATISFACTION tobacco" and pipe for $1. Smoking, chewing tobacco, cigars, cigarettes and complete line of pipes. Wholesale and retail. Peter M. Jacoy, 3 Washington st., Spokane.

HONEY 53

FINEST HONEY, FIVE POUNDS, $1; TEN pounds, $1.95, postpaid; sixty pounds, $7.50; two cans, $14.50; add transportation. Satisfaction guaranteed. Bancroft Apiaries, Hermiston, Ore.

KING CLOVER'S ALFALFA-SWEET CLOVER honey; 60-lb. can, $7.50; two cans, $14.50; 60-lb., prepaid, second zone, $8.29. King Clover, Sunnyside, Wash.

ALFALFA, SWEET CLOVER HONEY, PREpaid second zone, 3 10s, $5; 60 lbs., $8.30; two cans, $14.50, not prepaid. Harry Fisher, Prosser, Wash.

HAPPY HOME HONEY — ALFALFA AND clover; 60-lb. can, $7.50; two cans, $14.50; case six 10-lb. pails, $8.50. H. N. Paul, Mabton, Wash.

EXTRACTED HONEY FOR SALE—WELLS D. Rose, Sunnyside, Wash.

MISCELLANEOUS—FOR SALE 60

TOBACCO—EXTRA FANCY SMOKING, 10 pounds, $2.50; good smoking, 5 pounds, $1; 10 pounds, $1.50; 20 pounds, $2.75; chewing, 5 pounds, $1.50; 10 pounds, $2.75; quality guaranteed. O'Connor Smokehouse, S104 Mayfield, Ky.

NATURAL LEAF TOBACCO—CHEWING, 5 lbs., $1.75; 10 lbs., $3; smoking, 5 lbs., $1.25; 10 lbs., $2. Pay when received; pipe and recipe free. Farmers' Tobacco Union, D19, Paducah, Ky.

MISCELLANEOUS—FOR SALE (Continued) 60

SASH AND DOORS—O. B. WILLIAMS CO., 1943 First ave. So., Seattle. Chicken house sash, 20" wide by 25" high, 80c; a dozen different sizes in stock for immediate shipment. Skylights for chicken houses, 36"x40"; price, glazed, $2. This is the size recommended by the Western Washington experiment station. We carry them in stock for immediate shipment. Sash and doors for all purposes at lowest prices. All orders receive prompt attention. Our large illustrated catalog No. 35, showing full line of building material and built-in fixtures for the home, free on request. O. B. Williams Co. Established 1899.

PIPE—GET PARTICULARS ON OUR SPEcial flue pipe, 1¼, 1½ and 2 inch. Big saving on it. We also have all sizes second-hand and new standard pipe at low prices. We also save you on roofing, belting, pumps, engines, cables, etc. Alaska Junk Co., S120 Adams, Spokane, Wash.

TOBACCO — SELECT THREE-YEAR-OLD leaf; nature cured; 3 lbs. chewing, $1; 4 lbs. smoking, $1; 7 lbs., No. 2 smoking, $1. Pay for tobacco and postage when received. Farmers' Grange, Hawesville, Ky.

WALL BOARD—WRITE FOR SAMPLE OF Washington plaster wall board; won't warp, won't burn. Manufactured by Washington Building Products company, 6851 E. Marginal Way, Seattle, Wash.

NATURAL LEAF TOBACCO—5 LBS. CHEWing, $1.75; 10 lbs., $3; 5 lbs. smoking, $1.25; 10 lbs., $2. Pay when received; pipe and recipe free. Cooperative Farmers, Paducah, Kentucky.

TOBACCO—KENTUCKY'S PRIDE: EXTRA fine chewing; 10 pounds, $3; smoking, 10 pounds, $2; 20 pounds, $3.50. Farmers' Club, Mayfield, Ky.

ALL WOOL KNITTING YARN FOR SALE from manufacturer, 95c up per lb; golf and plain socks. Free samples. H. A. Bartlett, Harmony, Maine.

ARMY GOODS BARGAINS — WRITE FOR catalogue. Simon's Army Supply Store, 309 Riverside ave., Spokane.

50,000 SACKS FOR SALE. INLAND HIDE & Junk Co., W21 Main, Spokane.

MISCELLANEOUS. 61

ELIJAH COMING BEFORE JESUS, FREE book. N. Megiddo Mission, Rochester, N. Y.

ELECTRICAL MACHINERY 92

NEW DYNELECTRIC FARM LIGHTING plant, complete, $225; regular price $495. Miller, 72 Marion st., Seattle.

MACHINERY—For Sale 93

2-HORSEPOWER GAS ENGINE, $65; 4-horsepower gas engine, $100; 4½-horsepower gas engine, $85. Exchange Machinery Co., W20 Riverside, Spokane.

AUTOMOBILES—FOR SALE 113

SEE CHEVROLET FIRST—NEW AND USED cars at prices that will surprise you; stop in or write Inland Empire Chevrolet Sales Corp., 916 2d ave., Spokane. Open evenings. Open Sunday.

AUTO ACCESSORIES AND PARTS 119

NEW AND USED AUTO PARTS, NEARLY ALL cars. Our low prices and prompt service will convince you. Money refunded if not satisfied. C. & D. Auto Salvage & Supply Co., 1904 Grand ave., Kansas City, Mo.

SATISFACTORY SERVICE—THE MOST COMplete stock of new standard make automobile repair parts. Pacific Gear & Auto Parts Co., 1022 First ave., Spokane, Wash.

STOVE REPAIRING 128

WRITE MYER RUBENS, SPOKANE, ABOUT stove repairs, welding broken parts, nickel plating.

PETS—Dogs, Birds, Etc. 171

FOR SALE—BEAUTIFUL COLLIE PUPPIES, $10 each; satisfaction guaranteed. Write Fred Schneider, Albany, Ore.

FOR SALE — FOXHOUND PUPS, BROOD bitches; thoroughbred stock. A. E. Heath, Redmond, Wash.

FIFTY PAIRS YEARLING ROLLER CANARies, fifteen dollars a pair. Mrs. J. Wellborn, Wafren, Ore.

FOR SALE—PUREBRED NEWFOUNDLAND puppies, beauties. Fred Schneider, Albany, Ore.

(Continued on the following page.)

PETS—Dogs, Birds, Etc. (Continued) 171

FOX HOUND PUPS, BEST BRED DOGS ON the coast. J. E. Bateman, Gales Creek, Ore.

WHITE COLLIE PUPPIES FOR CHRISTMAS delivery. Urbandale Farm, Oakley, Idaho.

RABBITS and HARES. 173

RABBITS, TOULOUSE GEESE HAVE MADE my living for 10 years. Prize winning blue Flemish Giants, New Zealand Reds, Himalayans, at utility prices. Agnes Brenner, R4, Box 49, Tacoma, Wash.

FOR SALE—PEDIGREED AMERICAN BLUE and black Siberian rabbits, $3. Black Canyon Rabbitry, Emmett, Idaho.

POULTRY—Baby Chicks 174

CERTIFIED WHITE LEGHORN QUALITY chicks from selected free-range, heavy-laying, utility hens, mated to double pedigree cockerels with authentic trapnest records. Our breeding flocks are inspected and accredited by the Sonoma county farm bureau. Safe arrival and full count of live, vigorous chicks guaranteed. Booking orders now for the spring season of 1924 delivery. Send for catalogue and attractive prices. Must Hatch Incubator Co., Inc., the world's largest electric hatchery, 445 Seventh st., Petaluma, Cal.

"FRESHLAID" WHITE LEGHORN CHICKS for 1924 will produce results. Thirteen years hatching of real chicks. High record males, vigorous, mature females, unlimited free range, a chick producing proposition hard to beat. We send out chicks that will make you a permanent customer. Discount on large orders. World's largest electric incubator. Free catalog. Freshlaid Farm, Colfax, Wash.

ACCREDITED CHICKS—ALL OUR CHICKS for 1924 will be from accredited flocks mated with certified cockerels sired by hens with 225-egg record. A limited number of chicks from cockerels sired by our $1000 champion cockerel and our world's record pen of hens. Write for special prices for those who order early. Queen Hatchery, 1430 1st ave., Seattle, Wash.

"HENACRES" BABY CHICKS FOR 1924—Booking orders now. Early orders get delivery when wanted. We never have enough February, March or April chicks to meet the demand. Strictly high grade chicks at common chick cost. $22 per 100; $200 per 1000. Free catalog. "Henacres," Box A, Prosser, Wash.

WHY DELAY?—PLACE YOUR ORDER FOR 1924 chicks with the White Hatchery, the hatchery with a reputation for good chicks. Safe arrival, full count guaranteed. Member Accredited Hatcheries, Sonoma county, "A" and "AA" stock. Price right. Send for catalog. White Hatchery, Petaluma, Calif.

S. C. WHITE LEGHORN CHICKS, 100 PER cent live, delivery guaranteed; 20 per cent books order. 100, $16; 500, $75; 1000, $140, postpaid; hatch only eggs from my own flock; no lights; trap records to 292. Absolutely only one grade. Catalog free. Roy S. Hands, B614, Cottage Grove, Ore.

WHITE LEGHORN BABY CHIX FROM flocks mated to males having sire's dam record of 240 to 297 eggs per year. Full particulars and interesting literature on request. We are accredited by Sonoma county farm bureau. The Pioneer Hatchery, 422 Sixth street, Petaluma, Cal.

TRAPNESTED WHITE LEGHORNS, HOLLYwood and O. A. C. stock. We offer 75,000 chicks, 25,000 hatching eggs, 5000 pullets. 11 years at the business. Satisfaction guaranteed. Booking orders now. Send for price list. Inwood Leghorn Farm, Corvallis, Ore.

PREPAID—WHITE LEGHORN CHICKS, OREgon Agricultural college stock; the famous egg producers; $16 per 100; prices on quantities. Only 10 per cent deposit. Safe arrival strong, husky chicks guaranteed. Russell Poultry Yards, Corvallis, Ore.

PUREBRED BABY CHICKS AT REASONable prices. Leghorns, Reds, Barred Rocks, White Rocks, Minorcas, Anconas. Booking orders now for '24. Postal secures free catalog. Salem Chickeries, Salem, Ore. C. N. Needham, Mgr.

1924 WHITE LEGHORN CHICKS FROM FAmous egg strains; Corvallis bred; low price, high quality; enlarged capacity to care for large orders as well as small. Oregon-Corvallis Hatchery, Corvallis, Ore.

ANCONAS—BACKED BY OFFICIAL CONTEST records and solendid list of winnings in the west's leading shows. Booking chick and egg orders. Oscar Dunlap, Junction City, Ore.

SPECIAL PRICES ON GUARANTEED DAYold pullets; fall and winter delivery. Write for particulars. Eureka Hatchery, Petaluma, Cal.

Turkeys.

FINE, FULL BLOOD RED BOURBON TURkeys, hens and toms; young stock for breeding; finest in northwest; hens, $5; toms, $9;. W. D. Gladwill, R1, Box 37, Roseburg, Ore.

PURE MAMMOTH BRONZE TURKEYS; choice breeding stock. Toms, $10; hens, $6, until December 1st. Pure Toulouse geese. Mrs. F. Crane, Hagerman, Idaho.

FOR SALE—MAMMOTH BRONZE TURKEYS, Toulouse geese, Dark Cornish and Brown Leghorn cockerels. E. A. Kruse, Roseburg, Ore.

GIANT BRONZE TURKEYS FROM PACIFIC International winning strain; circular free. Herbert Stoneberg, Route "B," Eugene, Ore.

MAMMOTH BRONZE TURKEYS—CHOICE OF 500; sires, 45 lbs.; hens, $6 to $8; toms, $10 to $20. Harry Smith, Coupeville, Wash.

BLOODED GIANT BRONZE TOMS AND hens; extra fine; prices right. Lawrence Christensen, Eugene, Ore. Box. 479.

BOURBON RED TURKEYS—150 CHOICE young toms and hens; large and well marked. Mrs. A. H. Yates, Parma, Idaho.

22 YEARS A SPECIALTY BREEDER OF M. B. turkeys; prize-winning stock. Mrs. Frank Browning, R. 1, Nampa, Idaho.

HAVE FEW FINE PUREBRED BRONZE toms for sale. J. W. Van Horn, Middleton, Idaho.

PUREBRED BOURBON RED TURKEYS; hardy stock. Napton & Napton, Homedale, Idaho.

THOROUGHBRED BRONZE TURKEYS—Toms, $10; hens, $7. Cora Burroughs, Ione, Ore.

PUREBRED MAMMOTH BRONZE TURKEYS. Mrs. S. L. Maltby, Rogerson, Idaho.

PUREBRED M. B. TURKEYS—TOMS, $7; hens, $5. D. A. Roby, Creston, Wash.

Miscellaneous Poultry.

PUREBRED S. C. RHODE ISLAND REDS, pullets and cockerels; beautiful color; good laying strain, $3, $5 and $10 each. Send your order now. Mrs. L. Wham, Double Diamond Ranch, Omak, Wash.

IMPERIAL PEKIN DUCKS, PRIZE WINNING, long bodied, heavy kind; large, choice young drakes, $3; eggs and baby ducklings, Mammoth Bronze turkeys. Low prices. H. L. Moody, Parkland, Wash.

FARMERS' WANT ADS

This is the farmers' "want," "sale" and "exchange" department for small advertisements of farmers, including live stock and poultry.

Advertising rates for ads running 1 to 3 times, 10c per word per insertion, with a special rate to Farmer subscribers, as follows: Ads running 4 to 12 times, 9c per word per insertion; ads running 13 times or more, 8c per word per insertion.

All commercial and land advertising, 10 cents per word per insertion. Open also to nonsubscribers.

In using these columns advertisers must observe (1) No advertisement will be accepted for less than $1.00 per insertion. (2) Every word, number and initial, including name and address, must be paid for. (3) New advertisements, changes of copy or cancellations must reach general office, Spokane, Wash., 10 days in advance of publication date. (4) Cash must accompany order.

Above rates include insertion in The Washington Farmer, The Idaho Farmer and The Oregon Farmer, which constitute the Pacific Northwest Farm Trio, 46 Review building, Spokane, Wash.

POULTRY—Miscellaneous (Continued) 174

BARRED ROCK COCKERELS AND PULLETS from high producing hens and undefeated show quality for nine years; $5, $7.50, $10. Jacobson's Poultry Yards, 3596 Tacoma ave., Tacoma, Wash.

PULLETS—CHOICE W. L. PULLETS, APRIL hatch; husky, free range birds of Hollywood strain; heavy laying stock; ready for the laying pens; $1.85 each. Pulletpens, Prosser, Wash.

HUNT'S BARRED ROCKS, UTILITY COCKerels from the best egg producers, Imperial Ringlets, both matings. Prices right, satisfaction guaranteed. W. A. Hunt, Lebanon, Ore.

PUREBRED S. C. WHITE MINORCA COCKerels, also White Rock cockerels; price $2 each. Mrs. Arthur Schmidt, Charlo, Mont.

BARRED ROCKS, DARK THOMPSON STRAIN; cockerels, seven months old; five to seven fifty each. S. K. Hartsock, Corvallis, Ore.

FOR SALE—PRIZEWINNING WHITE WYANdotte and White Minorca cockerels. Roy Canary, 2201 Highland, Everett, Wash.

BIRDS OF QUALITY—SINGLE COMB WHITE Minorca pullets and cockerels. J. E. Richardson, Prosser, Wash.

S. C. BROWN LEGHORNS, PEDIGREED stock. Write your wants to E. H. Rosenkranz, Colfax, Wash.

FOR SALE—S. C. BLACK MINORCA COCKerels; cheap if taken early. Mrs. A. Ludwig, Post Falls, Idaho.

ROSE COMB BLACK MINORCAS—COCKERels, $2; pullets, $1; hens, $2. Mrs. Carley, Carley, Wash.

TO MAKE ROOM, WILL SACRIFICE ROCK and Leghorn breeders. D. W. Allen, Laconner, Wash.

PRIZEWINNING IMPERIAL WHITE PEKIN ducks for breeding. R. E. Baumgardner, Chelan, Wash.

JERSEY BLACK GIANTS, FIVE MONTHS old, $2.50 and $3. E. M. Chambers, Bovill, Idaho.

PRINTING FOR POULTRY MEN. EMPIRE-Pacific Printing Co., Auditorium bldg., Spokane.

BROWN LEGHORN HENS, PULLETS AND cockerels for sale. B. Campbell, Freewater, Ore.

WHITE MINORCA COCKERELS FOR SALE. G. W. Baun, Monmouth, Ore.

POULTRY AND LIVESTOCK WANTED 175

WE GUARANTEE TO PAY THE HIGHEST market price for your poultry and live stock. Owing to the constant changes in the market we are unable to quote prices in this paper from week to week. We will furnish tags and prices when you are ready to ship. Write us what you have to sell. Prompt returns. John Lewis & Co., Spokane, Wash.

DOLLARS FOR YOUR EGGS—WE PAY THE top market prices for your eggs and poultry. Daily cash remittances. McClintock-Trunkey Co., produce department, Spokane.

WE PAY TOP PRICES FOR YOUR LIVE OR dressed veal, hogs and poultry. Your check by return mail. Shipping tags on request. M. & J. Packing Co., Spokane.

TOP PRICES PAID FOR CREAM, EGGS, poultry, turkeys, geese, ducks. Inland Products company, Second at Cedar. Dept. E, Spokane, Wash.

LIVE POULTRY WANTED—WE REMIT promptly at market prices. Commercial Creamery Co., 1327½ Railroad. Spokane, Wash.

WE WANT YOUR TURKEYS, GEESE, POULtry and eggs; highest prices, Hotchkiss Produce company, Spokane.

SHIP YOUR POULTRY AND EGGS TO THE Washington Meat & Poultry, Spokane, Wash.

LIVE STOCK 177

REGISTERED SHORTHORN BULLS OF quality and breeding; red, white or roan; polled or horned; of serviceable age or younger; priced to sell. Wm. Mulhall, Buena, Yakima county, Wash.

FOR SALE—REGISTERED DUROC, POLAND China, Chester White and Berkshire gilts and sows. Simcoe Stock Farm, Box 85, Goldendale, Wash.

SPOTTED POLANDS—HOGS ARE AT THE bottom, now is the time to buy purebreds. Howard Tucker, Route 1, Boise, Idaho.

FOR SALE—CHESTER WHITE BOARS. Write for prices. Booking orders for bred gilts. H. S. Curtis, Palouse, Wash.

FIFTEEN MONTHS' JERSEY BULL; DAM 600 lbs.; sire's dam, 1080 lbs. fat. Price, $150. Floyd Otto, Roy, Wash.

HIGH CLASS DUROC JERSEY SWINE. Young stock for sale; bank references. Dimick Stock Farm, Hubbard, Ore.

REGISTERED SPOTTED POLAND CHINA pigs, $15 each; sows and boars, any age. B. S. Brown, Lingle, Wyoming.

CHOICE DUROC JERSEY SERVICE BOARS, open and bred gilts; priced to sell. Geo. De Bok, Oregon City, Ore.

FOR SALE OR TRADE—TWO REGISTERED Shorthorn bulls cheap; male collie. J. R. Anvil, Elbe, Wash.

MILK GOATS—REGISTERED SAANENS AT prices that will please you. Ferd. H. Dietzel, Portland, Ore.

WANTED—25 TO 50 GRADE HOLSTEINS, soon to freshen; good cows. F. C. Holibaugh, Clatskanie, Ore.

REGISTERED HAMPSHIRE BREEDING bucks and ewe lambs. Far Niente Farm, R2, Bothell, Wash.

FOR SALE—9 REGISTERED GUERNSEYS: 2 bulls and 7 females. Robert McClay, R8, Salem, Ore.

REG. SHROPSHIRE AND HAMPSHIRE rams. Write McK. Edwards, Valley, Wash.

PUREBRED CHESTER WHITE SHOATS FOR sale, $15 each. Meryl Davis, Elberton, Wash.

FOR SALE—TWO REGISTERED DUROC herd boars. Parkins, Leavenworth, Wash.

MILK GOATS, BRED DOES, $10 TO $25. Fannie Branson, Dallas, Ore.

HARNESS and SADDLERY 189

SEND FOR FREE HARNESS AND SADDLE catalog today; cut out the middleman, buy direct from the manufacturer. Lowest prices in the west; satisfaction guaranteed. Established 1881. Write Pierce Harness Co., Dept. T, Spokane, Wash.

HAY FOR SALE. 200

ALFALFA, GRAIN HAY, TIMOTHY AND straw; guaranteed quality; prompt shipment. Prices upon application. Richard Nyman, Walla Walla, Wash.

HOTELS 306

WHITE'S HOTEL AND RESTAURANT. ROOMS $1 and up; special weekly rates. Stevens and Sprague. Right on the corner; 5 minutes from all depots. In heart of the business district, Spokane.

JOB PRINTING. 372

WEDDING ANNOUNCEMENTS AND INVItations, catalogs, booklets, high school annuals, letter heads, envelopes, cards, butter wrappers etc. Union Printing Co., 412 First ave., Spokane, Wash.

CLEANING, DYEING, Etc. 420

FRENCH DRY CLEANING BY PARCEL post. Ladies' and gents' suits, furs, hats, etc, prompt service. Address City Dye Works (Dept. A), E422 Sprague ave., Spokane, Wash.

TANNING 425

WE WILL TAN YOUR COW OR HORSE HIDE for robes or coats, and guarantee our work. We are custom tanners, manufacturers and taxidermists. Write for prices. Spokane Fur Tanning Co., 7 Pine st., Spokane.

ANY KIND OF HIDE TANNED WITH HAIR on, or for leather. Fur and taxidermy work done to order. M. R. Mohr Co., 321 Sprague, Spokane, Wash.

SEATTLE FUR DYEING AND TANNING CO., 3508 Phinney ave., Seattle, Wash.

TAXIDERMISTS 426

DEER HEADS AND BIRDS MOUNTED, HIDES tanned and made into rugs and robes. Withers Bros., 913 Sprague ave., Spokane.

KODAK FILM DEVELOPING 472

FREE ENLARGEMENT WITH 75C ORDER high gloss print. Spokane Film Co.

FILMS DEVELOPED FREE—KODO, THE PICture King, 815 Stevens, Spokane.

MATERNITY HOMES 497

MATERNITY HOSPITAL; STRICTLY PRIvate; doctor in attendance; prices reasonable. Mrs. Elizabeth Peel, matron. W1324 Broadway, Spokane.

BUILDING MATERIAL 588

TACOMA SASH & DOOR CO., 15TH AND Dock, Tacoma, Wash. Direct selling means direct saving. These prices demonstrate: Chicken house sash, 20"x23," 75c; other sizes in stock. Chicken house skylights, 36"x40," glazed, $1.95; western Washington experiment station recommends this size. Sash and doors correspondingly low priced. Prompt delivery, careful filling of orders guaranteed. Catalog No. 1 is yours for the asking.

FIX BROKEN PLASTER WALLS WITH PERfection plaster wallboard; nailed on like lumber; takes calcimine or paint; sample and booklet from Western Wallboard Co., Seattle, Wash.

SEEDS 620

HUNGARIAN AND PURPLE VETCH SEED, 6c pound. Farm Bureau Cooperative Exchange, Roseburg, Ore.

NURSERY STOCK 621

GROW NEW PEDIGREED WASHINGTON asparagus; best in the world. Roots now ready. Ask for circular. Cherries, pears, peaches, apricots, soy beans for silage and soil building. For lumber, shade, windbreak plant Siberian elm. Special prices on berries, grapes and asparagus for commercial planting. Home Nursery, Richland, Wash.

RELIABLE TREES AND PLANTS—PRUNES, apples, pear, cherry, peach, apricot, grafted walnut and filbert trees, gooseberries, currants, etc., at attractive prices for early orders. Send your want list today for quotations. Benedict Nursery Co., 185 E. 87th st. N., Portland, Ore.

ISLAND BELLE GRAPE PLANTS FOR SALE —Write for the grape book, giving directions how to grow them successfully, etc. Issued by E. H. Urban. Box 777, Bremerton, Wash., grower of Island Belle grape vines.

TREES—NOW BOOKING MAIL ORDERS AT reduced prices for limited time only. Apples, pears, peaches, nut trees, prunes, cherry, small fruits, etc. Live agents wanted. Lafayette Nursery Co., Lafayette, Ore.

NURSERY STOCK—PRUNES, WALNUTS, FILberts, fruit trees of all kinds, gooseberry and small fruits. Buy direct and save 50 per cent. Brooks Nursery, Lafayette, Ore.

TREES—CHERRY, PEAR, PRUNE, APPLE, walnut, filbert. Mazzard cherry seedlings. Prices based on production costs only. Homer R. Brixey, McMinnville, Ore.

NURSERY STOCK SOLD DIRECT TO PLANTers; apple trees a specialty; no agents employed; can save you money. Write for prices. Lawson Nursery, Gates, Ore.

FILBERT AND WALNUT TREES, THE BEST paying crops for the northwest. Write for prices on the different grades. Villa Nurseries, Route 1, Portland, Ore.

STRAWBERRY PLANTS—SIXTEEN VARIEties. Asparagus and Munger black caps. Prices low. Brigg's Fruit Ranch, Olympia, Wn.

EVERYWHERE TO SELL OUR COMPLETE line of fine nursery stock. Cash weekly. Kimberly Nurseries, Kimberly, Idaho.

GOOD, THRIFTY APPLE AND PRUNE TREES at reasonable prices. R. B. Porter, Forest Grove, Ore.

FARM LANDS FOR SALE 651

SIXTY ACRES, SOME STOCK; NEAR SCHOOL. $3750 down. E. Schilling, Route 7, Sherwood, Ore.

FARM LANDS FOR SALE (Continued) 651

CUTOVER LANDS, EASY TO CLEAR; $8 TO $20 per acre; 25 miles north of Spokane; on hard surfaced highway; Great Northern and Milwaukee railways; excellent opportunity for dairying and stock raising with Spokane markets and creamery near at hand. Will help the man who will live upon this land and agree to clear a part each year by giving lumber to help start his buildings, and a purebred Jersey bull to groups of farmers. Interest and payments low. Write Milan Farms Development company, Dept. T, Old National Bank bldg., Spokane, Wash.

80 AND 160 ACRE IRRIGATED FARMS, IN the Lethbridge northern irrigation district, in sunny southern Alberta, at low prices and easy terms. First class mixed farming proposition. All kinds of livestock thrive wonderfully. Excellent climate, rich soil, ample water. Alfalfa, corn, wheat, oats, barley, vegetables yield abundantly. An opportunity to secure a farm that will bring you a steady income and to make a really attractive home. Write for descriptive handbook to the Irrigation Council of Alberta, 12 Provincial building, Lethbridge, Alberta.

5000 ACRES, SMALL TRACTS; NEWAUKUM river valley lands; easy terms; employment. Big mill and timber companies are selling their large holdings in this well known and fertile valley, at Chehalis, Washington, on most advantageous terms and conditions, where settlers are assured steady employment, good wages and live at home. Positively all high type agricultural land; level bench and valley. No gravel. No mountains. No irrigation required. Already well settled community; good schools and markets. 20 acres or more, $15 to $50. Terms to suit purchaser. Graham Land Company, 1008 American Bank bldg., Seattle.

CLEARED MEADOW LAND; FINE FOR POtatoes, poultry, berries; few feet to paved highway; near several thriving towns; half mile to railroad, store, sawmill, schools; $100 per acre in 5, 10 and 20 acre tracts. Easy down payment, balance long time, 6 per cent. The finest land in Western Washington at the price. Full information from Carter, MacDonald & Miller, 208 Columbia st., Seattle, Wash.

HARRINGTON DISTRICT — 540 ACRES good wheat land; 100 acres pasture; creek; good buildings; macadamized road; two miles from Harrington; main line Great Northern; good schools, churches, stores; small payment will handle, balance easy terms; bargain; no trades. Owner, W. E. Shrader, Harrington, Wn.

BIG OPENING SALE OF YAKIMA VALLEY farm land, under an assessed state and government approved irrigation project; best, deep soil; close to town and good roads. Price $25 per acre and up. Very easy terms. Western Lands, Inc., owners, 918 Green bldg., Seattle.

BIG LUMBER COMPANY LAND SALE—IN Skagit county; 40-acre tracts, $1400; $200 cash, balance easy. Lots work for the settler. Splendid district, roads, schools, towns. Information free. H. C. Peters, 726 3d ave., Seattle.

WHATCOM COUNTY, WASH.; 47 ACRES: EXceptional fertility; 2 springs; family orchard, etc.; fine dairy section. For quick sale, $5250; terms if desired. Owner, Mrs. Laura Smith, 802 Cole ave., Los Angeles, Cal.

ROGUE RIVER VALLEY PEARS WIN OUT again this year; fine return. We have some good orchards. Write for data, Rogue River Land Company, Medford, Ore.

SELL YOUR PROPERTY QUICKLY FOR cash; no matter where located. Particulars free. Real Estate Salesman company, 501 Brownell, Lincoln, Neb.

TRADE ALBERTA LAND, ASSUME PALOUSE brick, timber, merchandise, hay ranch; sell, rent. Woods Realty, Coeur d'Alene, Idaho.

160; GOOD LOCATION; SOLD FOR 1-3; small trade; near town; possession now or spring. Box 1620, Bossburg, Wash.

OLE H. SATHER, REAL ESTATE, FARMS and city property, Canby, Ore.

FARM LANDS—Wanted 654

NO COMMISSION—SELL YOUR FARM through Washington Farm Bureau Exchange, represented in 45 states. Lists of farms for sale by owners mailed free. 312 Lindelle bldg., Spokane, Wash.

WANT TO HEAR FROM OWNERS HAVING farm for sale; give particulars and lowest price. John J. Black, Chippewa Falls, Wis.

I HAVE INQUIRIES FOR FARMS IN NORTHwest. Describe fully and state price. R. A. McNown, 310 Wilkinson bldg., Omaha, Neb.

WE HAVE BUYERS FOR SEVERAL FAIR priced farms and ranches. Central Land Bureau, New Franklin, Mo.

FARM LANDS FOR RENT 657

90 ACRES IN FERRY COUNTY, WASH., TO lease for term of years; 8 acres now in timothy, besides 6 acres fine pasture, balance timbered; good well, barn and house, furnished except bedding. Free lease to responsible party who will make further improvements. Mrs. Dora Smith, 735 S. McKinley, Casper, Wyo.

IRRIGATED LANDS—For Sale 663

FARMERS AND STOCK MEN—THE COLUMbia irrigation district has several tracts of irrigated lands of various sizes, in the famous Kennewick valley, with plentiful water supply. The district wishes to get these tracts into the hands of good farmers who will put them to work, and will make very low prices and long terms to such men. No speculators need apply. One tract 580 acres, especially suitable for stock or dairy ranch. Write the secretary, Columbia Irrigation District, Kennewick, Wash.

IRRIGATED TRACTS, 20 MILES FROM SEattle; 5 to 40 acres; suitable for poultry, berries, fruit, garden truck and dairying. These tracts are selling at rock bottom prices on very easy terms and make the ideal farm home. Located few miles from the largest vegetable, berry and fruit canneries in the northwest. Also close to the big markets of Seattle and Tacoma. Gateway Land Company, 504 Hinckley building, Seattle, Wash.

55 ACRES, YAKIMA VALLEY, IRRIGATED; government water rights; 25 above ditch; grow corn, spuds or anything put in ground; good house, barn, chicken house; fine climate, school, church; two railroads; no better land in valley; will sell $2000 under value to some one who wants good home and willing to work; reasonable payments; easy terms. H. L. Williams, W924 14th, Spokane.

A MONEY MAKER THAT WILL ALWAYS show handsome profits; 130 acres, near Yakima; good water rights; excellent buildings and well equipped; large dairy herd. Price $22,000; good terms. Western Lands, Inc., owners, 918 Green bldg., Seattle.

FOR SALE OR EXCHANGE 703

160 ACRES; 80 IN CULTIVATION; GOOD buildings; running water; good roads; near school. Otto Peterson, Colville, Wash.

STORE BUILDING IN SPOKANE, RENTED, $30 month; trade for cattle. Price $4000. A. Clark, Valley, Wash.

Cattle Ranch To College

By Russell Doubleday (Copyright by Doubleday & McClure Co.)

CHAPTER XX.

A Transformation.

The love of adventure that possesses the soul of most boys was not a characteristic of John Worth. An adventurous life he had always led and thought nothing of it; it was too commonplace to be remarkable to him. This starting forth in search of knowledge, this seeking of the "dude" and his ways in his own haunts, was an entirely different matter; it was almost terrifying, and he was half inclined to turn back. To mix with men who wore white "boiled" shirts habitually, who dressed and went down to dinner, and who did all sorts of things strange to the frontier, seemed to John a trying ordeal, and he dreaded it.

He had no definite plan, for he could not quite realize what lay before him. A cowboy merely he would not be; he now felt that there was a larger place that he could fill, and he knew that this could be reached only through education.

A sound body and brain, enough money to last till spring, a good horse to carry him, and a strong resolve to get somewhere were his possessions.

For 10 days he and Lightning wandered around from one settlement to another, from town to town; he was enjoying his freedom to the utmost, so much so in fact that none of the towns he passed through suited him. Finally he woke up to the fact that he was avoiding a decision, and he pulled himself up with a round turn.

"Here, John Worth," he said to himself, "you're afraid to begin; any of those towns would have done."

He was in the open when he came to himself, riding along on a good horse, dressed in a complete outfit of cowboy finery, fringed chaps, good, broad-brimmed felt hat, heavy, well-fitting riding gloves, and silver spurs, the envy of every man he met.

For the second time a storm helped to decide his destiny, for as he rode along the sky became overcast and soon the snow began to fall heavily. "Come, 'Lite,' let's get out of this," he said to his only companion; and heading the pony toward the place where he knew ——— was located, he urged him forward. Just before dark he reached ——— and after finding a stable, put up at a neat little hotel near by. Even if he had wished to go on to some other place he could not now, for the storm developed into a regular blizzard, which prevented man or beast from venturing outside the town limits. John soon turned to the hotel keeper, a loquacious individual who believed in his town and could sound its praises as well as any real estate boomer.

"Schools?" in answer to one of John's inquiries. "Schools? Why, we've got one of the best schools in Montana; higher'n a high school! Schools and churches—we're great on schools and churches."

He took his cue from John's questions; he could discourse just as eloquently about the shady part of the town, its slums, its dives, and dance halls; there was nothing in that town that should not be there and everything that was desirable—at least that was the impression this worthy strove to convey.

"Schools and churches," said John to himself. "That's what Mr. Baker said I must hitch up to."

For several days the blizzard continued, so long in fact that John grew restless and longed for something to do. He had about decided that he did not like this town and thought he would move on as soon as the weather permitted.

One day the landlord was declaiming earnestly on the merits of the town and its institutions.

"Now, there's the academy," said he. "Now that academy is——"

"What's an academy?" interrupted John.

"Oh! that's a place where they teach you things."

"What kind of things?" persisted John.

"Reading and arithmetic and geography and—here's Gray, he'll tell you all about it, he goes there. Henry, come here a minute," he shouted.

A young man in overalls, well sprinkled with ashes, and carrying a fire shovel, appeared.

The landlord introduced them and told Gray that John was looking for information about the academy. Then he went off, leaving them together.

"Well," said Gray, a slight, dark-haired, bright-eyed, thoughtful fellow, after some preliminary talk, "you begin with arithmetic; then comes algebra, then geometry and trigonometry in mathematics; the languages are Latin, Greek, French and German."

The mere recital of these things was enough to scare John, who had scarcely heard the names before. When Gray went on to enlarge on the fine course of study the academy afforded, as a loyal student should, his hearer was appalled by the amount of learning necessary even to enter a school, and feared the ranch after all was the place for him.

"Some of the fellows are good workers," Gray went on, "but some do nothing but talk to the girls."

"Girls!" thought John. "So girls go to school with the boys here." This boy, who had hardly seen a girl, was terrified at the idea of being brought into such close association with them—he was quite sure now the ranch was the place for him.

That night he made up his mind to go back to Mr. Baker and ask for his old job, but the next morning was no better than the preceding ones.

For lack of something better to do, after much persuasion on Gray's part, he went with him to the academy.

The things he saw there were as strange to him as they would be to an Eskimo.

An old-fashioned school of 150 students seated at rows of desks, the boys on one side of the room, the girls on the other. The principal sat at one end, surrounded by blackboards. Gray found a seat for John at the back of the room, out of the range of curious eyes, and he sat there and watched and listened—wonderingly.

The classes went up and recited one by one or demonstrated mathematical problems on the blackboards. John heard with amazement youngsters answer questions which he could not comprehend at all, and yet he noticed that their faces were care-free and happy, as if they had never known what trouble was. The faces he knew, young and old, bore distinctly the traces of care and hardship. He was intensely interested and enjoyed the whole session keenly.

When noon came, Gray approached, as he thought, to return to the hotel with him, but to his surprise he was marched up to the principal's desk and introduced to Professor Marston. John was awe-stricken, but the principal knew boys thoroughly, and soon put him at his ease.

"Will you come with us?" asked Mr. Marston after a while.

"I wanted to, but I guess not now." Somehow John's resolve seemed rather foolish in the presence of this kindly faced man with the high forehead.

"Why? What's the trouble?"

"Oh, I changed my mind."

"What's your reason?" persisted the professor. "You don't look like a fellow who changes his mind with every wind."

His manner was so kindly, his interest so evident that John let go his reserve and told of his ambitions and hopes and then of the futility, as he thought, of a fellow at his age beginning at the very lowest rung of the ladder when boys much younger than he were so far advanced. This applied not only to actual schooling but to all the little things wherein he saw he was different from these town-dwelling youngsters.

Mr. Marston was interested. He invited John to call and see him after school. "I think we shall be able to talk our way out of this difficulty," he said, as the boy bade him good by.

At the appointed hour John appeared, eager to be convinced but altogether dubious. Professor Marston received him cordially, and, taking him into his private office, talked to him "like a Dutch uncle," as John assured Gray afterwards. He spoke to him out of his own wide experience, told him of men who had worked themselves up to a high place from small beginnings by determination and hard work. He showed John that he believed he could do the same, and finally brought back the confidence in himself which for a time had been banished.

"How did you come out?" called Gray as John burst into the hotel, his face beaming, his eyes alight—confidence in every gesture.

"Bully! he exclaimed. "I'm going to start right in."

"That's the way to talk," said his friend, delighted at his good spirits.

"Professor Marston is going to help me, and I'm to get some one to night-herd me; between the two I'm going to round up all those things and put my brand on 'em. I mean," he hastened to explain, as he realized that Gray might not be up on all the cow-puncher's phrases, "I hope to put away in my mind some of the things that go to make up book-learning."

He was sensitive, and it tried his soul to stand up with the primary class—he almost a full grown man.

Whereupon Gray volunteered to act as his night-herder, as John called his tutor. The offer was gladly accepted, and the two went out to get the school books which Mr. Marston had recommended.

John's first day was, as he expected, an ordeal. He was sensitive, and it tried his soul to stand up with the primary class—he almost a full-grown man. He heard the remarks spoken in an undertone that passed from lip to lip when he stepped forward with the youngsters, and he would have been glad to be able to get his hands on the whisperers and bang their heads together; but he only shut his firm jaws together a little tighter, clinched his hands, and drew his breath hard.

He did not even know the multiplication table, but under Gray's coaching he picked it up very rapidly. Mr. Marston made everything as easy for him as possible, and under the considerate aid of these two he made great strides in his mental training. His application and capacity for work was tremendous, and the amount he got through quite astonished his teachers.

The jeers of his schoolmates, however, not always suppressed, drove him more and more to himself. Gray, Professor Marston, and "Lite" were his only companions. "Lite" was now living in clover; never in his short life had he imagined such ease, so much povender, and so little work; he was therefore fat and exceedingly lively, so that when John was astride of him his master was able to show his school mates his absolute superiority in one thing at least.

As he advanced in his studies and demonstrated his ability as a horseman and a boxer (he soon had an opportunity to show that he knew how to "put up his hands") the respect of his schoolmates increased—at least that of the boys did—but it was only the kindly glances from one girl's big soft eyes that saved the whole of girl kind from complete repudiation on his part.

John's first visit to a church was an event that he did not soon forget. It was at Professor Marston's invitation. He came early, and as he told Gray afterward: "The millionaire took me clear up front. My clothes were stiff and my shoes squeaked, and I know every one in the place was looking my way." The music was strange to him; the only thing familiar was "Old Hundred," and even that "had frills on it," he asserted. The form of service was new and the good clothes of both men and women oppressed him. The sermon, however, he could and did appreciate. A sermon was the only part of a religious service he had ever listened to. Frim time to time hardy missionaries visited the cow camps and sheep ranches, and he had often been one of the congregation that, rough though they were, and little as they appreciated what they heard, listened respectfully to the good man's sermon. John had often on such occasions, after the preacher had finished and gone away, mounted on the wagon tongue and repreached the sermon, using his own words but the same ideas. He was therefore able to appreciate and enjoy this sermon preached in what seemed to him a most elaborate house of worship. This was his first attendance at a "fancy church," and it was the last open one for a long time. In the evening he was wont to steal in in time to hear the sermon, he excusing himself thus: "I can't do it all at once; I'll have to learn their ways first."

The dinner at Professor Martson's which followed his first church-going was a red-letter occasion of another kind. John's earnestness and sincerity always made friends for him, and he speedily won the heart of Mrs. Martson. She took great interest in the boy and gave him many hints as to the ways of civilized life, so tactfully that he could feel only gratitude.

He left her home full of content; he had discovered a new phase of life—to him a heretofore closed book—the "home beautiful."

John Worth was a good student, a hard, conscientious worker, and with the aid of his friend Gray and his instructor he made more and more rapid progress. As spring advanced he began to hear talk about "vacation"—a word the meaning of which was strange to him.

When he found out what it was he wondered what new wrinkle would be "sprung" on him next. But it was a serious thing to him; he could not afford to stay in town and do nothing—he wanted to keep on with his work.

Professor Martson called him into his office just before school closed, and after learning of his difficulty suggested that he get a job during the summer and come back to school in the fall, when he would give him work that would pay his necessary expenses while he kept on with studies. John's heart was filled with gratitude, but his benefactor would not listen to his thanks, and bade him good-by and good luck.

The boy went away thinking he was indeed in luck. The only trouble was to secure a job for the summer. This problem was speedily solved by Gray, who proposed that they should try to join a party of tourists that were to visit Yellowstone park and act as guides and guards. To their great joy they were able to accomplish this, and soon after the commencement festivities they rode out with the tourist outfit. John always had pleasure in remembering one of the number, a fearless, undaunted rider who won his admiration then, and still more later, when he became Colonel Roosevelt of the "Rough Riders." John in his old cowboy dress and mounted on Lightning was happy enough: as for the horse, he fairly

(Continued on page twenty-eight.)

Bits of Fun for Everyone

The Silver Lining.

"Which is the way to Ottawa, my lad?"

"I—I don't know."

"Which is the way to Topeka, then?"

"I—I don't know."

"Well, can you tell me how to get back to Wichita, then?"

"II don't know."

By this time the drummer was quite impatient and said to the boy: "Say, you don't know very much, do you?" to which the lad retorted:

"No! But—but I ain't lost!"—Judge.

Out at Second.

Waiter (indignantly): "When you eat here you need not dust off the plate."

Diner: "Beg pardon. Force of habit. I'm a baseball umpire."—Selected.

But Surely It Wasn't.

The kindergarten had been studying the wind all week—its power, effects, etc.—until the subject had been pretty well exhausted.

To stimulate interest, the teacher said, in her most enthusiastic manner: "Children, we were going to Baton Rogue to witness the football games yesterday. As the train approached one of the stations something came softly in and kissed me on the cheek. What do you think it was?"

A pretty girl in the rear shouted: "I know! It was the conductor, because when he took my ticket, he told me I was a very pretty girl and kissed me, too."

Her Pedigree.

Father: "I don't approve of your acquaintance with that telephone girl."

"Why, she's connected with the best families in town!"—Film Fun.

Cold Nut.

Said a bald-headed man to a waitress bold, "See here, young lady, my cocoa's cold."

She scornfully answered, "I can't help that. If your cocoa's cold, put on your hat."—Exchange.

English, a la Sweden.

An official of the board of health in a certain town notified a citizen that his license to keep a cow had expired. In reply the official received this epistle:

Monsieur Bord of Helt—I just got your notjs that my licens to keep my cow has expire. I wish to inf rm you, M'sieur Bord of Helt, that my cow she beat you to it—she expeir t'ree weeks ago. Much oblige. Yours with respeck, Petc."

The Maiden's Prayer.

"Dear Lord, I ask nothing for myself! Only give mother a son-in-law."—Exchange.

Upholds Alien Land Law

Supreme Court Declares States May Legally Prohibit Ownership of Soil

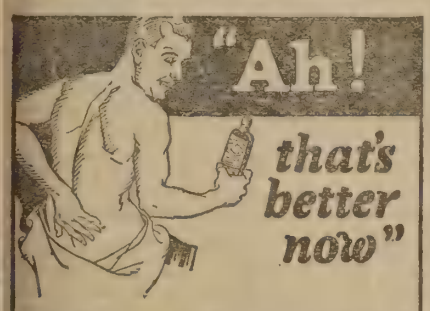
Aliens can be prohibited by states from owning land provided there is no treaty stipulation to the contrary, the United States supreme court announced Monday in an opinion ending a legal controversy which for years had been an issue on the Pacific coast.

The issue reached the supreme court in two cases, one from Washington brought by Frank Terrace and his wife and N. Nakatsuka, and the other from California, brought by W. I. Porterfield and Y. Mizuno. While the cases presented only the question of the proposed leasing of land to ineligible aliens, the court passed upon the broad question of the constitutionality of the law. It held that states could, as Washington had, prohibit from owning land aliens eligible to citizenship, but who had not declared their intentions, as well as aliens ineligible to citizenship, or, as California had, restrict the prohibition to aliens who had not in good faith declared intention to become citizens.

California and Washington sought to have the cases disposed of upon the declaration that in neither case had there been an actual violation of the law, there having been no leases made nor any confiscation of land as provided by the two states as penalty for the violation of the law. They had been successful in having the attack decided in the lower courts without going into the merits of the constitutionality of the laws.

The supreme court found, however, that there were presented certain equitable rights which entitled both the land owner and the proposed Japanese lessor to a decision on the validity of the laws before they had incurred liability to punishment. It therefore assumed full jurisdiction to review the cases from every point of view. The main decision was handed down in the Washington case, the court explaining that the grounds upon which the Washington alien land law was attacked included those on which the California act was assailed.

It not only found the laws in harmony with all rights guaranteed under the Constitution, but in their direct application to the Japanese it discussed the treaty with Japan, concluding that it guaranteed the subjects of that empire no such right as that for which they contended in the matter of owning or leasing land.



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Holsteins at Matt Poynor Sale

When the 23 head of registered Holsteins owned by Matt W. Poynor of Wiley City, near Yakima, were sold at auction at the old Elmer Marks ranch on October 15, they brought an average of $215 for the cows in milk, and $171 for the entire lot. This was a good price considering that it was a cash sale and the cattle were only in ordinary farm condition. The total of all sales was $3935.

The sale was held in order to dispose of the greater part of the herd, since Poynor intends to go out of the dairy business and keep only a few head on his own farm, which is located only a short distance down the Ahtanum valley. Only what few head of heifers and bulls that didn't sell will be kept and sold in the spring after feeding through the winter.

The top animal was Lady Poynor, a 9-year-old daughter of King Dirkje of Rock and with Mutual Piebe De Kol the grandsire on both the dam's and sires' sides. She has a seven-day record of 26.12 pounds of butter and 695 pounds of milk. She was bid off to J. A. Stevenson of the Gromore district for $300.

There were 10 head that sold for $200 or over and 16 for $150 or over. Ten of the cows were purchased by J. C. Scott for the state land settlement project at White Bluffs and Hanford.

The sale was cried by George A. Gue of Auburn.

A list of all animals sold, with their buyer and price paid, follows:

Lady Poynor, J. A. Stevenson, Gromore, $300; Lady Yellowstone Poynor, State Land Settlement project, White Bluffs, $230; Lady Yellowstone Segis, State Land Settlement project, $225; Lady Poynor Segis, A. W. Cushman, Wapato, $260; Lady Yellowstone Fobes, State Land Settlement, $210; Alice Burke Spofford Model, State Land Settlement project, $215; unnamed heifer, State Land Settlement, $200; Ruby Akkrum Segis, State Land Settlement, $260; Model Vesa, State Land Settlement, $215; Annie De Kol Fobes, State Land Settlement, $200; Von Heim Tritomia Valdessa, H. C. Davis, Granger, $195; Aaggie Cascade Ormsby Fobes, State Land Settlement, $185; Eleanor Segis De Kol Korndyke, J. W. Stewart, Yakima, $150; unnamed heifer, E. V. Taylor, Selah, $150; unnamed heifer, Nels Nelson, Yakima, $105; unnamed heifer, Nels Nelson, $120; unnamed bull, Ben Ashbal, Wiley City, $110; senior calf, unnamed, Woodhouse Bros., Yakima, $85; Kooistra Princess McKinley Segis, J. W. Frasier, Granger, $55; Bertha Mutual Tritomia, State Land Settlement, $180; unnamed heifer, consigned by Bellingham Milk Products company, State Land Settlement, $125; unnamed heifer, consigned by Bellingham Milk Products company, A. L. Blake, Yakima, $65.

Lower Naches Fair

Apples were the chief part of the agricultural display at the sixth annual Lower Naches community fair, which was held November 1 and 2. The entire center of the hall was used for a display of about 50 trays of apples, all of which were of exceptional quality. The schools of Lower Naches were represented by a complete display of the work done in the different classes. F. L. Sincock, superintendent, was in charge of the display.

Home economics also had a hand in the showings which were displayed in booths along one side of the hall. One of these was entered by Mrs. Charles Dean, who had worked in a very attractive block of apples. Substantial prizes were offered for the winners. A. E. Lovett, the county agent, judged the agricultural exhibits; W. L. Close, district horticultural inspector, the fruits, and Miss Edna Ladwig, the county home demonstration agent, the women's department.

The winners of the main varieties of apples were: L. J. Leibert, first prize on Delicious; J. Sundquist, second prize. Thomas Cloughley won first on Jonathans and John Dobie second. The first prize on Winesaps went to A. R. Fossum and the second to J. R. Holcomb. John Dobie had the prize Romes and E. R. Stout was awarded second prize. E. T. Barnet took first on Yellow Newtown and L. R. Clark second. Thomas Cloughley took first on Winter Nellis pears.

Packed Boxes Shown.

In the agricultural display A. H. Bair won first prize on Netted Gem potatoes and John Dobie second. Eleanor Trout won first on eggplant. Yvonne Atkins received the blue ribbon on crookneck squash and J. B. Bannerman the red ribbon. J. J. Bean had the best cabbage and the Rev. W. B. Trout the best popcorn.

Golden Delicious apples, shown by H. K. Stahler, attracted a good deal of attention. There was an exhibit of packed apples by the Big Y, including a box each of Spitzenburg, Arkansas Black and Rome, while the Winthrop orchards showed a box of Jonathans and a box of Delicious. These packed boxes were donated by the two concerns and went into the auction sale of fruit at the close of the fair.

New Stars in Live Stock Judging

(Continued from page six.)

1922, and its work was consistent, at least. All three members placed Duroc and Poland China swine correctly, and averaged about the same on other breeds.

Other Oregon county teams participating, and the scores they made, are as follows: Yamhill — Alex Cruikshank (775); Benton—Elwood and Kenneth Bradshaw, Arial Brown (1860); Umatilla—Sherlock and Lowell Stockard, Thomas Lenhart (2128); Washington — Frank Peters, Elmer Koenig, Waldo Flint (2197); Multnomah—John Fleming, Robert Kerslake, Percy Carlson (2110); Marion — Homer Bray, Lyle Rains, Leslie Davis (2233); Malheur—Alvah Van Boren, Dennis Patch, Wilford Webber (2197); Josephine—Howard Lewis, Emerald Morrison, John Smith (2197); Lane—Curtis, Carrole and Lloyd Robinson (2288;) Lincoln — William Stokes, Morris Johnson, Sidney Robertson (2045); Clatsop—Alton Berg, May Carl, Thomas Nordstrom (2042); Jackson—John Bohnert, Vernon Turpin, Lester Hamilton (2070); Tillamook — Flora Schild, Peter Betschert, Roletta Watson (2070); Union — Clair Smith, Howard Gassett, Marion Daniel (2055); Polk—Leslie Stewart, Wilford Domes, Donald Byngs (1840). Washington counties participating, but not previously mentioned, include: Adams—Lawrence Gillispie, Will Buscher, Walter Thorne (2163); Skagit—Walford Youngquist, Harry O'Brien, Henry Burkland (2150); Wahliakum—Noyes, Whitten, Arthur Engelson, Raymond Rasor (1870); Kittitas—Eugene and Thilmore Wilson Erling Hanson (2175); Yakima — Harold Holmes, Gerald and Harvey Barnum (2185); Grays Harbor—Homer Mouncer, Forth Twidwell, Walter Askew (2080); Spokane — Jack Adams, Gordon Brown, Margaret Campbell (2080). The only Idaho team was from Latah county. It consisted of Homer and Elmer Sawyer and Felix Papineau, and they scored a total of 2073.

Buy Dairy Plant

The purchase of the Royal Dairy Products company plant at Bellingham by the Whatcom County Dairyman's association has been reported at a purchase price of $110,000. The plant will be equipped for the manufacture of condensed milk, skimmed milk powder and butter, as well as ice cream and bottled milk for the city delivery.

The purchase of the new plant was considered necessary for the expansion and growth of the association, which now handles nearly 100 tons of milk daily.

Hanna Leaves College

Richard Hanna, who for many years has been herdsman at the Washington State college at Pullman, has resigned from the position and has gone to Cottage Grove, Ore., where he will engage in farming with his son. Mr. Hanna is recognized as one of the best fitters and showmen of cattle in the northwest. His specialty is fitting steers and piloting them to victory at the big fairs and stock shows.

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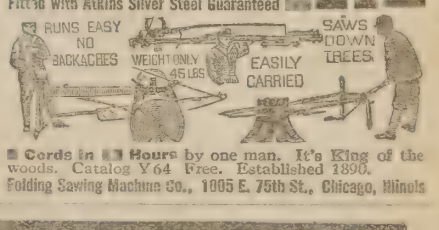

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NORTHWEST ELECTRIC LIGHT AND POWER ASSOCIATION

P-6

FAMILY CIRCLE

ALICE W. BARLAND
EDITORIAL CONTRIBUTOR

I would be true for there are those who trust me,
I would be pure for there are those who care,
I would be strong for there is much to suffer,
I would be brave for there is much to dare;
I would be friend to all the poor and friendless,
I would be giver and forget the gift,
I would be humble for I know my weakness,
I would look up and love and laugh and lift."

Experience Letters

Dear Mrs. Barland: You surely do give the best advice I ever read to young folk. If it was put into practice we parents would have less to worry about. Since the boys of today are to be protectors of the women of the future, why not be protectors of the girls of today?

We have three nearly grown sons and we would be ashamed of them if they should treat other girls in a manner that they wouldn't want their sister treated. They are very proud of their sister.

There is another side to the question of dancing and other questionable amusements; young people must have some place to go and if suitable amusement is not provided they will go and find it elsewhere.

I will tell you a few ways in which we take pleasure. (These are for winter evenings): One evening we will spend in games and singing and other music, another in games and candy pulling and another in skating, with apples and popcorn before starting home. We parents are always expected to take part in the whole program.

I would say to the parents, be chums with your children and enjoy them while you may. I ride horseback with my children and they consider it great sport, as they are very proud of their horses and like to show them off. Don't say this is too much work or too much bother. One can accomplish more with a light heart, even if the muscles are a little stiff and tired. A plain home without regrets is much better than an elaborate house and a sorrowing heart. A. M. D.
Idaho.

Dear Mrs. Barland: I enjoy your talks and the letters very much. I liked the letter by "Rosy Cheeks"; she is a dear girl with a dear, good mother. Let me say to the mothers: Try to make things pleasant for your children so their dearest memory shall be of you. Many a time my sister and I have cried because we didn't have a mother's care. She was far from dear and still is. We are grown up now and in our 20s, but we still long for the love of a good mother.

I am trying to be everything to my children that a mother should be. I don't find it hard to love them or to make them love me. I don't believe in much whipping, but I try to rule my children by love.

I believe that most husbands can be managed by love, too. The first two or three years my husband and I were not happy, but I learned that things went better when I showed him that I loved him and there isn't a happier couple now than we are. The children always meet him with a cheerful manner when he comes home tired from work, for happy faces rest a tired man when he comes home.

I am trying out a new way (for me) of making money at home. I have a pair of registered Airedale dogs and I am going to raise puppies for sale. When I have had more experience I will write and tell you what success I have had. HAPPY.

Family Circle Boys

Dear Mrs. Barland and Family Circle girls and boys: This is my first letter to the Circle, although I have read all the recent discussions. I am sure these have been of benefit to the readers. The question has been discussed: "Have the girls the same right to smoke as the boys?" Why shouldn't they have?

The only reason I can think of is that people expect better behavior and more self-respect on the part of the girls than the boys. But if they have more self-respect than boys it would be a reason why they wouldn't smoke and not why they shouldn't.

I don't believe any one ought to think they have a right to smoke and still consider themselves good American citizens. There is no good in it, it is annoying to nonsmokers and weakens the physical strength of the youth of the nation.

It is a well-known fact that opium has made China a weak nation and tobacco would do the same for our country in the course of a few generations if used by both fathers and mothers.

Too many think, when offered a smoke, that they will take "just this one," and before they realize it they have accepted too many "ones" and the habit has been acquired. Most of us have seen some man who has been a habitual user of tobacco trying to break from the habit and knows how very hard it is to do so.

Boys and girls, we don't think deeply enough into this question. It doesn't concern ourselves alone. It concerns all about us and the nation as well. We all have a duty to our country and to keep ourselves fit for any demands that may be made upon us is something within the power of all of us.

I think the subject of education suggested by Happy Daisy a good subject for discussion and as I am 15 years old and in my first year of high school I think it will be helpful to me. "HANK," Wash.

Dear Mrs. Barland: The girl who had a letter some time ago signing herself "Blanch," stated that she wasn't popular. I want to say a few words hoping to help her out.

Entertaining at a party in one's home makes a girl popular and it needn't be expensive either. Helping with community affairs, being a good friend and a good sport with every one, being sweet, and happy and sincere to everybody are helps to popularity.

I know a young girl who is now very popular with us all (and she was not at one time); she did a wonderful thing one day. We were all at a country dance and there was a young man who was a stranger there and felt a little embarrassed because he knew no one.

Hattie left her boy friend and entertained the stranger the rest of the evening. She didn't overdo it, but seemed to understand how the strange boy felt. Hattie never sneers or snubs any one, no matter how much she may dislike them, and that is why she is popular. Every one likes her because she is such a true friend.

Many girls have a way of snubbing and showing dislike; we all have feelings, you must remember.

Another lady in our circle started the "Every two weeks club." Every member has to take her turn in giving a party or a dance or something, and we have had some of the finest times at some of the novelty parties given by members of this club. Our latest novelty was a "string party. JAY. OREGON.

Dear Jay: Will you please write again soon and tell us all about those parties. You will be doing the circle a real service, for the winter is close at hand and the long evenings invite fun and frolic.
A. W. B.

LAYING LINOLEUM.

A kitchen floor should be free from cracks, non-absorbent of grease, easily cleaned and comfortable to stand upon. Covering with a good quality of linoleum seems to meet all these requirements better than any other treatment.

A poorly laid linoleum is likely to buckle and crack. In order that it may become "set" to the floor, a new linoleum should be laid at least two weeks before it is tacked down. It should then be tacked through the center of the room with small brads or headless tacks. If two widths are necessary, the edges should be joined under a flat metal strip made especially for this purpose and then tacked. It should fit up under the lower edge of the baseboard or quarter-round, but should not be tacked at these outer edges.

LET LIGHT ABOUND.

In the kitchen the light should be strong, and should fall upon all working surfaces, such as tables, stove and sink. In order to get this at the best angle and that the worker may not stand in her own light, the windows should be placed in at least two sides of the room.

SUCCESS IN
Bottle Feeding
depends largely on three things: Proper food. Proper preparation. Cleanliness.
Mothers who use Dennos and follow our methods, have little trouble in keeping baby well and growing. Ask for free sample and booklet.

DENNOS
The Milk Modifier
Dennos Food Co. Portland, Ore.

Companionable Warmth

What a world of happy memories are aroused by the "Companionable Warmth" of Friendships—children—books—and a Majestic Electric Heater!

A Majestic Heater broadcasts clean, safe, healthy heat throughout a room as the rays of the sun dispel the gloom.

It seeks out and warms the hard-to-heat corners and makes life enjoyable for every member of the family.

You'll appreciate a Majestic Electric Heater most while Winter blows his breath outside.

A XMAS GIFT FOR ALL THE FAMILY

There are many exclusive features to the Majestic Electric Heater—all of which emphasize its sturdy character and increase and lengthen its life of Service.

Ask to have a Majestic Heater laid aside for you and bid goodbye to chilly corners in your home

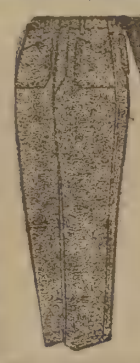
For Sale by All Dealers Everywhere

[303]

Majestic Electric Appliance Co., Inc.
SAN FRANCISCO, CALIF. KANSAS CITY, MO.

MAJESTIC
Electric Heaters
Provide Companionable Warmth for Everyone

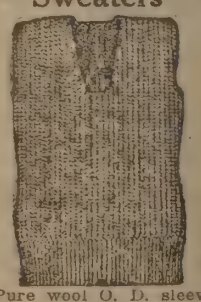
ARMY GOODS SALE



Wool Pants

Full length, winter weight government trousers of genuine virgin wool. Best stuff Uncle Sam could buy for durability and comfort. Olive drab color; belt straps and plenty of pockets; extra stout seams. Ordinary stores can't sell trousers of this quality for less than $9 a pair. By purchasing in large quantities, direct from the war dept. we can offer these brand new wool trousers (sizes up to 36 waist) at, pair $3.45

Pure Wool O. D. Sweaters



Pure wool O. D. sleeveless sweaters, made of very best wool yarn. All sizes at—

98c

O. D. Wool COATS

O. D. all wool serge lined coat—Brand new. Worth up to $12. Sizes from 38 to 42 only. Sale price

$2.45

Officer's Moleskin Coat

$11.95

Made of finest grade army moleskin; absolutely waterproof. The classiest and most popular garment among A. E. F. officers. Lasts a lifetime. Carefully tailored, military cut. Double breasted with two slash pockets. Belt all around. Sleeves fasten tight for winter driving. Lined with pure fleeced mixtures. Three-quarter length, cut to give ample freedom for legs. Give us size and order today.

BLANKETS

O. D. government pure wool blankets, reclaimed; now priced at—

$2.75

TRENCH SHOES

Hob nailed trench shoes. All solid leather.

$3.95

ORDER AT ONCE—DON'T WAIT. Write name and address plainly. State size and color desired. If not sure of size give your weight and height. Make all orders payable to J. B. Robinson.

IMPORTANT—We Prepay All Postage—Send enough to cover for merchandise. Reference—National Bank of Tacoma.

U. S. ARMY SUPPLY STORE
1310 PACIFIC AVE., TACOMA, WASH.

Just Folks

Most failures are self-made.

When is fortune misfortune?

Play is not always recreation.

Lordly asking is polite begging.

If you have a right to ask, ask.

Formidable things are not half formidable.

Begging becomes a prerogative with some persons.

Prohibition is denial and denial is contrary to human nature.

Passing by a store window this morning, I snatched the sight of a book entitled, "How to Build Mental Power." It seemed to me a simple proposition to tell how. To build mental power, use the mind. The harder you use it the more power you will have. It is not quite as easy to do as to tell how to do it. Hard thinking is not easy work.

Did you ever scrutinize the face of a man of power and influence in the community when a troublesome problem confronted him? I have almost stood in awe before the workings of the countenance at such a time. There was nothing easy in the situation.

Most persons had rather do anything else than work their minds. E&S

FEDERAL AID ROADS BEING BUILT.

A total of 26,536 miles of federal aid roads was completed by June 30, 1923, according to the United States department of agriculture. Some 8820 miles of federal aid highways of different types were constructed during the fiscal year ended on that date. The projects under construction at the close of the year totaled 14,772 miles and were estimated as 55 per cent complete.

Latest High Class Patterns for the Home

Please order the patterns you desire at least two or three weeks before you wish to use them. Desiring to obtain the latest high-class patterns for its readers, THE FARMER has made arrangements to have them sent direct from the east, and under present mailing conditions it takes about that time for them to reach you.

4545. Ladies' dress. Cut in seven sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. A 38-inch size requires five and five-eighths yards of 40-inch material. The width of the dress at the foot is two and one-fourth yards. Price 10 cents.

4209. Girl's coat. Cut in five sizes: 6, 8, 10, 12 and 14 years. A 10-year size requires two and one-fourth yards of 54-inch material. Price 10 cents.

4557. Girls' dress. Cut in four sizes: 8, 10, 12 and 14 years. A 12-year size requires three and five-eighths yards of 40-inch material. Price 10 cents.

4330. Misses' dress. Cut in three sizes: 16, 18 and 20 years. An 18-year size requires four and one-fourth yards of 40-inch material. The width of the skirt at the foot is two and one-fourth yards. Price 10 cents.

4548. Ladies' apron. Cut in four sizes: Small, medium, large and extra large. A medium size requires three yards of 27-inch material. Price 10 cents.

4574. A "fancy dress" for masquerades, parties, etc. Cut in four sizes: 6, 8, 10 and 12 years. A 10-year size requires five and one-half yards of 35-inch material. To make fichu and sash of contrasting material requires one and five-eighths yards 36 inches wide. Price 10 cents.

4577. Santa Claus or Kris Kringle costume. Cut in four sizes: Small, 34-36; medium, 38-40; large, 42-44; extra large, 46-48 inches breast measure. A medium size requires three and one-fourth yards of 54-inch material. For leggings alone three-fourths yard of 54-inch material is required. Price 10 cents.

4392. Ladies' one-piece dress. Cut in eight sizes: 36, 38, 40, 42, 44, 46, 48 and 50 inches bust measure. A 38-inch size requires six and one-eighth yards of 32-inch material. The width at the foot is two and one-half yards. Price 10 cents.

4570. Child's dress. Cut in three sizes: Six months, 1 year and 2 years. A 1-year size requires one and one-half yards of 36-inch material. Price 10 cents.

4579. New doll outfit. Cut in three sizes: For dolls 12, 16 and 20 inches in length. To make the doll in a 16-inch size requires one-half yard of 36-inch material. The dress and cap require seven-eighths yard. The cap alone requires one-fourth yard. Price 10 cents.

2967. A set of toy animals. Cut in one size. The cow requires five-eighths yard of 27-inch material and the horse seven-eighths yard of 36-inch material. Price 10 cents.

4566. Boys' suit. Cut in three sizes: 2, 4 and 6 years. A 4-year size requires two and three-eighths yards of 36-inch material. Price 10 cents.

Send 12 cents in silver or stamps for our up-to-date fall and winter 1923-1924 book of fashions.

Please fill in this order and mail with remittance to:
PATTERN DEPT., PACIFIC NORTHWEST FARM TRIO, Spokane, Wash.

Enclosed find ..... cents for which send me the following:

Pattern No..... Size..... Pattern No..... Size.....

Pattern No..... Size..... Pattern No..... Size.....

Name .....

Postoffice ..... State .....

R. F. D..... Box No..... St. No. .....

Be sure to give the pattern number and the correct size.

20 MULE TEAM BORAX

Clean, fresh-smelling sheets and pillow cases, clean, soft fluffy blankets, clean uninjured bedspreads and counterpanes, are *always* the result when 20 Mule Team Borax is used. It is the greatest water-softener known and should be used with soap wherever soap is used. It *protects* fabrics and colors. 20 Mule Team Borax is wonderful at cleaning pots, pans, churns, milk cans, etc. Try it. It is in all clean farm kitchens—is it in yours? At *all* grocers and druggists. Send for the Magic Crystal Booklet.

PACIFIC COAST BORAX CO.

NEW YORK CHICAGO SAN FRANCISCO

NATURES GREATEST CLEANSER

HOLIDAY SPECIALS

KODAK Enlargements

Write for free price list of—

ART PROOFS
OLD MASTERS
OLD MASTER ART PROOFS
From your own favorite negatives.

Northwestern Photo Supply Co. Inc.
Eastman Kodak Company
1415 Fourth Ave.
Seattle Wash.

Color Your Butter

"Dandelion Butter Color" Gives That Golden June Shade and Costs Really Nothing. Read!

Before churning add one-half teaspoonful to each gallon of cream and out of your churn comes butter of Golden June shade to bring you top prices. "Dandelion Butter Color" costs nothing because each ounce used adds ounce of weight to butter. Large bottles cost only 35 cents at drug or grocery stores. Purely vegetable, harmless, meets all state and national food laws. Used for 50 years by all large creameries. Doesn't color buttermilk. Absolutely tasteless.
Wells & Richardson Co., Burlington, Vt.

High Points in News of the Week

France and the United States have come definitely to the parting of the way on the proposal to enlist American aid toward a solution of the reparations problem. Premier Poincare was advised by Secretary Hughes through Ambassador Jusserand, Friday, that restrictions insisted upon by France would serve to "frustrate" the object of the Washington government in offering American cooperation in an expert reparation inquiry plan.

WILSSON'S MESSAGE.

Woodrow Wilson, addressing the American people directly through a radio instrument at his home in Washington for the first time since he left the White House, declared America's attitude after the world war was "deeply ignoble, cowardly and dishonorable." France and Italy, Mr. Wilson also declared, in a discussion of world affairs, have made "waste paper of the treaty of Versailles." Mr. Wilson added:

"Happily, the present situation of affairs in the world affords us an opportunity to retrieve the past and to render to mankind an incomparable service by proving that there is at least one great and powerful nation which can put aside programs of self-interest and devote itself to practicing and establishing the highest ideals of disinterested service and the constant maintenance of exalted standards of conscience and of right.

THANKSGIVING PROCLAMATION.

In his Thanksgiving proclamation, President Coolidge refers to the two tragic experiences which have deeply affected our people, the death of President Harding and the unparalleled disaster to Japan, adding that "by experiences such as these, men and nations are tested and refined." And again:

"We will do well then to render thanks for the good that has come to us and show by our actions that we have become stronger, wiser and truer by the chastenings which have been imposed upon us. We will thus prepare ourselves for the part we must have in a world which forever needs the full measure of service. We have been a most favored people. We ought to be a most generous people. We have been a most blessed people. We ought to be a most thankful people."

RED CROSS ENROLLMENT.

President Coolidge has been duly enrolled as a member of the American Red Cross for the year 1924. He paid $1 as dues to Miss Janet Moffett, daughter of Rear Admiral William A. Moffett and she pinned on his coat the Red Cross button which will be given to all members enrolled during the annual roll call starting Armistice day.

WHEAT COUNCIL.

The Pacific northwest is represented by three men on the advisory committee of the wheat council of the United States, as announced by Sidney Anderson, the president of the council: Dean E. J. Iddings of the College of Agriculture of the University of Idaho; Walter J. Robinson, general manager of the Washington Wheat Growers, and Chester C. Davis, state commissioner of agriculture of Montana. Other members of the advisory committee are W. M. Jardine, president of the Kansas State Agricultural college; E. C. Stackman of the University of Minnesota; H. W. Moorhouse of the Oklahoma Agricultural and Mechanical college; Dean John Lee Coulter of the West Virginia College of Agriculture; Alonzo F. Taylor of Stanford university; M. R. Benedict of the State College of South Dakota; J. D. Black, ex-governor of Kentucky; F. M. Crosby and L. E. Wettling. This advisory committee also will cooperate with the U. S. bureau of agricultural economics, of which H. C. Taylor is chief.

The U. S. department of agriculture wheat council was formed a few months ago as a direct outgrowth of wheat investigations made by representatives of that department at the order of President Coolidge.

The advisory committee composed of leading wheat and agricultural authorities of the country has been made to formulate a production program for stabilization of wheat growing in the United States and has its first meeting in Chicago this week.

Marketing of surplus wheat through a federal export commission offers the only remedy for the situation for growers of this year's crop, in the opinion of Walter J. Robinson, head of the Northwest Wheat Growers, Associated.

STOCKS BOOSTED.

The declaration of one-quarter of one per cent extra dividend on United States Steel common amounted to only $1,250,000, yet the declaration of this extra dividend caused advances in Wall street stocks amounting to between $400,000,000 and $500,000,000. Subsequent reaction due to the foreign situation reduced this total, but the net result of the spectacular upturn in prices has been a general heartening of American industry.

WHITE ROSE ON SOLDIER'S TOMB.

President Coolidge laid a wreath Sunday on the tomb of the Unknown Soldier at Arlington as the Armistice day tribute of the American people to the memory of "those who did not see the end, but died that the end might come."

As the president was turning to leave Mrs. Coolidge stepped to the tomb and laid beside the wreath a white rosebud, the special tribute of American womanhood.

The act of tribute to the dead of the World war was performed by the chief executive with little ceremony and in strict accord with the custom established a year ago by President Harding.

FARM AREA LESS.

While agricultural production in America has shown an increase in the last decade, the farm area is less, according to statistics compiled by the institute for research in land, economics and public utilities, with headquarters at Madison, Wisconsin. The study indicates a return of agriculture by the steady increase in population. The farm area increased only approximately nine per cent from 1910 to 1920 and most of this was in the semi-arid states. There were fewer acres in farms in 1920 than in 1910 in virtually all the states east of the Mississippi river.

Farm Business and Markets Outlook

(Continued from page five.)

Sheep and lambs—Lambs, 84 pounds down, medium, good and choice, $10@11.25; cull and common, $7.50@10; yearling wethers medium to choice, all weights, $6@9; wethers, $5.50@7.50; ewes, medium to choice, $3.50@6.50.

SPOKANE, Nov. 10.—Cattle—Prime steers, $6.25@7.25; good to choice steers, $6.25@6.75; medium to good steers, $5.50@6.25; fair to medium steers, $5@5.50; common to fair steers, $4.25@5; choice cows and heifers, $4.75@5.25; good to choice cows and heifers, $4@4.75; medium to good cow, and heifers, $3.50@4; fair to medium cows and heifers, $3@3.50; canners, $1.50@2.25; bulls, $3.25@4; light veal calves, $8@9; heavy veal calves, $6.50@8; stockers and feeders, $4@5.25.

Hogs—Prime mixed, $7@7.25; medium, $6.75@7; heavies, $4.25@5.75; fat pigs, $6.25@6.50; stockers and feeders, $6@6.25.

Sheep—Prime lambs, $9.25@9.75; fair to medium, $8.50@9.25; yearlings, $6.50@7.50; wethers, $5.50@6.50; mutton ewes, $3@5.

THE GRAIN MARKET.

SEATTLE, Nov. 10.—Wheat—Bid: Hard, soft and western white, Big Bend Bluestem, $1.01; hard and soft red winter, northern spring and western red, 99c.

PORTLAND, Ore., Nov. 10.—Wheat—Hard white, Bluestem, Bart, $1.03; soft white, western white, $1.02; hard winter, northern spring, western red, 99c.

Grain futures: Wheat—Bluestem and Bart, November, December, $1.03; soft white, November, December, $1.02; western white, November, December, $1.02; hard winter, northern spring, November, December, 98c; western red, November, December, 99c.

Oats—No. 2 white feed, November; No. 2 gray, November, December, $32.

Barley—No. 2, 46 pounds, November, December, $31; 44 pounds, November, December, $30.

WALLA WALLA, Nov. 10.—Bluestem, 89c; Club, 87c; Turkey red, 84c.

DAYTON, Wash., Nov. 10.—Club, 89c; red, 88c.

DAVENPORT, Wash., Nov. 10.—Bluestem, 81c; Gold Coin, 81c; northern spring, 78c; Turkey red, 78c.

PULLMAN, Wash., Nov. 10.—Red, 82c; white, 85c.

RITZVILLE, Wash., Nov. 10.—Bart, 84c; red, 82c; Fife, 82c.

ODESSA, Wash., Nov. 10.—Bart and Bluestem, 83c; Fortyfold, 82c; Marquis, 81c; Turkey red, 81c; Jones Fife, 80c.

HAY AND FEED GRAIN.

SPOKANE, Nov. 10.—Wheat—Feed wheat, $36 ton. Oats—$38 per ton; rolled, $40. Corn—$50 per ton; cracked corn, $52 per ton. Barley—$38 per ton; rolled, $40. Bran—$29 per ton. Bran and shorts—$30 per ton. Shorts—$34 per ton.

Alfalfa, $22 ton, in ton lots; $19 carload lots; new timothy, $22 in ton lots, delivered; mixed timothy, $20 in ton lots.

PORTLAND, Nov. 10.—Millfeed—City delivery prices: Mill run, $31 per ton; middlings, $43; scratch feed, $50; rolled barley, $42@44; cracked corn, $53; rolled oats, $42.

Hay—Buying prices f. o. b. Portland: Alfalfa, $17@18 ton; cheat, $13@14; valley timothy, $19@20; eastern Oregon timothy, $20@22; clover, $14@15; oats, $15@16; oats and vetch, $15.50@16.50; straw, $8.50 per ton.

GENERAL PRODUCE.

PORTLAND, Nov. 10.—Butter—Cubes, extra, 45c lb; prints, parchment wrapped, box lots, 49c; cartons, 50c. Butterfat, 51c, delivered, Portland.

Eggs—Buying prices, white hennery standards, 52c; hennery receipts, 50c; mixed color standards, 42@46c. Selling prices, Front street: Selects, 57@58c; candled ranch, 50c; storage, processed, 40c; storage No. 1, candled, 35c; association selling prices, cash at store, extras, 55c; pullets, 45c.

Cheese—Price to jobbers, f. o. b. Tillamook: Triplets, 30c; longhorns, 31c; loaf, 30c per lb.

Poultry—Hens, 16@25c; springs, 20@22c; ducks, 17@20c; geese, young, 15c; turkeys, live, young, 25@26c; dressed, 35@36c.

Dressed meats—Veal, fancy, 14c; pork, fancy, 11c per pound.

SPOKANE, Nov. 10.—Poultry, live weight—Hens, 4 lbs and over, 18c; light hens, under 4 lbs, 14c; springs, 20@22c; old roosters, 8c.

Fresh ranch eggs—$11@13; fancy poultry farm, $15; pullet eggs, $10.50@13.50.

Butterfat, 49c.

SEATTLE, Nov. 10.—Eggs—Select local ranch, white shells, cases included, 53c per doz; pullets, 35@38c per doz; pewees, 22c per doz; checks, 22c per doz; cases returned to shippers, 1c less; do to country stores, f. o. b. 50c per doz, loss off.

Butterfat—F. o. b. Seattle: A grade, 52c per lb; raw milk, $2.30 per cwt.

Poultry—Hens, 4½ lbs and up, 24c per lb; do over 3½ and under 4½ lbs, 18c lb; springs, 2 lbs and heavier, 25c per lb; do 1 to 2 lbs, 30c per lb; hens, 3 to 3½ lbs, 15c per lb.

Beef—Steers, fancy, 7c per lb; cows, fat, 6c per lb.

Mutton—Fat, 7c per lb; spring lambs, fat, 15c per lb.

Hogs—Good block, 90 to 150 lbs, 10@11c per lb; do heavy, 5@10c per lb.

Veal—Fat, fancy, 75 to 150 lbs, 14@15c per lb; do heavy, 80@150 lbs, 7@13c per lb; medium, 12@13c per lb.

HIDES, PELTS, WOOL.

PORTLAND, Ore., Nov. 10.—Hides—Salted hides, all weights, 5c; green hides, all weights, 4c; salted bulls, 4c; green bulls, 3c; salted or green calf, 10c; salted or green kip, 7c; hair-slipped hides and pelts, half price; flint dry hides, 10c; dry salted hides, 6c; culls and damaged, half price. Horse hides, green or salted, each $1; colt hides, each, 25c; dry horse with tail and mane on, 50c.

Mohair—Long staple, 30c per lb; short staple, 20c lb; burry, 15c lb.

Hops—1923 crop, 25@29c lb.

Wool—Valley wool, fine, 28@30c; medium, 28@30c; coarse, 25@27c; cotswold and braid, 20c; matted, 15c; Eastern Oregon, good average, 32c.

BOSTON WOOL.

BOSTON, Nov. 10.—The Commercial Bulletin quotes the following: A better tone prevails in the wool market this week with medium domestic wools occupying the strategic position; in fact, prices for such wools are tending upward. Fine wools still are slow. Medium to low scours are strong, with price strengthening for low foreign wools. Exports seem likely to decline.

The goods market is still unsettled, but improvement is noted in spots.

The foreign markets keep firm and London is about 10 per cent up on all greasy wools over the last series. America is buying next to nothing abroad. The first offerings of fall wools will be made in Texas presently.

Mohair is quiet locally, but steady.

The rail and water shipments of wool from Boston, January 1, 1923, to November 8, 1923, inclusive, were 125,472,300 pounds against 110,593,675 pounds for the same period last year. The receipts from January 1, 1923, to November 8, 1923, inclusive, were 391,265,000 pounds, against 363,713,511 pounds for the same period last year.

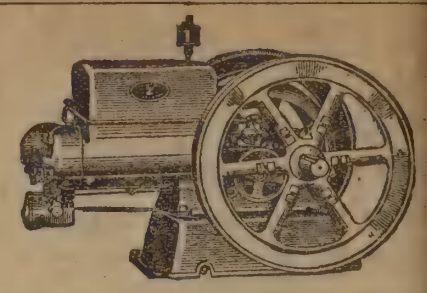
The Commercial Bulletin publishes the following scoured wool quotations:

Oregon Eastern No. 1 staple, $1.25@1.28; fine and fine medium combing, $1.20@1.25; eastern clothing, $1.10@1.15; valley No. 1, $1.15@1.18.

Mohair: Best combing, 73@83c; best carding, 70@75c.

Range of Live Stock Prices for Week Ending November 7

	Chicago.	Spokane.	Portland.	N. Salt Lake.
CATTLE.				
Choice and prime heavy steers (1100 lb. up)	11.00@12.50			
Good heavy steers	9.75@11.35			
Medium heavy steers	7.75@10.25			
Common heavy steers	5.50@ 7.75			
Choice and prime light steers (1100 lb. down)	11.35@12.50			
Good light steers	10.00@11.35			
Medium light steers	8.00@10.25	6.25@ 7.25	6.25@ 7.25	6.00@ 7.25
Common light steers	5.25@ 8.00	4.25@ 6.25	4.25@ 6.25	4.00@ 6.00
Common to choice butcher heifers	3.75@10.75	3.00@ 5.00	3.00@ 5.25	2.35@ 4.35
Common to choice butcher cows	3.25@ 8.25	2.50@ 4.50	2.75@ 5.00	2.00@ 4.25
Bologna and beef bulls	2.85@ 6.75	3.25@ 4.00	2.75@ 4.00	2.00@ 3.50
Canners and cutters, cows and heifers	2.50@ 3.25	1.50@ 2.25	1.50@ 3.00	1.00@ 2.00
Canner steers	3.25@ 5.35			
Medium to choice light veals	7.25@11.00	8.00@ 9.00	8.50@ 9.00	6.50@ 7.50
Medium to choice heavy veals	4.75@ 7.50	6.50@ 8.00	3.00@ 6.50	4.50@ 6.50
Common to choice feeders (750 lb. up)	5.25@ 7.75			
Common to choice feeders (750 lb. down)	4.40@ 7.75	4.00@ 5.25	5.00@ 5.50	4.50@ 6.00
Common to choice stocker cows and heifers	2.75@ 5.00			
HOGS.				
Top of market	7.80	8.25	8.60	7.40
Bulk of sales	6.70@ 7.60	7.25@ 8.00	8.25@ 8.50	
Heavy (250 lb. up)	6.90@ 7.80	7.50@ 8.25	6.50@ 7.50	
Medium (200-250 lb.)	7.00@ 7.80	7.50@ 8.25	7.50@ 8.00	5.15@ 6.15
Light (150-200 lb.)	6.50@ 7.75	7.25@ 8.25	8.00@ 8.60	6.15@ 7.40
Light lights (130-150 lb.)	6.00@ 7.25	7.25@ 7.75		
Smooth packing sows (250 lb. up)	6.40@ 7.00	6.00@ 7.00	6.00@ 7.25	4.30@ 5.15
Rough packing sows (200 lb. up)	6.20@ 6.70	4.75@ 6.00	4.50@ 6.00	
Medium to choice pigs (130 lb. down)	5.25@ 6.50	7.25@ 8.00	7.75@ 8.00	
Stock pigs		6.75@ 7.00	7.75@ 7.90	6.50@ 7.00
SHEEP AND LAMBS.				
Medium to prime lambs (85 lb. down)	11.00@13.40	9.00@ 9.75	10.00@11.25	10.00@11.00
Culls and common lambs	8.75@11.25	8.00@ 9.00	7.50@10.00	
Medium to prime yearling wethers	8.25@11.25	6.50@ 7.50	6.00@ 9.00	
Medium to prime wethers	5.00@ 9.25	4.00@ 6.50	5.50@ 7.50	6.50@ 7.25
Common to choice ewes	3.75@ 6.75	3.00@ 5.00	3.50@ 6.50	4.00@ 5.00
Culls and canner ewes	1.00@ 4.00			2.00@ 4.00
Feeder lambs	11.50@13.00			8.50@10.50



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Glance over the bargains on the "Want Ad" page.

Birthday Greetings

THURSDAY, November 15—Alice Bunlain, 9 years old; Ernest Dolm, 9.

FRIDAY, November 16—Hazel Farley, 11 years old; Martin Mikkelson, 5.

MONDAY, November 19—David Slemp,) years old.

TUESDAY, November 20—Ellen Bouchrd, 11 years old.

WEDNESDAY, November 21—Ethel Leoy Bowen, 9 years old; Nelson Chrisman, 1; Edna Yochum, 11.

LETTERS WELCOMED BY AUNT NELLIE.

Among recent letters received by Aunt Nellie re those from cousins whose names follow. A ew of these will be published each week in the egular edition of THE FARMER and others ill appear from time to time in The Junior armer:

Ursula L. Warmoth, Goldie Cox, Gertrude inster, Henrietta J. Pinster, Mildred Shawgo, ohn Blake, Margaret Irwin, Helmi M. Johnson, uella Hayward, Shirley Brooks, Mildred icken, Adelaide Sanborn, Melvin Grigsby, ilma Johnson, Viola Underwood, Harry Monoe, Luella Partch, Agnes Raff, Victor Anderon, Annie Elizabeth Anderson, May Pendell, erbert Scheuer, Mary Daly, Annie Eeschart, race A. Brown, Gertrude Thomi, Herbert Mile, Carol Wurcher, Leonard Carroll, Ellen Moerg, Goldie Pier.

BEDTIME STORIES

By THORNTON W. BURGESS.

THE TROUBLES OF MR. AND MRS. REDEYE.

A dreadful, dreadful thing is greed;
A thing for which there is no need.

Redeye the vireo and Mrs. Redeye were a peck of trouble. It was the talk of all the old orchard. You see, hateful Sally Sly had left one of her eggs in their nest about the same time she left one in the nest of Tiny the warbler. Like Tiny, they had done their best to get that hateful egg out, but their nest was so deep that they failed. They had thought of leaving their nest and eggs, but they couldn't bear to do that, so finally had made up their minds to make the best of a bad matter. Perhaps that hateful egg wouldn't hatch. But it did. It was the first one to hatch, and the ugly baby who came out of it was twice as big as the biggest of their own babies when they broke their shells. It was then that the real troubles of Redeye and Mrs. Redeye began. It is hard enough to feed a growing family at best, but it is a labor of love. But when a big, greedy, ugly stranger is added what can one do? That is what puzzled Redeye and Mrs. Redeye.

"Let him starve," said Sammy Jay when he heard about it.

"I would," said Chatterer the red squirrel. "I'd like to see any one make me take care of their children!"

But Redeye and Mrs. Redeye could not do that. They just couldn't. You see, they felt that it wasn't the fault of the ugly stranger that he was in their nest. It was the fault of his good-for-nothing mother, Sally Sly, the cowbird, who had laid the egg from which he had hatched. So they felt that they just couldn't let him starve while he was too young to take care of himself. It wouldn't be right.

But, oh, dear, oh, dear! he was such a greedy fellow! Being bigger and stronger than the Redeye babies, he snatched food right out of their mouths. Being so much bigger than they, he needed twice as much food, anyway, but he wasn't content with this. It seemed as if he wanted all the food. He was greedy, greedy, greedy. At the rate he gobbled everything he could get hold of, Mr. and Mrs. Redeye could have kept more than comfortably busy just hunting food for him alone. But there were three babies of their own, and they had to be fed, too. So from the first break of day to the coming of the black shadows Mr. and Mrs. Redeye hunted for food for their family and almost starved themselves. They grew thin and they had no time to care for their clothes, so that they grew shabby and untidy looking. Every one said that it was a shame, and it was.

Those were the unhappiest weeks that they ever had known, and they should have been the happiest, for all parents love to work for their children. But they could not be happy when they were so terribly anxious. Their own children were not getting enough to eat, and so, of course, were not growing as they should. They did their best to feed their own babies, but the greedy, ugly stranger was so big and strong that he would reach over and snatch the food intended for some other little gaping mouth. So the Redeye babies cried all the time because they were hungry, and their father and mother worked themselves to skin and bone trying to feed them, while the ugly stranger grew fat and big and presently began to crowd the others so that there was danger that one or more would be crowded out of the nest.

"Let him starve," said Sammy when he heard about it.

The result was that the little Redeyes left the nest before they really should have, and this added to the troubles of their father and mother. You see, they were terribly afraid that something would happen to their babies. But it made it easier to feed them, for the ugly stranger could not snatch the food from them. He was in no hurry to leave that comfortable nest himself. He was lazy and liked to be waited on. So he would squall and squall until they brought him food. Yes, indeed, those were weary and hard days for Redeye the vireo and his little mate.

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Pres. Calvin Coolidge

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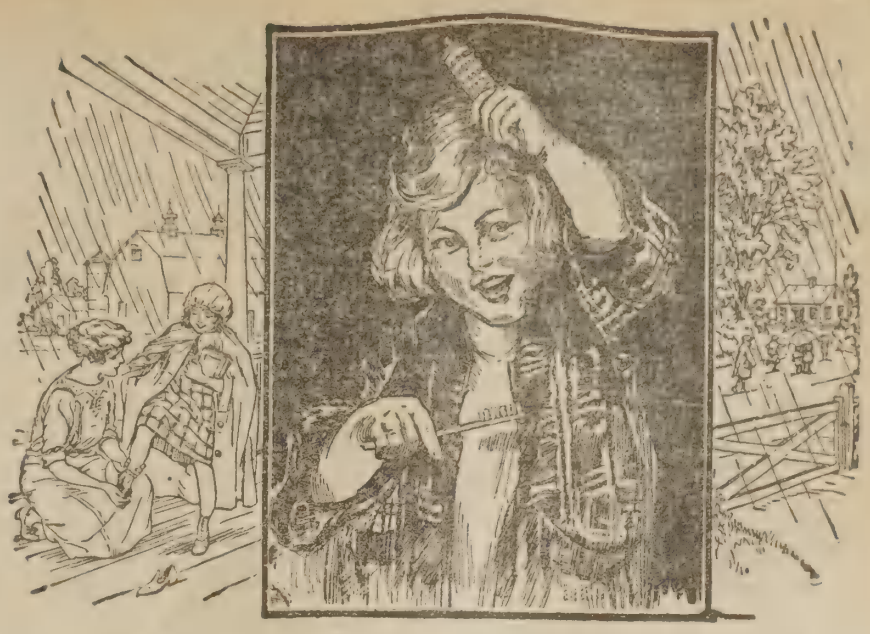

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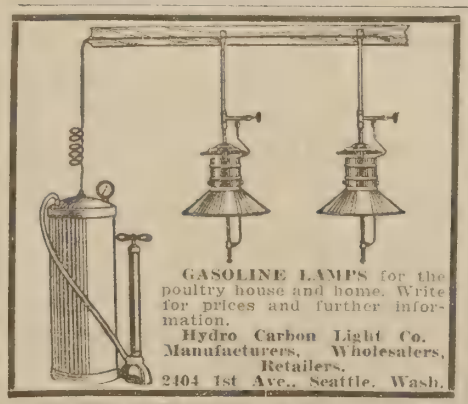

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Export Commission

Means of Handling Surplus Wheat

The creation of an export commission to handle the surplus crop of wheat is urged upon President Calvin Coolidge by Walter J. Robinson, general manager of the Washington Wheat Growers' association. Mr. Robinson takes open issue with Eugene Meyer, managing director of the War Finance corporation, and Frank W. Mondell, director, in their recent report to the president. Mr. Meyer recommended against the export commission. Mr. Robinson says: "I have attended many meetings in many different sections and have yet to find a meeting that did not appear to be almost unanimously in accord with the idea that it will be necessary for government assistance in handling the surplus wheat. Mr. Robinson adds:

"The plan under discussion involves a sufficiently high tariff to give wheat its prewar relative purchasing power and a government agency with sufficient capital and authority to purchase and merchandise the surplus wheat and pro rate the loss back over the entire crop. This agency or corporation could determine through the department of agriculture the probable surplus and necessary tariff. The probable loss on the export could be handled possibly by a form of sales tax on wheat which might be collected by licensing the different elements in the grain and milling business.

"This system would not necessarily destroy the relative milling values of different wheats, but would more probably raise each in proportion to its milling value. If such were the case the loss should be borne jointly by all wheats. This difficulty was taken care of by the grain corporation and could surely be handled justly by an export corporation.

"The export agency would stand ready to move wheat or flour out of the country at any time it was evident that the market was not benefiting by the tariff. The export could be handled directly through this agency or by a drawback system through the regular exporters and cooperative marketing associations."

Acreage Readjustment.

Minimum cost of production, highest quality of product and an aggregate production for the country as a whole are the conditions most desired for wheat growing in this country, according to Sydney Anderson, president of the wheat council of the United States in opening the session in Chicago Monday of the production committee of the council.

Mr. Anderson said that during the last four years the United States has increased its wheat acreage about 25 per cent, while the population has increased only about 14 per cent. Canada has increased wheat acreage 80 per cent and Argentina 20 per cent, he stated.

"Therefore, I think that the matter of readjustment in wheat acreage in this country to a point where it shall not be at the mercy of a world price, fixed by the surpluses from the cheap lands of other countries is worthy of the serious consideration of this committee," said Mr. Anderson.

"Farmers of the United States can not hope to make any money growing wheat for export, except in occasional years. So long as we produce a surplus, our domestic price is generally a reflection of the world market price. I hope that this committee will work out a program for readjustment acreage which, if carried out, will place this country on a domestic basis, where domestic demands will establish a price and not the surplus from our foreign lands."

RUSSIAN WHEAT.

The Manchester Guardian of England announces that the negotiations which have been in progress during the past month for the formation of an Anglo-Russian company for the purchase and shipment of Russian grain are now complete, the agreement between the parties having been signed. On the Russian side the participants are the central organization of the Russian Cooperative society, the Russian Grain Exporting organization, on which both the state and the cooperatives are represented. The English representatives are the cooperative wholesale society, together with a firm of grain brokers and a firm of shipping agents. It is understood that the support of leading English banks is forthcoming to the extent of providing credit of one million sterling at one time to cover Russian grain on seaboard in Russian ports or afloat.

The Manchester Guardian adds that it is expected that the shipments of grain under the new company's auspices from Russian ports this season will be very considerable, and it is specially significant that leading English banks and commercial institutions are prepared to finance operations in Russia on ordinary commercial lines.

The intention is to supply the British market in the first instance, but shipments will also be effected to France, Italy and other Mediterranean countries, which absorbed Russian grain before the war. It is not too much to say that the transactions contemplated by the new company represent the most important step yet taken towards the resumption of normal pre-war trade between Russia and this country.

AGRICULTURAL DEBTS.

The volume of agricultural debts lies at the bottom of financial difficulties in the agricultural districts to a greater extent than present low price levels for farm products, in the opinion of M. L. Corey, member of the farm loan bureau, Washington, D. C., chief executive of the intermediate credit banks. Mr. Corey and August Dezavala, examiner, spent Saturday in Spokane.

Illustrating the increase in agricultural debts, Mr. Corey said short-term debts in 1914 were $2,650,000,000 and in 1921 they had increased to $3,870,000,000. Farm mortgages in 1914 were $3,598,000,000 and in 1921 they aggregated $7,857,000,000.

Speaking of the intermediate credit banks, Mr. Corey declared that $60,000,000 capital is available, but "we are actually using only $20,000,000, leaving the balance in the treasury for any emergency that may arise.

Mr. Corey further explained how country banks can re-discount through the credit bank, how it works with agricultural associations and with cooperative marketing associations. He said the credit banks today have loans out to 250,000 members of the latter for probably $30,000,000, and commitments of an additional $28,000,000. "Our particular problem now is," said Mr. Corey, "to care for the cooperative organizations and live stock comes second."

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One man with a K can rip out any stump that can be pulled with the best inch steel cable. No Digging—No Expense for Teams or Power
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Details of the methods you have successfully followed are always welcome. Sending them to us is one way you can cooperate in making this paper more valuable to every reader. Another way of cooperating, that we greatly appreciate, is sending in your subscription order at least 60 days in advance of the expiration date on the wrapper of your paper, and including your neighbors' orders with your own.

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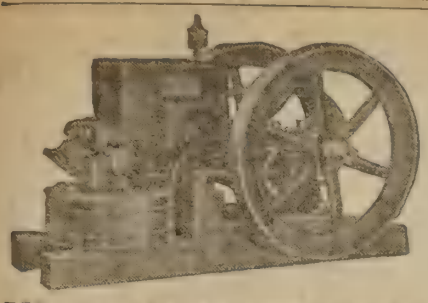

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Today the WITTE ENGINE sells at the lowest price in history. Into this WITTE has gone the ripe experience of more than 40 years of engine building—over 100,000 users all over the world have placed upon it their stamp of approval. You, too, can put a WITTE on your place, secure in the knowledge that it represents the STANDARD OF POWER.

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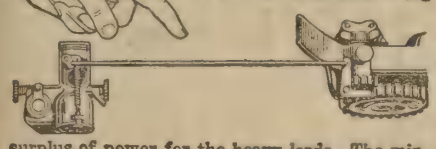

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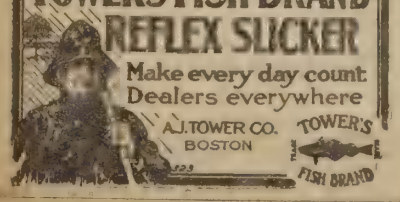

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News for Breeders

WASHINGTON BRED AYRSHIRES.

Two Washington-bred Ayrshire bulls, both bearing the well-known farm name of Willowmoor, have been admitted to advanced registry recently. One is owned in Colorado and the other in Illinois.

FIRST IN STATE FOR MILK.

Nora Segis Prospect, a junior 2-year-old in the Piet Bergsma herd of Holsteins at Ferndale, has just completed a seven-day test that places her first in the state for milk, with 521 pounds of milk and 21.164 pounds of fat. The fat record is said to be the second highest in the state.

WINS SILVER MEDAL.

Quecchie of Wenatchee, an Ayrshire heifer tested by Wenatchee Ayrshire farm, Wenatchee, Wash., at 3 1-2 years of age, wins a silver medal on her production of 10,862 pounds of milk and 479.47 pounds of butterfat. This record makes her senior 3-year-old champion of Washington and eighth highest roll of honor cow for her age of the breed.

WINS SILVER MEDAL.

St. Mawes Lad's Gertrude, a junior 3-year-old in the Shortley Brothers' herd at Orcas, San Juan county, recently won a silver medal with a production of 586.33 pounds of fat and 8830 pounds of milk in class AA. A second silver medal was won by Maid's Liberty Lass, a junior 2-year-old in the same herd, with a production of 472.06 pounds of fat and 7745 pounds of milk.

RECORD OF 30,000 POUNDS MILK.

Hollywood Lilith Palmyra Abbekerk, a Holstein cow bred by Hollywood farm of Hollywood, Wash., on October 23 finished a yearly record which was the first 30,000-pound milk record ever made in southern California. The animal had 30,015 pounds to her credit September 23 and with another month to go was expected to have about 32,000 pounds for the year. In 11 months she made 1128.6 pounds of butterfat, which is the highest southern California fat record, and early in October she had passed both Adirondac Wietske Dairy Maid, champion of California, and Segis Pietertje Prospect, milk champion of the world. The record promised to be not only the highest for butterfat production ever made on the Pacific coast, but at least third highest in the entire United States, with a total of close to 1200 pounds. Only one other 30,000-pound cow has made a correspondingly high fat record.

USE PUREBRED SIRE.

Mason county has a number of dairymen who believe in the use of a purebred sire to build up the production of the heifers, even with a grade herd. Joe and Edward Priszner of Matlock have used a registered brown Swiss bull on their herd of 11 grade cows of the same breed. All of the heifers that have freshened so far have shown better milking qualities than their dams and the older grades will be disposed of as their place is filled by the younger animals.

Since the first herd bull has passed his usefulness in the herd he has been replaced with a new animal from Bushton, Ill. The sire of La Marnick B of Bowerhome, the youngster in question, is Nick's Prize Master and the dam is La Mark 3d of Sedgely. On the sire's side is College Bravura 2d, who had a record of 798 pounds of fat. Both of these blood lines are well known to dairymen of this breed and Mr. Priszner feels that he has a foundation for a real herd of Brown Swiss.

NEW HERD BULL.

C. E. Entsminger of Arlington has been breeding up a grade herd of Guernseys and for the first time entered some of his best cows against strong competition at Everett this fall. Three of the cows in the herd are bred to Lishman's Son, the Valley Gem herd bull, and four others have been bred to the Fred Jenner herd bull. His herd is now large enough to warrant the use of a new herd bull, Traveler's Dellwood Masher, a son of Sunny Girl of Chicona, one of his foundation cows.

The feed problem on the Entsminger farm is largely solved by the use of clover and barley silage, mangles and clover hay. Some of the grain mixtures fed to the cows are ground from oats, barley and other grains that are grown on the farm. In this way Mr. Entsminger is able to keep the purchased feeds down to a minimum, since he buys alfalfa only when his own hay runs short. The pasture was good last season and it was not necessary to feed green feed during the summer.

INDIA'S RICE ACREAGE.

Rice acreage in India is now reported at 70,784,000 acres in a recent cable received by the United States department of agriculture from the international institute of agriculture at Rome. The acreage reported on the same date last year was 73,800,000 acres.

Vigor

Vigor is one of the most important characteristics of a dairy cow.

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Berkshire Boars for Sale

Two high class, aged herd boars, one a Laurel champion, the other a Matchless Lee 8th. At your own price.

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The big kind with quality and finish. Breeding stocks, both sexes, different ages, for sale. Special prices on spring boars and unrelated trios. Popular blood lines.

REICK BROS., Macleay, Ore.

BERKSHIRES

For sale—2 fall, 1922 boars. Also choice lot of last March and April boars. Four of these are full brothers to junior champion boar and junior champion sow at Washington state fair, 1923.

FRED H. SINNES, R. 2, Prosser, Wash.

Royal Ranch Durocs

We have the best boars we ever raised for sale at less money than you ever bought them for. The type and breeding you want, including the 1923 junior champion of Idaho. The strongest Duroc show of the northwest. 26 herds competing. Write us your needs.

ROY SHUTWELL, R. F. D. NO. 3, Boise, Ida.

Turner's Durocs

For sale—Registered spring boars and gilts, sired by grand champion boar. Also booking orders for fall pigs. Prices reasonable.

H. W. TURNER, Sunnyside, Wash.

Duroc Jersey Boars Spring boars sired by my Jr. yearling boar Gem Sensation Leader, the boar that weighed 700 lbs. at 18 months, and was Sr. and grand champion in 1923 at Idaho's greatest hog show. These boars are priced to sell. Let me write you about them.

J. P. Hunt, Route 1, Buhl, Idaho.

Duroc-Jerseys For sale, a choice lot of spring boars and gilts. Pathfinder type, from prize winning stock. Terms, C. O. D.

HILLCREST FARMS, R. 9, Hillyard, Wash.

Entermille's Polands

Sired by Giant Liberator and out of a Big Buster sow, win first and third junior sow pigs at state fair in class of 42. Have a few choice spring pigs and some wonderful fall stock for sale.

FRED D. ENTERMILLE, Baker, Ore.

Big Type Poland Chinas

Young boars ready for service. Also weaned pigs at bargain prices. Best breeding of the times.

H. J. STILLINGS, Hermiston, Ore.

Pioneer Herd Hampshire Swine

10 head choice boars; 10 head of sows and gilts, backed by show records.

J. M. FRUITTS, Cambridge, Idaho.

Richly Bred Jersey Bull

Oxford Lad of Ingleside, dropped July 6, 1922. Sire, LaBelle's Oxford Lad, half brother to ex-world record cow, St. Saviour Belle, and first prize aged bull, Pacific International, and headed first prize herd, 1920. Dam, Lady Jamieson of Ingleside, 520 lbs. fat at 3 yrs., 1 mo., milked twice a day, herd care. Type and production combined.

B. C. ALTMAN, Gresham, Ore.

Imported and American Bred Jerseys

Blood lines of phenomenal production and most perfect Jersey type.

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Richly Bred Young Jersey Bulls

Sired by Gertie's St. Mawes and out of tested dams with good records.

C. F. BATES, Rt. 5. Salem, Ore.

Gold and Silver Medal Jersey Breeding

Heifers and bulls, offspring of the great gold and silver medal bull, Silver Chimes of S. B.

DEL PERKINS, Carlton, Ore.

Graymere Jersey Heifers Bred and open, from 6 to 18 months old. Myra's Missionary, Plymouth Lad and Oxford Majesty breeding.

WARREN GRAY, Box T, Jefferson, Ore

Midway Farm Jerseys Herd headed by St. Mawes Lad of Midway, son of St. Mawes Lad and Lad's Littie Pauline, 941 lbs. fat.

W. B. McCONNEL, Shedd, Ore.

Jersey Bull Calf Full brother junior champion, S. W. Wash. fair, 1923. Sire, son of Poppy's St. Mawes, a gold medal bull. Dam, daughter of Poppy's Golden St. Mawes, sire to two world record cows.

A. T. FLAGG, Rt. 2, Chehalis, Wash.

Registered Herefords cows and heifers, yearling and bull calves of popular breeding; priced very reasonable.

WALTER BLANCHARD, Buhl, Idaho.

Brown Swiss Stock Farm

Breeders of Brown Swiss cattle, the farmers' dairy cow. Young stock for sale.

THEO BRUGGER, Route 3. Gresham. Ore.

FOR SALE

A choice lot of Holstein calves, both sexes, finest Hollywood breeding, excellent individuals. Several are out of yearly record dams. Have no room for them and they must be sold. Breeding and individuality considered, they are the very best bargain on the market. Write for prices and descriptions. Excellent heifers for calf clubs, fine bulls for bull associations.

A CALF OR A CARLOAD.

HOLLYWOOD FARM, Hollywood, Wash.

Vandervelden's Jerseys at Auction

Monday, November 19, 1923

Twenty head, entire herd, heavy producing cows, heifers, bulls and young calves. All American bred, but founded on the best of island blood. The cow that was the foundation for the most of this herd was an imported cow, champion of the show ring and winner of milk contest at the fair.

Sale to be held on the Vandervelden farm, near Roy. The catalog tells how to reach the sale. Send for one.

J. W. VANDERVELDEN, Owner, Forest Grove, Oregon.

E. A. RHOTEN, Sale Manager, Salem, Oregon.

UNIV. OF ILL. EXPERIMENT STATION URBANA ILL

Life Preservers

(Continued from page eight.)

free from tuberculosis? Quite a number know that they are of clean animal origin, but many do not know anything about the source of this food.

Too often the man who owns his own cows is quick to say that his herd is clean, when in reality he knows nothing about it. Diseased animals may not show their illness in the early stages of the disease, but look as healthy as any animals in the herd. I have known animals in the private one-cow dairies to be responsible for fatal infections in the family, and all the while the family would have been offended if one had asked whether the cow had been tested for tuberculosis or not. They were sure that their cow was all right until they were forced to find out the truth.

The danger from the milk food products is greatest because we use so much of it in the raw state and this organism will live through many of the processes by which milk food products are prepared. They may be found in the milk, ice cream, butter or cheese. The children especially are frequent sufferers because we encourage them to drink lots of milk, and it is right that we should, because there is no better food for them, but we should know that this product is from healthy animals.

The meat may be the source of infection and no doubt is responsible for many of our tubercular people, but the danger is lessened because we cook our meat before it is eaten and thereby lessen the danger. Meat food products are not usually eaten raw and even rare cooking kills the tuberculosis organism.

Need of Inspection.

The safeguards against the above disease lies in having competent inspection of the dairy herds and all animals tuberculin tested, no matter whether they are in the great dairies supplying milk to hundreds in the cities or the single private cow. There is no occasion for taking chances with your life or the life of your children when this can very certainly be avoided by having the animals tested.

Cleanliness in the handling of milk is also essential, and while it may not cause a specific disease, it is worth while knowing that the product is clean and wholesome. Meat should be inspected at the time of killing if possible to determine the presence of tuberculosis and all organs should be seen if possible.

It is easily possible to avoid the dangers of tuberculosis of animal origin if the people who use these products, and that is all of us, would just make it our business to see that the animals from which these products come were healthy and free from this disease. This can be done by supporting a movement to have adequate meat and milk inspection, and this applies to the small town as well as the large city.

Cattle Ranch to College

(Continued from page twenty.)

bubled over with joy and gladness. He showed it in his usual unconventional fashion by trying to throw John "into the middle of next week" but his master understood him well and took all his pranks good-naturally, sitting in the saddle as if it was an every-day occurrence and not worth bothering about.

The boy's leech-like riding attracted the attention of his employers at once and especially one—a young easterner named Sherman, who was a college man.

The summer's experience was a very pleasant one; compared to the work and hardship that John had formerly endured this was child's play.

On the long summer evenings young Sherman would often join John while he was keeping his vigil over the saddle stock, and they would have long talks. John telling of his experiences with Indians, cattle and horses, while Sherman in turn told of colllege life, its advantages and pleasures and the hard work connected with it.

Shortly before the time set for the return of the party Sherman, who had learned to respect and like John greatly, said: "Suppose you study hard next fall and spring and prepare for college. If you can bone up enough to pass the examinations I think I can get you a scholarship."

The proposition took John's breath away, but he was not the kind of a boy to be "stumped," and when they separated he assured Sherman that he'd do "some tall trying."

The party of tourists among whom John was soon broke up. Sherman went east after exacting a promise from John to "carry out that deal."

John returned to —— and to the academy, his path now marked out clearly before him and a prize worth striving for at the end.

(To be continued.)

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The installed price for the most popular size Delco-Light plant includes not only the plant itself—it includes the freight to nearest railroad station—it includes the actual installation of that plant, except purchaser is to build concrete base and battery rack and haul plant from nearest railroad station—it includes the standard Delco-Light Exide Battery composed of sixteen large capacity cells, built for long life, with extra thick plates and heavy glass jars; the wiring of your house for ten lights to be located anywhere you wish; one power outlet wherever you may want it; a standard set of ten drop lights with sockets and the installation of these lights; and ten standard electric light bulbs—the complete installation ready for you to turn on the lights.

This is the way to buy your electric light and power plant.

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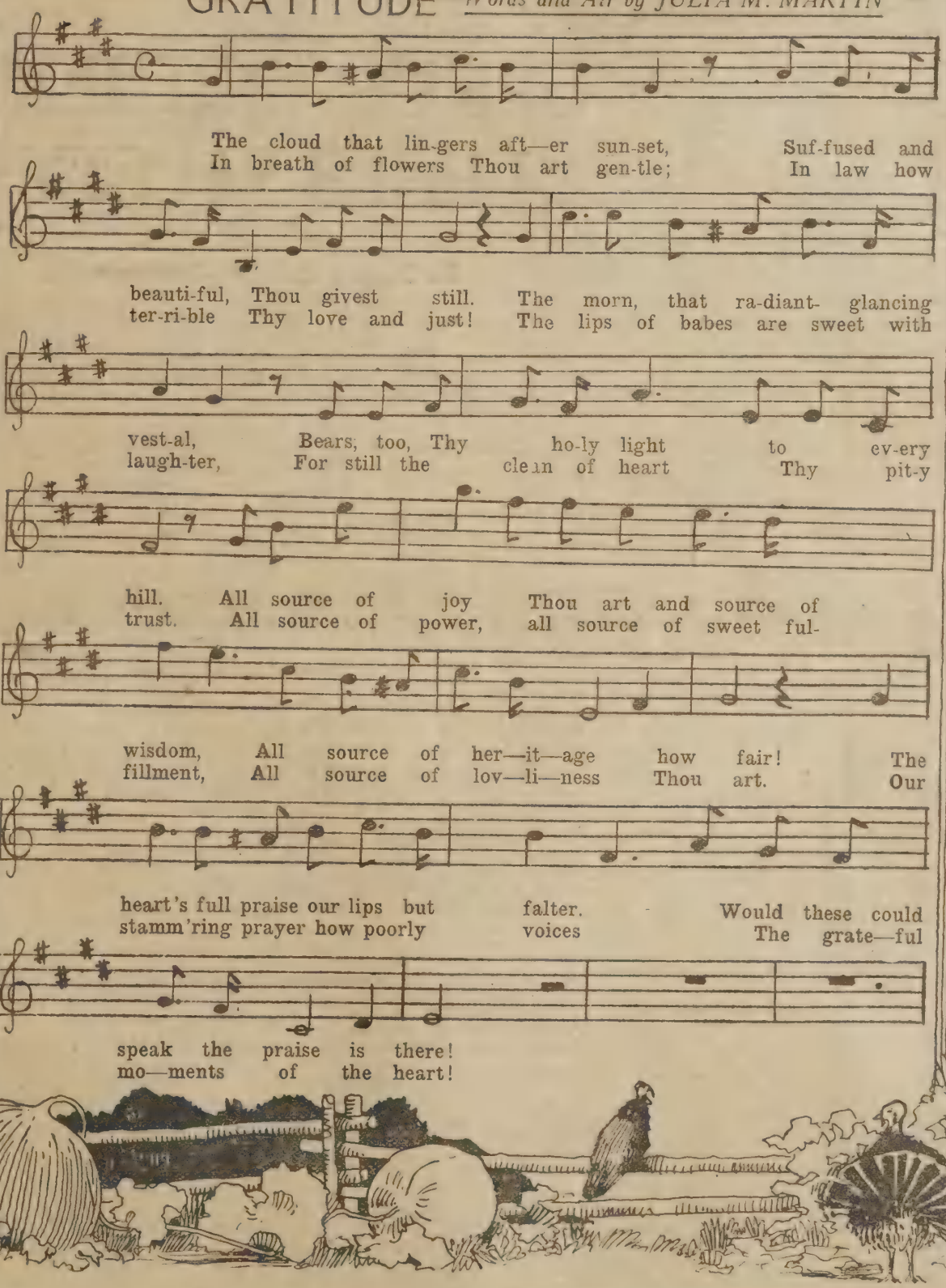
THANKSGIVING DAY
An American Institution

GRATITUDE—*Words and Air by JULIA M. MARTIN*



Purebreds Prove Profitable Pork Producers---Page 3

Better Sheep at Pacific International

There was a distinct increase in the number of sheep this year over last, and most of the breeds had the best average quality in the history of the show. Flockmasters and shepherds, reflecting the optimism which prevails among them, had come out with their best, fitted as never before. The sheep division drew a large share of the visitors every day, and those who know sheep were well repaid.

The Oregon Shropshire association had built a beautiful booth in which writing material and reading matter were plentiful and visitors were welcomed. Its members were the most aggressive boosters for the "woolly coats," and their enterprising "stunt" drew much favorable comment.

Judge W. F. Renk of Wisconsin, who had the heaviest task in the ring, compared the Hampshire classes very favorably to the ones at the Chicago International last fall, and complimented local breeders on the general quality of the show. He said he had no idea there were so many good sheep in this territory.

Superintendent O. M. Nelson had 721 sheep, 71 Angora goats and 35 milk goats, a total of 827 head. The grand total for sheep in 1922 was 589, and Nelson expressed the opinion that if this ratio of increase keeps up, the management would not know what to do with the sheep next year. It was distinctly a sheep year.

Among the awards were the following:

Fine Wools. Judge: J. H. Butterfield, Enterprise, Ore.

Rambouillets.

With the largest and best show of Rambouillets in the history of the Pacific International, it was curious that all the entries were from outside of Oregon. California, Idaho and Washington made the show, and it was a royal contest, with a fair division of the ribbons among the different exhibitors.

Rams: Aged—1 and 4, Burlingame & Craig, Walla Walla, Wash.; 2, University of Idaho, Moscow, Idaho; 3, Bullard Bros., Woodland, Cal.; 5, J. M. Moran, Starbuck, Wash. Yearling—1 (champion) and 4, Bullard Bros.; 2, Moran; 3, U. of I.; 5 and 6, Burlingame. Lamb—1 and 2, Bullard Bros.; 3 and 5, U. of I.; 4 and 6, Moran.

Ewes: Aged—1 (champion) and 2, Burlingame & Craig; 3 and 6, Moran; 4 and 5, Bullard Bros. Yearling—1 and 2, Burlingame & Craig; 3, U. of I.; 4 and 5, Bullard Bros.; 6, Moran. Lamb—1 and 2, U. of I.; 3 and 5, Bullard Bros.; 4 and 6, Burlingame & Craig. Flock—1 and 4, Bullard Bros.; 2 and 6, Burlingame & Craig; 3, U. of I.; 5, Moran. Flock bred by exhibitor—1 and 4, Bullard Bros.; 2 and 5, Burlingame & Craig; 3, U. of I. Pen of four lambs—1 and 3, U. of I.; 2 and 5, Burlingame & Craig; 4, Bullard Bros.; 6, Moran. Pen bred by exhibitor—1 and 3, U. of I.; 2 and 6, Burlingame & Craig; 4, Bullard Bros.; 5, Moran. Get of sire—1 and 3, Burlingame & Craig; 4 and 6, Bullard Bros.; 5, Moran; 5, U. of I. Produce of dam—1 and 2, Burlingame & Craig; 3, U. of I.; 4, Bullard Bros.; 5 and 6, Moran.

Tell Us Your Happiest Christmas

First prize of $5
Second prize of $3
Third prize of $2
Five prizes of $1 each

for the story of your best Christmas.

Think over your past Christmases and pick out the one which you are the happiest to remember. It may or may not have been the most delightful one, but the one which has given you the greatest satisfaction during the years that have passed.

These prize articles must be within 500 words in length.

In order to be judged for a prize all these articles must reach our office on or before December 8.

Mail direct to Prize Editor, The Washington Farmer, Spokane, Wash.

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It is made from the best Gypsum plaster between two layers of specially prepared waterproof paper and will not crack or warp under any conditions.

ASK YOUR DEALER ABOUT "PERFECTION"
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Seattle.

GREAT NORTHERN URGES SAFETY

Be Careful at Grade Crossings

Almost daily there is reported a very large loss of life through preventable accidents, and many people who are not killed outright are maimed and crippled in such accidents.

Carelessness in crossing railroad tracks was responsible for more of these accidents than any other one cause. They are public as well as individual misfortunes. Your turn may come next if you, too, are not careful. Recklessness on your part will menace those on the train as well as yourself.

There is always a train coming; it may be nearer than you think. A track ahead always means great danger.

About 80 per cent of the automobile drivers do not stop or look in either direction before crossing a railroad track; in about 20 per cent of automobile crossing accidents the automobile is run into the side of a train. No such accidents could happen if automobile and other drivers were careful at every grade crossing.

The train can not turn out for the automobile, and must cross the highways at its usual speed in order to maintain the service that the people need and demand.

Railroad employees and railroad companies are showing praiseworthy zeal and making rapid progress in the adoption of safety precautions and the liberal use of safety appliances in shops and switching yards as well as on the line. What is being done along this line will be more fully developed in another talk.

Be Careful at Grade Crossings

LOUIS W. HILL,
Chairman of the Board.

Talk No. 9.

Purebreds Prove Profitable Pork Producers

Promoting Bred Sow Sales, the Boys' and Girls' Swine Club Work and Ton-Litter Contests

By C. M. HUBBARD

Extension Specialist in Live Stock, W. S. C.

"The purebred boar and sow are so much more efficient than the grade or scrub that we can not afford to raise other than purebreds. We carry 1000 brood sows, 700 of which are purebred, and we are rapidly increasing the purebreds," said R. C. Woodruff, manager of the Pacific Meat company's ranch near Seattle. "The purebreds farrow larger litters, grow more rapidly and put on a cheaper gain." This statement was made last February at Yakima at a meeting of representative hog men of the state who had gathered to discuss ways and means of developing a more efficient swine production in Washington. These hog men were of the unanimous opinion that an increased use of purebred hogs for pork production was the cornerstone of the whole structure.

Purebred Feeder Pigs.

Hog men of Washington, meeting at the Washington state fair at Yakima this fall, reapproved their faith in the purebred for efficient pork production. J. F. Pfander, secretary of the National Duroc Jersey Breeders' association, meeting with breeders at Lewiston, stated that "There is a rapidly increasing sentiment in the corn belt in favor of the purebred for the production of pork. Many farmers are paying a premium for purebred feeder pigs."

By what methods can more farmers be interested in carrying good purebred sows? Bred sow sales, the boys and girls' swine club work, the "Ton Litter" contest, press stories indicating the superior results obtained by litters from purebred sows, the influence of our best farmers and breeders, all point the way toward spreading interest in a more general type of high-class farm hog.

The Bred Sow Sale.

The value of the bred sow sale as a means of placing good hogs on the farms of their communities is being more appreciated by swine breeders as time passes. Good sows so placed make a convert of the buyer to the purebred ranks and to the particular breed concerned. Again these sales make strong breed publicity.

The better breeders are watching closely the quality of the hogs they consign to such sales with the idea in mind of giving complete satisfaction to purchasers. They offer only high-class specimens, sending the plainer material to the pork barrel. Only bred sows from large litters are offered, realizing that sows from small litters themselves average small litters and that the farmer's hog is always a hog capable of farrowing large litters. Pedigrees on sale consignments are on hand, as the breeder knows that if any one thing exasperates a farmer it is waiting from several months to half a year for the certificate of registry.

Strong sentiment developed at the state fair swine meeting in favor of a series of purebred sow sales in favorable localities of the state this late winter and early spring as a means of meeting the farmer's demand for better hogs.

Boys and Girls.

No phase of swine improvement offers greater opportunity for progress than does the boys and girls' swine club work. Carrying with it the use, in nearly all instances, of purebred females and using bred sows or gilts in the majority of instances, the club work is a relatively rapid means of spreading good hogs in a given neighborhood.

A local swine club leader in the Latah community, Spokane county, says, "This swine club work in this community for the last two years has put the hog industry on its feet. A year ago there was a demand for at least 60 registered gilts among the farmers in the community. Now from 40 to 50 per cent of the farmers are adopting swine club methods in this community."

Not only are the club members assisted in purchasing a good purebred sow or gilt, but they are also given instructions on feeding, management and judging work and interested in taking a few head of their best pigs to the county fair. Club members are informed by their leaders that, while now and then a gilt or boar may be good enough to sell for a fancy price, still practically all the gilts will sell to farmers at or a trifle above, farmers' prices or else go into the pork barrel and that the male pigs will travel the same route.

Grand champion pen barrows at the Pacific International Live Stock show, from River Banks farm, Grants Pass, Ore.

Older Folks Follow.

In nearly every county in the state where swine club work is being conducted a healthy increase in membership and interest in the work is noted. In 1923 a 15 per cent increase in enrollment over 1922 was obtained in all counties carrying county agents. The swine club work is receiving the hearty and enthusiastic support of the hog men of the state in its work of educating the young people, as well as older farm folk, toward a higher class of hogs.

The swine men of Washington favor the "Ton Litter" contest, being carried on again in 1924, as another means of improving the quality of our hogs. The production of a ton of pork from one litter in six months calls for good breeding and high-class care and management. It calls for large litters, nearly every pig of which must be saved; for modern type hogs rather than short, chunky ones; a good strong growing ration for the sow and litter for the first few months, with later on a change to the fattening type; and for the use of pasture of a legume or grain nature in order to keep down the cost of production. Last year in the Indiana contest every one of the 36 winning litters were from purebred dams. Surely here is another lesson in efficient pork production.

Farm Leadership.

Numerous prominent farmers over the state might be pointed out as using purebred sows for pork production purposes. Among these may be mentioned J. Huston McCroskey, local leader of the Garfield swine club, Lester Daily of Palouse and Roy Perringer of Belmont, who are running purebred shoats with the object in view of cleaning up their wheat stubbles and pea fields more efficiently.

With the United States department of agriculture stating that good purebred hogs are 38 per cent more efficient pork producers than grades and scrubs, and with the experience of practical hog men reaffirming this statement surely here is an avenue toward a greater profit open to the rank and file of our farmers.

Breeders' Sales at the Pacific International Livestock Show

More sales than ever before and higher prices for dairy cattle than have been realized for several years is the story in a few words of the live stock sales at the 1923 Pacific International. New this year were the Duroc-Jersey swine and the Guernsey cattle sales of Wednesday afternoon, the latter of which set a high average for other sales of the week; the sales of Shropshire sheep on Friday, and the private sales of Hereford cattle on Saturday; and while it could hardly be said that prices received by beef cattle breeders for their splendid offerings were satisfactory, yet they probably were better than expected under the conditions. The sales offer a good medium for an annual clean-up, and this year there was a splendid average of quality in the consignments.

The total turn-over was close to $100,000, of which boys and girls' club consignments, disposed of this season for the first time in a separate sale, furnished nearly $10,000, or about 10 per cent. The splendid conditioning that their animals had received, particularly the fat hogs in the Portland Union Stockyards company contest, was frequently remarked at the sale ringside. The largest amount of money was received in the Holstein sale, backers of which pride themselves on the fact that it was the eleventh annual. Fifty-four head brought over $17,000, and the top prices of $2000 for a bull and $1000 for a female, and the average of around $320, renewed the confidence of many a breeder. Sixty head of Jerseys brought $14,265, and while their average ($237) and their top ($1225 for St. Mawes Anne Rosaire) did not quite equal those of other breeds, the sale was entirely satisfactory. Thirty-eight Guernseys brought $12,365, making their average of $325 highest of the week. Janis of Sequoia, state and northwest leader in production, was their headliner at $1500. Thirty-three Herefords brought $4110, averaging $124; 65 Shorthorns $7993, averaging $123; and the Duroc-Jersey and Shropshire bred ewe sales brought in totals of $1400 and $825 more, respectively. In the sales of fat stock (including carloads), sensational features of former years were lacking, but 151 steers brought over $14,000, 283 hogs over $5750, 194 sheep nearly $2500, and the total was $22,622.27.

Forty-nine steers and a heifer, disposed of in the sale of boys and girls' club stock, brought $6287.50 as returns for the work of the young but very rapidly coming breeders. Hogs numbering 184 brought $3421.27, and lambs numbering 17 were disposed of for $194.67. These figures are staggering when compared with the comparatively small totals of two or three years ago, but they truly indicate the wonderful growth which club work is undergoing.

Not including two private sales of Herefords, on which figures are not available, the grand total of sales for the week, in round numbers, was $90,715.

Fifty-four Holsteins, 49 females and five bulls, brought a total of $17,240 and an average of $320 each in the 11th annual sale at the Pacific International Live Stock show at Portland. The list included principally consignments from the herd of F. R. Beals of Tillamook, who sold 19 head, and practically the entire herd (33 head) of Max Arp of Eugene, Ore., who quit the breeding game following a destructive fire. J. Luscher & Sons of Fairview, Ore., consigned one bull and Thomas J. Owens of Kirkland another, a royally bred youngster that topped the sale at $2000 and became the property of the imperial Japanese government.

The Guernsey sale at the Pacific International was one of high class, including consignments from the herds of Albion L. Gile, Chinook, Wash.; Olympic farms, Seattle, Wash.; Minnie W. Miller, Wendell, Idaho, and the following Oregon breeders: River Banks farm, Grants Pass; J. A. and J. T. Richey, Boring; H. L. Carl, Hubbard, and Shannon B. Shafer, Deer Island; also a complete dispersal of the Cottonwood farm herd, following dissolution of the partnership which owned it. The average of the sale was $325 for 38 animals of both sexes and all ages. Janis brought $1500 from Troutmere farm and Gail $800 form R. C. Hallberg of Independence, Ore., who vied with a California buyer and with Claig L. Spencer of Seattle for the highest total of purchases. His total for four head was $2000, including a daughter of Gail and a half-sister by the same sire. Troutmere farm totals was $2200 for three and Spencer's $2985 for 10 head from six different herds.

The first Duroc Jersey hog sale at the Pacific International hog show was held November 7. Three consignors made the sale and 32 hogs went through the ring. Top price was paid by Mr. and Mrs. Robert H. Warren of Forest Grove, Ore., who took the litter mates, Red King's Butterfly and Red King Buttercup for $115 each. Berry's top gilt brought $75 and was taken by Henry Zorn of Aurora, Ore.

Another new live stock sale was inaugurated at the Portland International this year when the Oregon Shropshire association put on a bred ewe sale. Seventeen ewes and three rams were sold. Prices were not high, but they were sufficiently satisfactory that the announcement was made, with the sanction of the breeders who had consigned, that the sale would be held again next year.

With a top price of $1225 and an average for the 53 females of $239 and $201.43 for the seven bulls, the Jersey sale at the Pacific International was deemed successful in every particular. There was almost every kind of Jersey consigned from calves barely 6 months old to cows past 10 years. The top price was for the young cow, St. Mawe's Anna Rosaire, consigned by G. H. Dammeier of Portland. The buyer was David Spencer, Ltd., of Vancouver, B. C., who was one of the best buyers of the sale. He took seven head for a total of $2880.

About 37 head of Herefords were sold at the Hereford sale at the Pacific International, about evenly divided between bulls and females. Top price for bulls was $250 and the average was $141. Average on the females was $120.

The Shorthorn sales at the Pacific International reflected the fact that the beef cattle business is still in a demoralized condition. Prices were decidedly low. Forty-two head of females were sold for an average of $112 and the 23 bulls averaged $145. Top price was $315, paid by the University of Idaho for one of the prize females from the F. M. othrock consignment.

Valley Apple Show

The biggest Spokane Valley Apple show yet held closed last Saturday night, with both attendance and exhibits outstripping those of last year. Although the exhibits of 1922, which were afterward sent to the Pacific International Fruit show at Seattle, won the sweepstakes there, the apples displayed this year were uniformly of even higher quality, stated J. B. Felts, manager of the show. About 30 varieties were shown in all by the 77 growers who exhibited individually, and in all some 400 trays, plates and boxes. Singles trays and three-tray exhibits, single plates and plates of five different varieties competed for the prizes to individual exhibitors, and there were beside exhibits by the valley clubs. In the women's department more than 100 varieties of apple product were displayed. Manufacturers

(Continued on page twenty.)

Winter Poultry Show

Five states—Washington, Oregon, Idaho, Montana and California—and the Canadian province of British Columbia were represented at the Western Winter show, the 14th annual exhibition of the Oregon Poultry and Pet Stock association, which is the poultry division of the Pacific International. Over 2000 birds were exhibited by more breeders than ever before, and from a wider territory, and C. S. Whitmore, secretary of the association, and Superintendent E. C. Shearer, both of whom have acted in their respective capacities for five years past, agreed that the 1923 exhibition established the high water mark of Portland shows, so far. Early November is too early in the season for the birds to be in good show condition, but even so, the other benefits which accrue to the exhibition by being held in conjunction with the Pacific International are held fully to justify its continuance

(Continued on page six.)

THE WASHINGTON FARMER

Successor to
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Spinach for the Cannery

Two hundred tons of spinach were raised for the cannery by farmers in the Yakima valley. This crop affords a chance for getting two crops from land that is to be planted later to potatoes, or other row crops. An average yield of 3½ tons has been estimated for the Yakima section.

Corn Clubs Popular

Corn clubs have been very popular with the boys' and girls' clubs in Benton county, there being a total of four such clubs in the county this past summer under the supervision of Miss Gertrude M. Gage, the county club leader. Each member took one-half acre of ground and prepared it for planting, planted the seed, cultivated and harvested the corn. In each case the member was required to keep accurate account of all labor and money expended, which figures were kept in the record book which is furnished by the extension service of the state college. All of the corn this year was some variety of Dent and many had yields that would have been a credit to their fathers' fields.

Prohibits Japanese Ownership of Land

Japanese ownership or leasing of lands in Washington and California was knocked higher than a kite by the supreme court of the United States in a sound, well-reasoned decision, as announced in the last issue of The Washington Farmer.

The constitution of the state of Washington, adopted in 1889, prohibits alien ownership of land. Additional to the constitution, a state law forbids the leasing of lands by Japanese.

The supreme court not only found our state constitution and laws in harmony with all rights guaranteed under the United States constitution, but declared that the treaty with Japan gives the subjects of that empire no such right as that for which they contended in the owning or leasing of land.

The supreme court's decision follows the line of reasoning that was advanced by The Washington Farmer when this issue was thrust into the courts. The fundamental doctrine is laid down in this decision that "the quality and allegiance of those who own, occupy and use the farm lands within its borders are matters of highest importance, and affect the safety and power of the state itself."

We hope that this decision disposes of a problem that carries a good deal of dynamite. It does not necessarily follow though that this ends the issue. We are safe from the evil of Japanese ownership and leasing of land so long as the present treaty stands with Japan, but it is possible that a new treaty could be negotiated and ratified by the United States senate that would give Japanese subjects the right to own and lease land in the United States and in that event the treaty would be superior to our state constitution and laws.

That is a possibility, but is highly improbable. The spirit of the people of the Pacific coast and Rocky Mountain states is resolutely against Japanese occupancy of our agricultural lands, and it is not likely that any administration at Washington would care to flout that spirit by negotiating an objectionable treaty with Japan. Even if our state department should negotiate such a treaty it would not come into effect until it had been ratified by two-thirds of the members of the United States senate.

It is theoretically conceivable that Japanese subjects could yet be put in the way of acquiring land in this and other states of the west coast, but as a practical political proposition it seems that the issue was effectively disposed of when the United States supreme court sustained our state constitution and law.

Menace to the Dairy Industry

The National Milk Producers' federation has been in session at Pittsburgh, Pa. At the opening session, Charles W. Holman of Washington, D. C., the secretary of the federation, uttered a warning to American farmers that they must protect themselves against the continuing menace of Oriental vegetable oils. Mr. Holman reviewed the fact that American farmers united in a fight to secure some measure of protection in the permanent tariff act of 1922; that they were opposed by a powerful lobby, financed by the organized soap interests, and uttered the further warning:

"Our farmers should not delude themselves with the belief that this lobby is now asleep. It is still on the job in Washington, engaged in the gentle task of trying to array one class of farmers against another and thus defeating all farmers. Connected with this lobby are large importers of vegetable oil."

The speaker also cautioned dairymen that they must prepare still further to protect their interest against butter substitutes. The vegetable margarine interests are preparing to wage a bitter fight to loosen restrictions, said he. "The first battle ground will be in the state of Washington, where a referendum vote has been ordered on a law which practically stamps out the margarine traffic and which was secured by the organized cooperative dairymen and the consumers of that state. I am informed that the opponents of this law are prepared to spend unlimited sums to defeat it at the polls. They fear the extension of this form of legislation to other states and they fear particularly the example which Canada has set in forbidding the importation, manufacture and sale of margarines in the Dominion."

The law passed by the last legislature of Washington, referred to by Mr. Holman, is given below, and is entitled "An Act Relating to Milk Products, to Prevent Fraud Therein, and the Adulteration Thereof, Regulating the Manufacture and Sale Thereof and Providing Penalties for Violation Thereof."

Section 1. It shall be unlawful for any person or corporation to manufacture for sale, sell or exchange or expose or offer for sale or exchange any condensed or evaporated milk, or any substance containing any milk or milk products and designed or intended to be used, or capable of being used for or as a substitute for condensed or evaporated milk, unless the milk used in the manufacture thereof is pure, clean, fresh, healthful, unadulterated and wholesome milk; provided, that nothing herein contained shall be construed as prohibiting the manufacture or sale of condensed or evaporated milk manufactured from pure, clean, fresh, healthful, unadulterated and wholesome skimmed milk; and it shall be unlawful for any person or corporation to manufacture for sale, sell or exchange or expose or offer for sale or exchange any condensed or evaporated milk containing any vegetable fat.

Section 2. It shall be unlawful for any person or corporation to manufacture for sale, sell or exchange or expose or offer for sale or exchange any substance containing any milk or milk product and designed or intended to be used, or capable of being used, for or as a substitute for butter, unless the milk contained therein, or used in the manufacture thereof, is pure, clean, fresh, healthful, unadulterated and wholesome milk from which none of the cream or butterfat has been removed, or to manufacture for sale, sell or exchange or expose or offer for sale or exchange any substance containing any milk or milk products, and designed or intended to be used, for or as a substitute for butter, which contains any vegetable fat.

Section 3. Every person or corporation violating any provisions of this act shall be guilty of a misdemeanor, and for a second and each subsequent violation thereof shall be guilty of a gross misdemeanor.

The dairymen of the state and all the friends of the great industry which is threatened must keep wide awake in defeating this referendum.

Washington State Gleanings

C. H. Greeley of Ridgefield won the $50 prize for the best bushel of certified Netted Gem seed potatoes exhibited at the Land Products show held at Portland during the week of the Pacific International Live Stock show.

TAX PAYMENTS INCREASE.

Internal revenue collections for the district of Washington, which includes Alaska, already have reached a total of $13,617,240 for this year. According to Burns Poe, collector, of Tacoma, this year's business of his office will greatly exceed that of 1922.

FARM BUREAU REORGANIZED.

W. H. Talley, secretary of the state farm bureau, and Brick Burford, Whitman county agent, reorganized the farm bureau at Thornton. Claude Comegys was elected president; Anson Patterson, vice president, and Mrs. Charles Hughes, secretary-treasurer.

GROW GROUND CHERRIES.

Ground cherries promise to become one of the principal crops in the Pasco district, according to County Agent Harold Simonds. The fruit has not been grown extensively, but a number of farmers have tried it this year and the crop proved very satisfactory. The cherries are unusually large and of good flavor.

EGG RECEIPTS AT WINLOCK.

Receipts of eggs at the Winlock station of the Washington Cooperative Egg and Poultry association for the week ended September 29, 1923, were 504 cases, compared with 220 cases for the corresponding week of 1922. For the week ended October 6, 1923, cases received totaled 421, compared with 208 a year ago the same week.

WILL SHIP APPLES TO EUROPE.

E. E. Ullberg, Seattle agent for the Cunard Steamship company, announced October 26 that 20 carloads of apples have been bought at Walla Walla for shipment to Europe. People of England and Scandinavian countries are in the market for smaller apples, he said. The apples were purchased from J. L. Johnson, Freewater, Ore., and T. A. Jones, Walla Walla.

LUMBER CARGOES FOR JAPAN.

Grays Harbor will ship 250,000,000 feet of lumber to Japan next year, according to H. N. Anderson of the Twin City Lumber company, who said that the independent lumber companies of Grays Harbor are specializing in Japanese trade and have chartered ships until May 1, 1924. The ships were chartered at low rates immediately after the earthquake disaster.

SHIP 50 CARS OF APPLES.

The apple season at Peach, in Lincoln county, is drawing to a close, reports Lynn Carter, manager of the White Brothers and Crum fruit warehouse. The company has sent 50 carloads of apples from this point. There were about 60 varieties included in these shipments, but Rome Beauties predominated. Probably 15 cars have been consigned by independent shippers.

YAKIMA ONIONS GRADE HIGH.

Yakima valley onions very readily make United States grade No. 1, according to W. L. Close, district horticultural inspector. The requirement for that grade is that the onions be not less than 1 1-4 inches in diameter and very few onions here are smaller than that. Those 1 1-4 to 1 3-4 inches in diameter are No. 1 medium and those still larger are the United States No. 1 large. The crop is greater than had been estimated and may run as high as 250 to 300 cars.

DECIDE TO PICK APPLE CROP.

The Stanton Investment company, owners of the Baker-Langdon orchard at Walla Walla, have finished picking about 20,000 boxes of Rome Beauty apples which it had planned to leave on the trees. Improvement in the apple market caused the decision to pick the apples. The company has 100 carloads of apples in storage in Chicago and Kansas City and 30 carloads in Freewater, while 10 carloads were shipped to England. The company has packed 210,000 boxes besides about 25,000 boxes to be used for byproducts.

1000 BOXES APPLES TO ACRE.

One thousand boxes to an acre on C. E. Chase's 20-acre ranch on Okanogan avenue is one of the largest yields reported this year at Wenatchee. Twenty thousand boxes for the entire orchard, is the latest estimate, and final figures will not vary materially from that.

In 1920 the trees had set their record at 20,436, which this year's crop has failed to beat. In 1921 they produced 17,900, and in 1922, 18,400 boxes. The trees are now 17 years old.

Mr. Chase's ranch is believed to be typical of the yields in the lower valley, most of them running beyond the early estimates for this year.

HORNET-YELLOW JACKET WAR.

Hornets and yellowjackets proved a more serious menace to fire wardens in Pend Oreille, Stevens and Chelan counties during the last season than did forest fires, according to Ted Goodyear and A. E. Schaller, who are now in Olympia after their season's work in eastern Washington. Not only were the hornets a constant source of annoyance to the men, but they were the third most frequent cause of fires, it was reported.

In a number of instances farmers and tourists who were bothered by the insects burned them out and the fires set to destroy the pests spread to the near-by forests, requiring the services of rangers to put them under control.

Lightning was the most common single source of forest fires on the East Side this year, the wardens stated, with the work of careless tourists coming next in order. Pend Oreille county suffered most from lightning, 35 of the 65 fires being attributed to it, Warden Goodyear reports. Thirty tourists, mostly easterners, were fined for leaving fires burning in the Blewett pass country, Warden Schaller states.

Although the latter part of August and all of September were highly favorable for forest fires, the loss was extremely low, it is said. In Pend Oreille county not more than 937 acres of land was burned over, only 47 acres of which contained merchantable timber, and of the 2900 acres burned over in Stevens county, not more than 300 acres was timber land.

Every Farm a Factory

Practice Has Drifted a Long Way from that Safe Mooring

"Every farm a factory" is the slogan proposed by the American Society of Agricultural Engineers, on recommendation of a committee report submitted by Professor L. J. Fletcher of the University of California, following a year's study of the problems involved in the preparation of farm products for the consumer.

"Manufacturing on the farm is not a new idea," the report says. "It was commonly practiced 2000 years ago throughout the Roman empire. Today the majority of the farmers of the United States are selling their products as raw material, while the manufacturing is carried on by separate highly specialized organizations."

The committee need not have gone back to the Roman empire. All through the colonial period of American history manufacturing was carried on right on the farm. Every well-equipped farm of that period had its forge, and many of them made boots and shoes, clothing and other commodities needed by the farmer, his family and his workers.

That practice extended down to the latter half of the last century. There are today many men and women in the Pacific northwest whose childhood was passed on farms where a flock of sheep provided the wool that was carded, spun and woven by the grandmothers and mothers of that period. The well-balanced farm then had its bees for honey, its sorghum patch for sirup, and even a little patch of broom corn for the family brooms. A yearly outlay of a few dollars for coffee and tea and perhaps a little sugar, required the handling of very little money by the successful farmer of that period. He was independent and he was out of debt. He was efficient himself and brought up his boys and girls to efficiency.

Farming has drifted a long way from that safe mooring, particularly in parts of the Pacific northwest. On too many farms there is even lacking production of the butter and milk, the poultry and eggs, the garden produce and the fruit that is consumed by the family on the farm.

That is one thing that is ailing American agriculture today. In the opinion of some observers it is the chief ailment.

Call for More Dairy Production

The call is constantly for more dairy production in this country. The distressed wheat growers are advised from many sources that if they would go into diversified farming and turn to dairying they and the country would be better off. We think that is true. We should like to see agriculture in the Pacific northwest turn more to dairying. But to bring about that happy condition the dairy producers must be given the fullest assistance compatible with the public interest.

There are two causes tending to keep down dairy production in the United States. One is the increase of butter substitutes. The consumption of oleomargarine, for instance, is steadily increasing. Complete revised figures of the bureau of internal revenue show a production of colored oleomargarine during the fiscal year that ended June 30, 1923, of 6,766,000 pounds, an increase of nearly 2,000,000 pounds over the production in the preceding year.

In the same year, ended June 30 last, production of uncolored oleomargarine reached the stupendous total of 202,852,000 pounds, an increase of nearly 20,000,000 pounds over the production of the preceding year.

At the same time the records of the government show that foreign butter is coming into the American market, although it has to pay a tariff tax of 8 cents a pound. Imports at New York in September amounted to 823,000 pounds, including 168,000 pounds from Argentina, 56,000 from Denmark, 72,000 from Holland, 52,000 from Ireland, 67,000 from Esthonia and 404,000 pounds from Siberia. The total butter import at New York from January to September of this year amounted to 12,282,000 pounds.

One does not have to be a high tariff supporter to see that our dairy producers do need protection. If more than 12,000,000 pounds of foreign butter could be sold in the single market of New York in nine months and pay a tariff of 8 cents a pound it is not difficult to speculate on what would happen if we had free trade in butter.

When the tariff law of 1922 was under consideration in congress, representatives of the great dairy associations told the congressional committees that a tariff tax of 8 cents a pound would be insufficient to shut out foreign competition. The records now show that they were right.

KEEP THE DOCKAGE AT HOME.

Northwest Farmstead: Let's keep the dockage at home, feed it to our own live stock, save the freight on it, and get pay for good grain instead of dirty grain. The first lesson in marketing is always that quality pays.

Good to Give Thanks

For Thou, Lord, Hast Made Me Glad Through Thy Work

It is a good thing to give thanks unto the Lord, and to sing praises unto thy name, O most high:

To shew forth thy loving kindness in the morning, and thy faithfulness every night.

Upon an instrument of 10 strings, and upon the psaltery; upon the harp with a solemn sound.

For thou, Lord, hast made me glad through thy work: I will triumph in the works of thy hands.

O Lord, how great are thy works! and thy thoughts are very deep

A brutish man knoweth not; neither doth a fool understand this.—Psalm 92:1-6.

HARD LABOR AND CLEAN LIVING.

Rural New Yorker: Several of our presidents were born on a farm and as boys were well acquainted with farm life. Washington was an aristocrat, one of the largest land owners of his time. It could not be said that he represented the typical farm life of his age. Lincoln was a farm boy—the exact opposite of Washington in social standing. It can not be said that his log cabin and rough boyhood surroundings represented the ideal country home. The fair type of what we consider the true rural American home lies between the lordly estate and the rough cabin, and we think the boyhood home and the early life of President Calvin Coolidge come close to the ideal of what we should consider typical farm surroundings. It means something to maintain a New England farm through four generations from the original pioneer, keep the land clean and in good tilth, hold the thrift which follows wise economy, and preserve the solid independence which gave such character and power to the old-fashioned farmer. This seems to be what has been worked out on the Coolidge farm in Vermont, and the more we hear of the president's farm life and the character of his parents the clearer it seems that he has come from about the finest starting point a man can have; that is, a practical farm, where hard labor and clean living are essential to a livelihood.

FARM BUSINESS AND MARKETS OUTLOOK

NO new clouds are apparent on the business horizon to suggest that a storm is brewing. Developments of last week contained a reasonable proportion of sunshine. In the farm market field a more steady undertone in cattle and sheep, the advances in corn and cotton and the evidence of sustained consumption of dairy and poultry products at good prices put the majority of changes on the favorable side.

The Harvard committee on economic research expresses its conviction as to the business future as follows:

"Favorable money and credit conditions give assurance that the readjustment which has been under way will be completed without development into depression. If fundamental conditions had generally been unsound the business recession of the last five or six months would have resulted in frozen credits and money stringency which would forecast business depression. General wholesale commodity prices, following the sharp recessions of late spring and early summer, have been stabilized. Retail trade has remained good. Thus the general business situation, despite weakness in certain lines, appears sound; and the strained credit conditions from which depressions ordinarily develop are absent."

Roger Babson looks for a further recession in business and industrial activity in the immediate future, but is hopeful of improvement in the farm field with a possibility that before the end of next year farmers may even be in a better position financially than their city brothers.

The November review of the Cleveland Federal Reserve bank makes this statement:

"Business has entered into the final quarter of the year, with production less active in certain lines than it was a month ago, but still large in volume and sustained by the consumption requirements of a well-improved population.

"Agricultural conditions are showing a steady improvement and it is the opinion of those in close touch with the farm trade that farmers in certain sections are coming into the market for those necessities which they have needed for the last three years."

Comeback in Steer Market.

A better undertone is perceptible in the cattle market, with trade more brisk, sales more prompt and steer prices at the highest point in a month. Market supply was slightly smaller and the lightest since mid-August, but the eastern beef market was sluggish as pork and poultry are abundant and cheap and the total amount of beef to be consumed is above normal.

Prices remain unsatisfactory, however. Few mature steers are selling above $10.75, but yearlings at $10.75 to $11.75 are numerous. Handyweights also get quick action.

Stocker and feeder purchases are running below last year and many feeders are taking light cattle, presumably to be carried along rather than to be forced on feed immediately, so that the prospect for the midwinter fat steer market is improving.

Hog Market Lowest in Season.

Under steadily mounting receipts the hog market sank to the lowest point yet reached this fall. The supply continues to outdistance that of the corresponding period of last year, and indications that the big runs are due to premature selling of light hogs and liquidation of brood sows are becoming more clear cut. The department of agriculture reports that the number of stock hogs on farms on September 1 for the country as a whole was only 3-10 of 1 per cent more than last year. For the corn belt the increase was 4.3 per cent. The greatest percentages of increase were shown by the western states.

Lamb Market Higher.

Lighter receipts and a stronger dressed market in the east finally turned the lamb market upward. Cull lambs, fat sheep and feeding lambs were slightly higher. Most of the range lambs arriving are thin, indicating the clean-up stage, and many of the "comebacks" from corn fields are not fat. Feeder lamb shipments of the country continue at an extraordinarily high level, with most of them going into Colorado and adjacent territory at present.

A better tone was reported in the laggard Boston wool market last week with medium wool prices tending upward. Fine wools are inclined to be slow. Values on imported wool are stiffer, but a substantial amount was sold for reexport last week.

Wheat Market a Puzzle.

Wheat prices declined early last week, but the market steadied rather promptly on a moderately lower level. Both the behavior of the market and the probable outcome of the various factors likely to shape the course of prices are more puzzling than usual.

Corn and Oats.

Corn prices have been fluctuating rather wildly in the last two weeks, but have held up better than expected.

Sales of oats by producers and shipments from country points show further falling off. The visible supply declined last week for the first time since the heavy after-harvest movement started. It is probably near its peak for the fall, the present total of 20,272,000 bushels comparing with 33,827,000 bushels last year.

The rye market is trailing wheat.

Cash Grain Markets.

The range of cash grain prices for the week ended November 14 was:

CHICAGO—Wheat—No. 2 hard, $1.05@1.06; No. 3, $1.02 1-2@1.03. Corn—No. 2 mixed, 93@96c; No. 3, 85 1-2@90c; No. 4, 83 1-2@89c; No. 2 yellow, 97c@$1; No. 3, 91 1-2@93c; No. 4, 86 1-2@95c. Oats—No. 2 white, 43@45c; No. 3, 41 3-4@43c. Rye—69@70 1-2c. Barley—54@69c.

Seed and Feed.

The November estimate of the clover seed crop was 1,121,000 bushels, compared with 1,251,000 bushels a month ago and 1,875,000 bushels harvested last year. On this basis, the 1923 crop is the smallest in a number of years and below average requirements.

The feed market was quiet last week, with western mills offering wheat feeds to the east for immediate shipment at slightly lower prices.

Hay Markets Firm.

Light receipts and a good demand caused a firm tone in hay markets, with higher prices at several points toward the end of the week. Dairymen are good buyers of alfalfa at Kansas City.

Egg Prices Firm.

Receipts of fresh eggs showed a marked falling off last week. Prices advanced sharply, but declined when the output of storage stocks increased as dealers supplied more of their needs from this source. As fresh eggs continued scarce, however, the market recovered part of its loss and further advances are not improbable. Cold storage holdings of eggs on November 1, according to the preliminary report of the bureau of agricultural economics, amounted to 6,658,000 cases, the largest on record for the corresponding date. The October movement of storage eggs in the United States was more nearly equal to that of last year than in the preceding month, so that the November figures compared more favorably with the total of 5,726,000 cases on November 1, 1922, than was generally expected.

Butter Market Is Strong.

Butter prices remained practically unchanged last week. Receipts of fresh butter are declining gradually, as is usual during the late fall, and reports from production centers indicate further shortening of supplies. Storage butter withdrawn to supplement the fresh last week kept prices from advancing. Cold storage holdings on November 1, according to the preliminary report were 76,630,000 pounds, a surplus over last year of only 2,773,000 pounds, indicating a fairly rapid out of storage movement at the interior points. Thus far this month withdrawals at the four leading markets have been in excess of the same period last year. Dealers view the market with confidence, although prices are not expected to advance into much higher ground before the first of the year.

Cheese prices remained unchanged last week and the undertone appears stronger. Receipts are still liberal, but are beginning to fall off and consumption continues high, so that firmer prices are to be expected.

Fruits and Vegetables.

The November estimate of the white potato crop was 417,000,000 bushels, an increase of 15,000,000 bushels over a month previous, mostly in New York and Pennsylvania. Sweet potatoes were estimated at 97,000,000 bushels or an increase of 1,000,000 bushels over last month. The combined yield of 514,000,000 bushels compares with 561,000,000 bushels harvested in 1922. Per capita production of white potatoes is about 3.8 bushels, which is above the average. Carlot shipments from producing sections have declined over 40 per cent in the last month and further shrinkage can be expected up to the first of the year. Northern round whites are quoted at 90 cents to $1.20 per 100 pounds in Chicago, with Idaho Rurals at $1.25 and Russets at $1.85 to $1.90.

The commercial apple crop estimate was increased slightly in the November returns to 33,522,000 barrels, compared with 30,955,000 barrels last year. Carlot shipments from producing sections last week were about one-third less than two weeks ago, but consuming markets have not recovered from the heavy movement and prices have not made much progress. Middlewestern A 2 1-4 Jonathans and Northern Spies are quoted at $5.50 to $6 a barrel in Chicago and northwestern medium to large extra fancy Jonathans at $2 to $2.25 a box, fancy at $1.75 to $2, extra fancy Delicious at $2.85 to $3.15 and fancy at $2.60 to $2.85.

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Sugar Beets

Made to Pay in West Washington

Sugar beets were tried out in western Washington the past season, and the general conclusions of several trial fields in Whatcom county show that they can be made to pay. H. B. Carroll Jr., county agent, has compiled the following figures which are self explanatory:

Horse labor—Plowing, $4.50; preparing seed bed, $3.25; seed and drilling (15 pounds to the acre), $3.25; cultivating four times at 65 cents per time, $2.60; plowing out beets at harvest time, $2.75; hauling 20 tons at 75 cents a ton, two miles, $15. Hand labor—Thinning, $8; first hoeing, $2.50; second hoeing, $1.50; harvesting, $16.50. Barnyard manure, $10. Total estimated cost of labor and seed, $69.50 an acre.

Returns—Twenty tons of beets at $8 a ton (paid in 1922), $160; less labor, etc., $69.50; income without taxes charged, $90.15.

In addition to the above income per acre, Mr. Carroll points out that there would be nearly eight tons of beet tops that could be used as feed, either for green feed or to put into the silo and fed out later in the season.

Even where the yield was lighter there would usually be enough profit to warrant the growing of beets. If there were only 15 tons to the acre and the total cost of producing the crop, the same as above, the gross return would be $120 from 15 tons at $8 per ton. That would mean a net income of more than $50, which does not include taxes and there would still be six tons of tops for feed.

While beets are yet in the experimental stage, the trials are conclusive enough to warrant further plantings in this territory provided the tonnage made this year can be equaled in future years. There seems to be little reason why this crop would not combine well with dairy or poultry farming. Mangles have already proved their value as a root crop but are used only as cow feed. Yields of as high as 50 and even more tons to the acre have been reported and there is a possibility of raising the tonnage of sugar beets. The highest yield of the latter in the trial plantings was close to 30 tons to the acre.

DR. HOLLAND SAILS FOR EUROPE.

Dr. E. O. Holland, president of the State College of Washington, sails for Europe this week to study the changed social and economic conditions of England, France, Germany, Russia and perhaps Czecho-Slovakia.

Twice before the war Dr. Holland visited Europe, traveling over much of England and the continent and acquainting himself with conditions as they then were.

Wheat Committee Announced

The personnel of the wheat committee authorized at the recent Colfax conference was announced Monday in Spokane by F. J. Wilmer, Rosalia, state senator from Whitman county, appointed chairman at the Colfax meeting. He reports that most of his appointees have sent acceptances and he expects them from all the others.

The Colfax resolutions specified organizations that should be on the committee to work out a wheat marketing plan that will solve present difficulties, if possible. Mr. Wilmer's appointments follow:

Peter McGregor, wheat grower, Hooper, representing the federal reserve bank and Adams county.

Arthur D. Jones, Spokane business men and wheat growers.

R. L. Rutter, bankers and war finance corporation.

Ward M. Buckles, Intermediate Credit bank.

A. W. Davis, Spokane, attorneys.

State Senator W. J. Sutton, Cheney, national banks and wheat growers.

H. Jurgenson, Wilbur, farmers' union and Washington Wheat Growers' association.

Ralph Comegys, Thornton, state banks and wheat growers.

County Commissioner Edward Powers, Starbuck, wheat growers.

State Representative H. E. Reynolds, Walla Walla, wheat growers.

W. C. Halsey, Asotin, wheat growers.

F. W. Hungate, Pomeroy, bankers, wheat growers and Garfield county.

J. Houston McCroskey, Garfield, farmers and farm bureau.

F. J. Wilmer, Rosalia, bankers and wheat growers.

Roy V. Peringer, Belmont, Washington Wheat Growers' association.

E. L. French, state department of agriculture.

E. J. Doneen, Farmington, farm bureau.

H. W. Cordell, department of economics, Washington State college.

Harrison C. Dale, department of economics, University of Idaho.

A member is yet to be named to represent Grant and Douglas counties. The committee will have its first meeting in Spokane Monday, December 3, under present plans. In the meantime every member will be furnished with publicity matter on the various plans to expedite action when they get together.

"The 'dirt' farmers have the majority on the committee, but we believe this is right," said Chairman Wilmer Monday. "Whitman county also has a large representation, but there was a motive in this. The indorsement by Whitman county of any plan will go a long way in the other counties. We will probably do our first work in Whitman county.

"The committee will endeavor to find a workable plan. It will consider every plan—cooperative marketing, fixed price, export surplus and any other that may be presented. We feel that we have a committee that will work well together. Every interest is represented and yet I don't believe we have any members who are sold on any one plan, or will be inclined to dictate policies."

Winter Poultry Show

(Continued from page three.)

under present arrangements. Cash premiums this year totaled $2500 for standard and commercial breeders' classes, egg show and rabbit show.

The fact that the Rhode Island Red Club of North America this year held its annual meeting in Portland and brought along some of its fancy stock to exhibit is partly accountable for the splendid showing of Reds, which was the largest of any breed, over 200 birds being caged. J. G. Dickson of Spokane was the largest exhibitor of this breed, but for comprehensiveness the display of Mr. and Mrs. J. T. Emert of Portland won most laurels. A group of Tacoma breeders contributed largely to the showing of Barred Plymouth Rocks, which with 100 birds was second largest. White Leghorns came next in numbers, but not in quality, for the constant striving of this breed toward high production has led it far afield from the standard of perfection. Buff Leghorns, Black Minorcas, White Plymouth Rocks and Anconas all were strong, the last named especially so, and there was a good display of turkeys.

Judges included W. M. Coates of Seattle, who has officiated every year since the show was started; J. C. Williams of Fullerton, Cal.; Tom Wilkinson of Nanaimo, B. C.; and H. E. Osborn of Portland. The latter named handled the awards on rabbits.

Holstein Sale

Twenty-nine head of purebred and grade Holsteins sold in the Clarke county breeders' first annual consignment sale at the fairgrounds, east of Vancouver, October 25, brought a total of $4875. Sixteen purbred females averaged exactly $200 each, but five grades averaged nearly $150 and one brought $255, within $50 of what the top price purebred sold for. Russell J. Case of B. O. Case & Sons' Longmeadow ranch, Vancouver, who arranged the sale, said that its proceeds satisfied all the consignors. These included Case & Sons, who sold 10 purebreds, mostly of their breeding, and five grades; Casper Jenny, who sold five purebreds; H. A. Simmons and W. C. Groth, who sold two each; J. M. Beveridge, M. B. Cunningham and Lloyd Whipple, who sold one each.

Tell Us Your Happiest Christmas

First prize of $5
Second prize of $3
Third prize of $2
Five prizes of $1 each

for the story of your best Christmas.

Think over your past Christmases and pick out the one which you are the happiest to remember. It may or may not have been the most delightful one, but the one which has given you the greatest satisfaction during the years that have passed.

These prize articles must be within 500 words in length.

In order to be judged for a prize all these articles must reach our office on or before December 8.

Mail direct to Prize Editor, The Washington Farmer, Spokane, Wash.

Electric Light Companies

Are Big Taxpayers

Electricity is your fellow taxpayer---and a big one, too.

The electric industry in Washington pays annually over $1,600,000 in taxes, making it one of the largest contributors to the support of the commonwealth.

Out of every hundred dollars that the various light and power companies receive for the sale of service, $9.60 goes right back to the public in taxes.

All the new money that these companies bring into the state in development means more property to carry tax assessments—a wider distribution of tax burdens.

Which is better—that your light and power facilities be furnished by properties which help to share your taxes, or by properties municipally owned which pay no taxes and increase your bonded indebtedness?

NORTHWEST ELECTRIC LIGHT AND POWER ASSOCIATION

"Just the Thing for Xmas"

Coleman Quick-Lite

"The Sunshine of the Night"

THIS wonderful lamp will bring the good cheer and radiant happiness of the holiday season to every "home evening" throughout the year. 300 candle power; brighter than 20 old style oil lamps or lanterns.

Surprise Mother on Christmas morning with a Quick-Lite Lamp. Dad or Brother will welcome the dependable Quick-Lite Lantern. Always ready for any job any night.

30,000 dealers sell Quick-Lites. If yours can't supply, write to nearest factory branch, Dept. PN. 17.

The Coleman Lamp Co.

Wichita, Philadelphia, Chicago, Los Angeles.
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Violin Free with lessons

Get a *real* Stradivarius model violin outfit and *famous* Imperial note and tuning chart *free*, by enrolling for our complete course of written and *illustrated* violin lessons. **Save time & money.** If you can read *plain* English you can learn to play *standard note music* quickly by this interesting *new short one note at a time* method. *Simple* as *A B C*. *Lessons only cost. Easy terms.* Successful pupils 8 to 70. Number of free violins limited. Write *today*.

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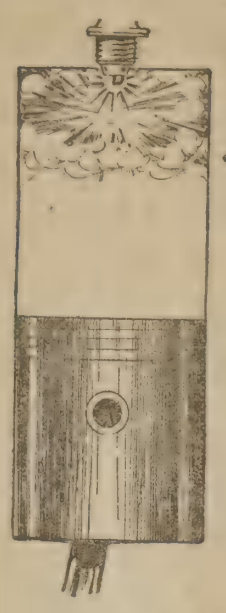
Just What You Want

may be offered in this week's want ads at a bargain. It's a good idea to look them over every week

With Union Non-Detonating Gasoline the Explosion thrusts the poston throughout the stroke, like this.



With detonating gasoline the Explosion may end here.

Non-Detonating Gasoline

Works a Full Stroke

Gasolines explode in two ways. One kind explodes with a crash. It **detonates.**

The piston receives but a single smashing impulse for each stroke. The power of the explosion is over before the piston is half way down the full length of its stroke.

Due to the tendency to explode prematurely, **detonating** gasoline limits compression in your cylinders.

It causes much of the "knocking" you notice on hills, or when a tractor is pulling hard. And the repeated crashing blows increase vibration, thus increasing wear and tear.

The Sustained Explosion

The explosion from Union Gasoline is of the **other kind.** It is sharp, but sustained—nondetonating. It gives impulse to the piston for the **full length** of the stroke.

Power and efficiency are increased as a result of increased compression, because, as all authorities know, nondetonation permits added compression.

New Speed

This added smoother power means a new "lift" on hills. You take grades with a rush. Your motor doesn't "knock."

There's more snap in your pickup and new speed on the level.

Vibration is reduced, which saves wear and tear. Fuel mileage is increased due to better efficiency all around.

So there are ample reasons for selecting Union **Non-Detonating** Gasoline for motor cars and tractors.

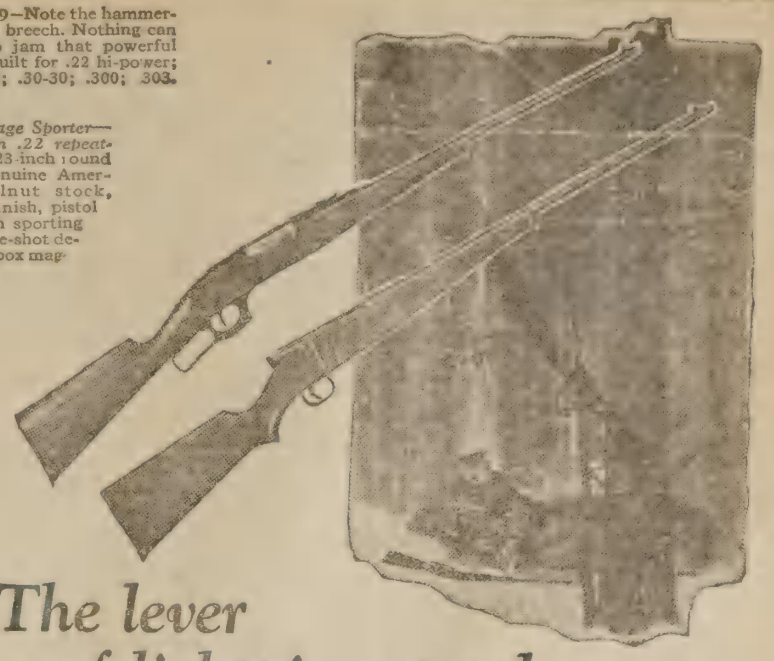
Union is the product of progressive refining methods. Its quality is governed by exhaustive tests. The research of able engineers and chemists, equipped with every accepted facility for studying refining methods, is constantly devoted to its improvement.

Union Oil Company
of California

Union Gasoline

Model '99—Note the hammerless, solid breech. Nothing can get in to jam that powerful action. Built for .22 hi-power; .250-3000; .30-30; .300; .303.

The Savage Sporter—bolt-action .22 repeating rifle. 23-inch round barrel, genuine American walnut stock, varnish finish, pistol grip, open sporting sights, five-shot detachable box magazine.



The lever of lightning speed

THERE'S speed in a Savage lever-action—in the short throw of the lever—in the powerful action that *always* functions.

There's speed, too, in the bolt-action—that smooth-working, easy-throwing bolt-handle. And deadly accuracy. Lever or bolt-action, a Savage shoots true.

And into the Savage magazine you can cram your soft points without denting a nose. For the Savage rotary magazine supports the cartridge *at the base*—no battering from recoil.

There's a Savage for every kind of American game

.22 Hi-power. Ideal for small and medium game—from woodchucks to wolves. Accurate at long and uncertain ranges.
.30-30. A standard and ever-dependable for deer and similar game at moderate ranges.
.303. The hard-hitting old .303—famous for 20 years. Ideal for deer; caribou and black bear. Unsurpassed for timbered country.
.250-3000. An all-around rifle. Terrific speed and low trajectory make it *the* gun for mountain sheep, goats and deer at extreme ranges.
.300. Delivers a smashing blow. Big enough for the biggest game. Splendid for moose and elk.

And the Savage .22s—the *Sporter*—the new bolt-action repeating .22—and the slide-action, Model '14—every feature originally and distinctively Savage—sturdy and accurate. Ask at your dealer's or write direct for our interesting catalog.

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Dept. 249, Utica, N. Y.
Owners and operators of the J. Stevens Arms Company

SAVAGE

Savage manufactures ammunition for every Savage high-power rifle. Savage ammunition is advised for use with Savage high-power rifles. Savage is now also manufacturing other well-known cartridges. Look for the Savage Red Box.

76th Year

The shrewdest buyers in the world are not those who can pick the lowest prices—but those who can pick the goods with the highest merit.

The PRICE is not the COST. The real cost is what you pay divided by the service you get out of what you paid for.

Reasonably Priced!

The most reliable dealers sell them.

HOLLEY-MASON HDWE. CO. Spokane, Wash. Distributors in Spokane and Spokane territory.

Charter Oak Stove & Range Co., St. Louis

LOOK AT THE GOOD FARM BARGAINS THAT ARE OFFERED ON THE FARMERS' "WANT AD" PAGE THIS WEEK.

LIVESTOCK AND DAIRY

Silage Trials

Show Corn Not Adapted to the Low Lands

The silage crop trials on the Hercules stock farm at Sprague have proved beyond a doubt that corn is not well adapted to the lowlands on the creek bottom. It is for this reason that F. M. Rothrock, the owner, has turned his attention to sunflowers for the silage since it is less easily frosted than corn. It is true that the cattle will eat more of the corn silage than of the sunflower product, but they soon become accustomed to the latter and do very well on it, according to results of the last three years' feeding.

This year Mr. Rothrock has 20 acres of sunflowers on his bottom land, which has not been irrigated. The yield was not measured, but a careful estimate shows a production of 12 to 15 tons of silage to the acre. On one patch last year, which was irrigated, the sunflowers produced approximately 20 tons to the acre. The seed was planted thick in the rows, which caused the plants to grow with smaller stocks, which are more easily cut and readily digested by the stock.

Some of the wheat farmers on the upland wheat sections of Lincoln county have tried sunflowers and find that they make a very good crop for the silo. They will withstand more drought and more severe frosts than will a crop of corn, and usually produce a larger tonnage of silage to the acre. Some dairymen have even planted sunflowers along the pasture fences and in waste places and allowed the cattle to browse from the leaves while the plants are growing. While this often helps the summer pasture problem, it does not solve the question of winter feed, which is an important problem in any wheat section where the wheat harvest requires a large part of the attention during late summer.

LIFE PRESERVERS FOR LIVESTOCK

By DR. E. E. WEGNER, W. S. C.

DISEASES OF MAN AND ANIMALS.

Many other diseases besides tuberculosis are transmissible to man. Glanders, a disease of horses and mules, is rather readily transmitted to the human being. This disease, however, is not commonly seen in man because he is usually careful in handling cases of this kind, and especially so if he realizes the danger to himself.

The principal symptom of glanders is the nasal discharge, and the ulcers on the membranes of the nose. These may go unobserved, however, by the animal owner, who is of the opinion that a nasal discharge is the result of catarrh or a diseased tooth or other noninfectious condition. Certain other diseases are associated with the discharge from the nose, so the nasal discharge is common in so many diseases that it is likely to arouse very little suspicion.

Glanders is transmitted from one animal to another by the infectious discharge being spread from one being to another. It may be spread from animal to man in the same way. The person then who is handling an animal with the glanderous discharge is in danger of infection all the time and if this material should get into the eyes or the mouth or other place where it could be easily absorbed into the system the result would likely be an infection of the human being.

But Little Hope of Recovery.

It is true that men have worked animals with glanders for years and have not caught the disease, and looking at the problem from that angle it might seem that there is relatively little danger, but we can not help but remember that when once this disease is contracted there is little hope of recovery, so we do not relish the idea of contracting glanders. It means weeks, months or years of suffering and ultimately death, as practically no recoveries are recorded.

I have in mind the case of the children who had a pony with a discharge from the nose that was supposed to be a simple thing and in no way dangerous. When this animal was presented to their veterinarian for treatment it was found to be glanders instead of the simple discharge from the nose. This animal had been used by the children for some time and none of the children contracted the disease, but it was only the good fortune of the little folks and not the precaution of the elders that was responsible for this happy termination.

A great deal is being done at the present time to eliminate the danger from this and all infectious diseases by trying to suppress them and prevent the spread among animals. When this is accomplished and the diseases have largely disappeared among the animals, there will be a greatly lessened danger to human beings.

We are quite sure that this disease is not as common as it used to be, but we found during the war time, when large numbers of horses were being assembled in the remount stations, that there was still a sufficient number of cases, and that the fight was not over yet by any means.

The only certain method of diagnosis in animals is the application of the test for glanders, known as the mallein test. This is a very effective method of making a diagnosis and few errors are made. The valuable feature of this test also is the fact that it will pick out the cases that are just beginning and allow us to catch them before the discharge appears or any other symptoms. The veterinarians, in controlling this disease among animals, have done a great service to the human family. Their constant fight to suppress animal diseases has protected human health more than any one fully realizes.

Glanders in Man.

Glanders in man may run a long or a short course, sometimes it acts like a case of blood poisoning and runs a rapidly fatal course. At other times it is a chronic disease characterized by the formation of chronic ulcers that are large and painful and difficult if not impossible to heal, finally involving larger and larger areas and eventually causing death.

The problem of suppressing animal diseases that may be transmitted to man is

AT YOUR SERVICE.
DEMPSEY
Hotel and Restaurant
(C. C. DEMPSEY & SONS)
UP TO DATE.
Opposite Union Station. Spokane.

SAVE ALL the CREAM

The Anker-Holth Cream Separator
meets with the approval of the most critical users. Why? Because of its self-balancing bowl and interchangeable disks. Place the disks in the machine any old way and they will be automatically thrown into place by centrifugal force.
PERFECTION MILKING MACHINE.
It has a gentle suction, spiral downward squeeze and a period of complete release.
Write today and we will send one on Free Trial.
THE J. C. ROBINSON CO.
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Prevent Blackleg By using
Blackleg Aggressin
NATURAL GERM-FREE VACCINE
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Scientifically Prepared and Tested
Consult your veterinarian or druggist.
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Animal Industry Department
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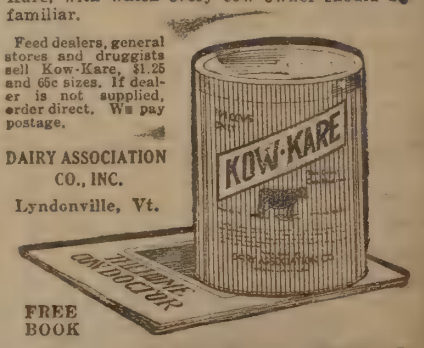
When answering ads, please don't fail to mention this paper.

From GRASS to DRY FEED
Now, the pasture field and range must give way
—to the stall and manger, the feed lot and self-feeder, the barnyard and fodder rack.
Include
DR. HESS STOCK TONIC
in the ration

You have often noticed stocking of the legs, roughness in the hair, highly colored urine—all on account of the change from grass to dry feed.
Not so where Dr. Hess Stock Tonic is fed. The Tonics, the Laxatives, the Diuretics, take care of all that. No worms; the Vermifuges settle them.
Then you are all set for heavy feeding, a good yield of flesh and milk throughout the winter.
Tell your dealer what stock you have. He has a package to suit. GUARANTEED.

I spent 30 years in perfecting this Tonic.
GILBERT HESS M.D., D.V.S.
25-lb. Pail, $3.50 100-lb. Drum, $12.00
Honest goods—honest price—why pay more?
DR. HESS & CLARK Ashland, O.
Dr. Hess Dip and Disinfectant Kills Hog Lice

10% More Milk Will Double The Profit from Your Cows
You do not expect bumper crops from your fields without fertilizing and extensive cultivation. Why, then, expect a maximum milk yield from your cows unless you keep their milk-making organs in top-notch health? The hard-worked milk-producing functions of the cow need frequent aid to keep up a full flow and retain the stamina to resist disease.
Kow-Kare has such positive action on the digestive and genital organs that its benefit is soon shown in the milk yield. Thousands of successful dairymen are now using it regularly about one week in each month for every cow. Especially during the winter months it aids in keeping up a full yield from dry rough feeds.
Dairy authorities say that the average dairy can double the net profit if measures can be found to increase the milk 10%. Kow-Kare is a regular part of the feeding course in thousands of dairies where surprising increases in milk yield are being accomplished.
Kow-Kare, of course, is primarily a cow medicine. It increases milk flow only because it builds up the same set of organs that must be reached when cow diseases are being treated. Such troubles as Barrenness, Abortion, Retained Afterbirth, Scours, Bunches, Milk Fever, Lost Appetite can be successfully eliminated by Kow-Kare because it restores health to the genital and digestive organs.
There is a definite profit advantage for every user of Kow-Kare. Cow health and big milk yields are inseparable. Our free book, "The Home Cow Doctor," is yours for the asking. It tells the various uses of Kow-Kare, with which every cow owner should be familiar.
Feed dealers, general stores and druggists sell Kow-Kare, $1.25 and 65c sizes. If dealer is not supplied, order direct. We pay postage.
DAIRY ASSOCIATION CO., INC.
Lyndonville, Vt.


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KOW-KARE Is supplied by Spokane Seed Co
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Dealers in Supplies for Dairy, Poultry, Bees and Orchard.

WANT ADS offering farms, live stock, poultry, second-hand machinery and a hundred and one other things on "Want Ad" page of this issue.

SURPLUS
Army Goods
SALE

ORDER BY MAIL FROM THIS AD

O. D. Wool Blankets, size 64x86... $3.50
O. D. Wool Reg. Shirts, new..... $2.95
O. D. Wool Breeches, new, double knee, pair..... $4.50
O. D. Wool Breeches, reclaimed $1.95
Wool Union Suits, new..... $2.65
Heavy Wool Union Suits, new $2.95
Heavy Cotton Union Suits, new..... $1.65
Army All-Wool Long Pants, new, size 30 to 35..... $2.95
Sizes 36 to 40 ..... $3.75
All-Wool Mohair Socks, new, pair..... 35c
3 pairs for $1.00
Wool Socks, heavy, new, pair 25c
Cotton Socks, new, per pair 10c
Wool-Lined Leather Mitts, new, pair..... 95c
All-Leather Puttees $3.45
O. D. Stag Shirts, double front, back and sleeves $6.95
Leather Vests, moleskin shell, all-leather sleeves and all-leather lined... $7.50
All-Leather Vests, wool lined $11.00

SPECIAL

Army Work Shoes, all sizes $2.95
Army Marching Shoes without hobs, sizes 9 to 12 only. Pair..... $3.48

Postage paid on every order over $1.00

Everything guaranteed as represented or your money will be promptly refunded.

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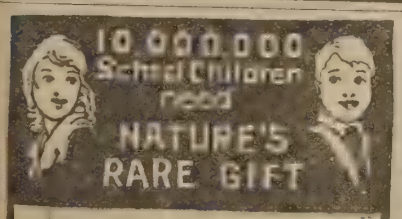


From Norway's Seas
SCOTT'S EMULSION
The Strength-maker.
Scott & Bowne, Bloomfield, N. J. 23-50

Have you glanced over the farm bargains on the "Want Ad" page?

one that should interest everybody; not that they can all help with the work in a direct way, but they can lend their influence to the movement already well under way to continue the work of eradication of animal diseases that are transmissible to man. A large force of veterinarians are now doing this and their work should be appreciated and more generally understood by the general public. This is an age of preventive medicine and the men who are protecting the human family from disease by suppressing diseases among animals are doing more to attain the desired end than the public realizes.

VETERINARY

By DR. S. B. NELSON.

Bloody Milk—What can be done for a cow that gives bloody milk? A. J. H.
Maplehurst, Wash.

Give the cow a teaspoonful of hypo-sulphite of soda in a pint of water morning and evening for some time.

Worms—I have a calf that is a year old and for the last four months it has been coughing as if there was something in the throat. She has lost some flesh. P. S.
Mount Vernon, Wash.

It is possible that your calf has worms in the windpipe. The treatment for that would be to put the calf in a closed room. Put a tub with about two inches of water in it on the floor; put some bricks in the tub, and put a pie pan full of sulphur on the bricks and set fire to the sulphur. Then let the calf breath the fumes as long as she can stand it, and turn her out. Repeat in three or four days, if necessary.

Goitre—I have a cow that has a goitre. What causes goitre in cows and calves and what can I do for the cow? J. O. H.
Aeneas, Wash.

Goitre is caused by lack of iodine in the system and the thyroid gland works overtime trying to produce it and consequently becomes enlarged. The iodine should as a rule be taken into the body in sufficient quantities through feed and water. About three grains of iodine daily would be the correct treatment for the cow.

Warts—We have a cow that has warts all over her teats. What can we do to increase the flow of milk? B. G.
Tenino, Wash.

Use the following prescription for warts on the teats: Chloral hydrate, 1 1-2 drams; acetic acid absolute, 1 1-2 drams; salicylic acid, 1 dram; spirits of ether, 1 dram; collodion, 4 drams. Apply morning and evening.

Since I do not know how long since the cow freshened, or what you are feeding, I do not know what I can say in the way way of advice that might result in an increased flow of milk.

Udder Trouble—I have a cow that has something wrong with one quarter of her udder every three to six weeks. Sometimes it changes from one quarter to a different one of an evening. The quarter affected seems to be caked inside and seems quite sore. The next morning it is gone, but she gives lumpy milk for a milking or two and she falls off in her milk for a few days. T. B. Z.
Prosser, Wash.

Give your cow one pound of epsom salts in three quarts of water. Two days later begin giving her 1-2 teaspoonful of potassium nitrate in her drinking water, preferably at noon. If you water her in the morning, give it to her then. In the evening give her one tablespoonful of fluid extract of phytolacca in a pint of water.

Wireworm Investigations

Professor George Dean, in charge of the division of field crop insect investigations of the United States department of agriculture, was at Pullman recently in conference with Dean Edward C. Johnson and Dr. A. L. Melander, relative to cooperative investigations of the wire-worm, a serious pest of potato and truck crops in the Yakima valley. He was accompanied by M. C. Lane and L. P. Rockwood, field men in insect investigations for the department of agriculture.

The experiment station of the state college, on the request of nurserymen and potato growers in the Toppenish section, commenced investigational work on the wire-worm in nurseries and potatoes last summer. It is now planned that the United States department of agriculture and the experiment station in cooperation undertake a comprehensive investigation of the entire wire-worm problem in the irrigated section, with a view to working out methods for its control. Mr. Lane for several years in cooperation with the experiment station, has been working on the wire-worm pest of wheat in the dry land section and has developed cultural practices for its control. It is expected that arrangements will be made for him to devote a large part of his time to the cooperative investigations of the wire-worm under irrigation conditions.

MADE THINGS HUM.

The electric dynamo was one of the inventions that memorialize the year 1866.

Test This Out for Yourself—

MANY people who drink coffee regularly are troubled with insomnia; or they feel nervous, "headachy," or suffer from indigestion.

It may be hard for such men and women to believe that coffee is responsible for the way they feel. Because they have always drunk coffee, it hardly seems possible that this old habit *could* cause trouble.

But there is one sure way to find out whether coffee is harming you. Just stop its use for a week or so, and drink Postum.

Postum is a pure cereal beverage—absolutely free from caffeine, the drug in coffee, which disturbs the health and comfort of many.

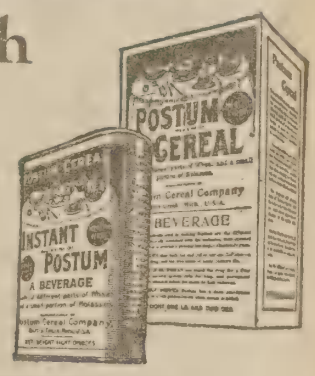
After a week or two on Postum, you will sleep better and feel better; then your own good judgment should decide whether you go back to coffee or continue on the Road to Wellville with Postum.

Sold by grocers everywhere!

Postum
for Health

"There's a Reason"

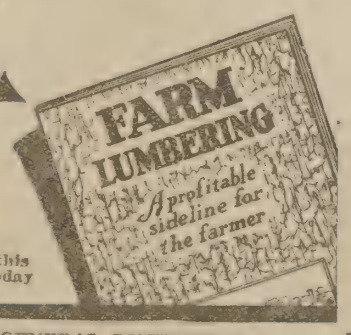
Your grocer sells Postum in two forms: Instant Postum (in tins) prepared instantly in the cup by the addition of boiling water. Postum Cereal (in packages) for those who prefer the flavor brought out by boiling fully 20 minutes. The cost of either form is about one-half cent a cup.



You need this Free Book

It tells how farmers without experience make as high as $35 a day sawing their own and their neighbors' wood lot timber with an American Portable Saw Mill.

American Saw Mill Machinery Co.
144 Main Street, Hackettstown, N. J.



Send for this booklet today

GENERAL DISTRIBUTORS
The Higgins Machinery Company
309 First Ave. So. Seattle, Wash.

RADIO New catalog ready free. See our prices first. Send for catalog today.
RADIO BUG HOUSE, 410 Best Bldg., Minneapolis, Minn.

Glance over the bargains on the "Want Ad" page.

Hand Power Hercules

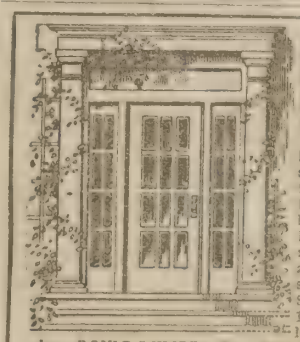
Fastest, Cheapest Way to Clear Land

At a contest held recently in England, Hercules all-steel triple power stump puller pulled stumps faster than any other method. Quick work—low cost and one man does the job. Hand now in four speeds, single, double, triple and quadruple power. Easy to pull—quick winding cable, and other features. Horse Power Hercules is most complete, up-to-the-minute stump pulling outfit made. Write for prices and catalog—get my 1923 introductory offer.

$10.00 Down
Easy Payments

A. FULLER, Pres.
Hercules Mfg. Co.
614 29th St.
Centerville, Iowa

Comes complete ready to use
Horse Power Hercules



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POULTRY AND RABBITS

Caponizing Leghorns

Some interesting results from caponizing White Leghorn cockerels come to us from W. H. Boggs of North Bend, King county, Washington.

On May 9 he caponized 120 young birds with the help of his son, L. C. Boggs, who has specialized in poultry husbandry at the state college. The birds came through in fine shape, only two dying from the operation and a few died later from exposure.

"After the weaker ones were taken out and a few more used for home consumption there were by August 29, 72 capons left for sale," said Mr. Boggs. "These were sold at 30 cents per pound live weight in Seattle to a retail shop for $93.20. Figuring the cost of the cockerels to start out with, we took the price that we could have bought them for at that age (about eight weeks).

120 birds at 15 cents each	$18.00
Feed and labor from May 9 to August 29	50.06
Total cost	$68.06
Received for 72 capons August 29	93.20
Net profit	25.14

"This made $25.14 on $68.06 invested in four months and shows that it pays to caponize Leghorns. It takes a Leghorn too long a period to get heavy enough to be sold as a capon, so it does not pay to hold them for the holiday capon market. They will, however, develop much more rapidly than a cockerel of the same age for about five or six months. The advantage in caponizing Leghorn cockerels is in getting more rapid development so they can be sold for broilers or friers at from 2 1-2 to 3 1-2 pounds per bird."

The greatest objection to caponizing has been their light weight and the supposed ability to put on fat during the first few months of growth. The experience of Mr. Boggs, however, throws a new light on the question and accounts for the many breeders who are using this means to sell their cockerels on the late summer market.

Poultry Problems

By R. T. PARKHURST.

Will you please tell me how many ounces of food or grain I should feed my hens each day? I want to figure how much it would cost to feed 100 chickens for five months, or from now until April 1. How many pounds to each fowl per month. R. I.

The usual allowance of feed per hen is two ounces daily. For 100 birds, we usually recommend 15 pounds of scratch ration and 10 pounds of mash daily.

The amount of grain and mash consumed will depend upon, to quite an extent, as to whether or not sour skim milk is given.

A Leghorn pullet lays about 200 eggs during the year and will consume about 85 pounds of grain, mash, grit and oyster shell when sour skim milk is not given. When sour skim milk is available, she will consume about 75 pounds of grain, mash, grit and oyster shell and about 200 pounds of milk.

I should like to know if I can expect my pullets to lay on the following rations: Corn morning and night, mash of bran and shorts (ready mixed mill feed) all the time and all the sour milk they want. They have full range and are very nearly five months old. MRS. E. L. P.

Your pullets will give good production from the ration which you have outlined. However, the ration can be materially improved by using with the corn in the scratch ration so that it will be either equal parts of wheat and corn or two parts of wheat and corn and also by the addition of cornmeal, ground oats and peameal to the mash so that it will be equal parts of bran, shorts, ground oats and peameal.

Lays 346 Eggs in Year

The Pacific coast is not the only part of the northwest where high egg record hens are produced. A poultrymen at Terrace Heights, near Yakima, has kept his own trapnest records and reports a hen which recently finished a year's laying with 346 eggs produced, which is 11 eggs more than the world's record hen had to her credit last year at the close of the contest at Puyallup, and 10 eggs better than the record of a hen at the Hollywood Poultry farms, which produced 336 eggs in a year.

This record of 346 eggs in a year was made by No. 413, one of 600 pullets which Mr. Westaby trapnested in the 1922-23 season, and she is one of six in the flock that produced more than 300 eggs. The highest run made by her was 80 eggs without a miss and she finished up her year with a run of 42 eggs without a miss. "She only missed then because housing conditions and feed were changed on her so she would quit and go into a molt," said Mr. Westaby.

Records of more than 300 eggs in a year are very exceptional and may be appreciated by the fact that in the classification of hens as to production by the extension service of the Washington State college, hens laying from 150 to 200 eggs a year are rated as good hens and those laying more than 200 eggs a year as extra good hens. She has produced twice as many eggs as a layer must to be classed as a good hen. Mr. Westaby's bird missed only 19 days in the whole year.

Mr. Westaby keeps Tancred stock and all the hens on the place are trapnested. At present he has 800 pullets that are laying well and will be trapnested to get their records, as nothing but high producing birds will be used for breeding purposes in his establishment.

MASON POULTRY ASSOCIATION.

A countywide poultry association was formed by the poultrymen of Mason county. This association was the result of the former community organizations which the poultrymen have outgrown. It is the purpose of the organization to further the accredited hatchery and other phases of the industry vital to the success of poultry raising. Along the line of development 20 250-egg cockerels produced in the county this season were placed in flocks which are to be used for breeding stock. In each case these high-producing cockerels will head flocks where scrub cockerels which had no trapnest records were ruling.

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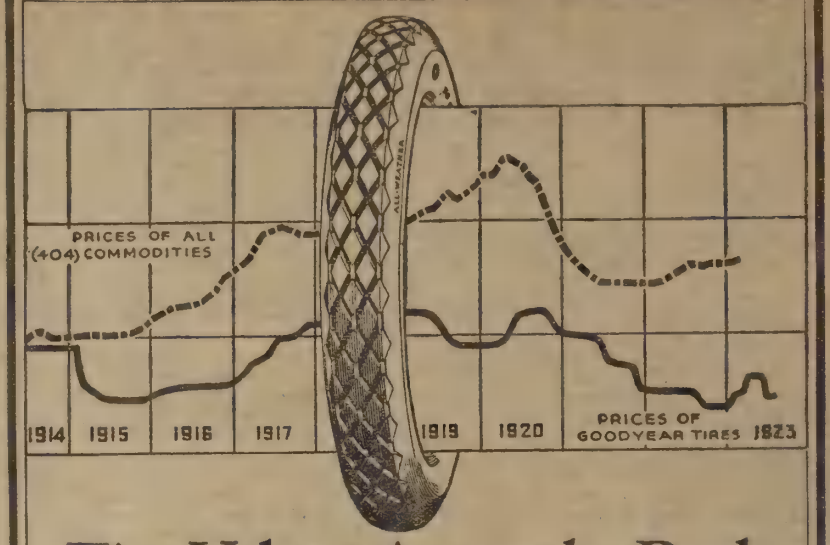

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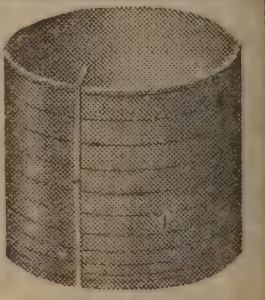

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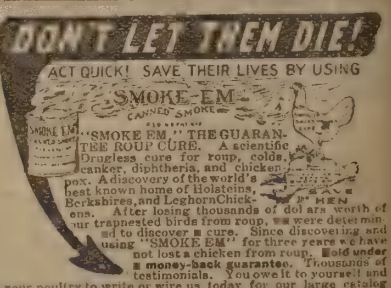

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ORCHARD AND GARDEN

Storing Foods

Keep Your Friends in the Dark

M. D. ARMSTRONG.

What would your opinion be of the man that ordered 100 pounds of ice on a hot July day to cool his food and drink and then left it on the sidewalk in the sun for an hour before putting it in the ice box? And yet, this man would show just as much wisdom as do the most of us in buying and storing a great many of our foods. Even the producers and the dealers, too, often neglect the provision of storage which would keep the produce in prime condition.

Thousands of tons of potatoes are lost every year in the United States through decay and shrinkage while in poor storage and yet perhaps a greater loss is suffered in the quality of the remaining potatoes. Aside from commercial storage, a great many folk keep their table supply—where it is too warm; where there is too much light; or where the air is too dry. Even a week's supply of potatoes, kept in a warm room is often materially depreciated in quality before they are used.

The potato is a living thing and its source of energy is entirely within itself. It uses up a great deal of energy when stored in warm, dry air and in a light room the food values are lost very rapidly. The best storage is that in which the energy required to live is at a minimum.

Even a few days in the light will cause quite a chemical change in the potato starches, which materially lowers the food value as well as the flavor. You needn't be ashamed of the Murpheys, but keep them in the dark until ready to use.

Warm temperatures increase the activity of the living cells and quickly exhaust the life of any vegetable. This is one reason why the southern states send annually to the north for their seed stock which has more energy and produces stronger plants.

In the processes of all life, materials poisonous to the individual are being continually thrown off. With the potato these poisons are thrown off in gasses. This is not a serious matter with 100 pounds of potatoes, but in any commercial quantity a good supply of fresh air is needed to displace these poisons. A dry air evaporates too much moisture from the tubers, resulting in a wilted or flabby condition. Most storage houses are too dry and practically all potatoes for the table supply are too dry and quickly wilt. From 5 to 15 per cent in weight is a common loss through shrinkage in good storage. Some modern storage houses, however, draw the fresh air over long troughs of water or through a water spray. Others have a false floor with water in a pit below, which keeps the air moist. The air, however, should never be quite saturated with moisture, as this favors the fungus rots.

Diseased, broken and cut tubers should be sorted out before storing, as they can not be expected to keep well. Very muddy, wet, dirty potatoes are apt to heat in large piles which do not ventilate well, and it is seldom advisable to store more than six feet deep.

For the best results: (1) store only sound, clean tubers in piles not over six feet deep; (2) keep the temperature from 35 to 42 degrees if possible; (3) provide sufficient air which is not quite saturated with moisture and (4) exclude every ray of light. For the table the No. 1 potatoes are the cheapest. Keep them until ready to use away from the frost, but in a cool, dark place.

Orchard Problems

By C. C. VINCENT.

Please send me a bulletin on artichokes, also something as to their food value and cultivation. H. S. H.

We have no available literature on artichokes, but a quotation taken from one of our textbooks on "Garden Farming," by Corbett, will answer your questions:

"The Jerusalem artichoke is in reality a tuberous-rooted sunflower native to North America and, like the globe artichoke, is an herbaceous perennial. This plant differs from the globe artichoke in that it produces an edible tuber instead of a blossom bud. The plant is grown both for human consumption and for stock food; but, although it is perennial, hardy and easily propagated, the tubers, while numerous, are small and the total yield is insignificant in comparison with Irish or sweet potatoes. Its food value is practically the same as that of the potato. Artichokes are seldom grown in sufficient numbers to be shipped to distant markets, but are to be found the year round in most southern markets.

To establish a plantation the tubers are planted in the same way as Irish potatoes, in rows from 30 to 36 inches apart, with the plants in each row 10 to 12 inches apart. The plant thrives on any fertile loamy soil, but does not do well on heavy clay. After a plantation is once established, it will maintain itself for several years, unless heavily dug or pastured by hogs. In some localities the crop is depended upon for a portion of the succulent food for hogs, the animals doing their own digging."

Some farmers in my community want information on the propagation of grapes. C. L. P.

Send for Farmers' Bulletin No. 471, entitled, "Grape Propagation, Pruning and Training," United States department of agriculture, Washington, D. C.

Kindly give me information in regard to the best variety of peaches to plant in this locality. The altitude is 5320 feet and coldest temperature in the winter is possibly from 15 to 25 degrees below zero. J. S. S.

I would be afraid to grow peaches extensively at an altitude of 5320 feet where the lowest temperature varies from 15 to 25 degrees below zero. We do know that peach buds can withstand a temperature of 25 degrees below zero if the wood is well ripened in autumn. However, you will find that in most peach districts the growers are always apprehensive of injury, even when the buds are in good condition and all other factors favorable, where the temperature reaches 10 to 20 degrees below zero. I have always considered that 15 degrees below zero is the usual danger line when it comes to growing peaches. In a small way try such varieties as Alexander Hales Early and Crawford.

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Breeders Meet

During Pacific International

At the western Guernsey breeders' banquet, held in connection with the Pacific International Live Stock show, there was an attendance of about 140. A. L. Gile, director of the American Guernsey Cattle club, was chairman of the evening.

After-dinner speakers were Karl B. Musser, secretary of the American Guernsey Cattle club, who spoke on the progress of the Guernsey breed in America. R. R. Graves of Washington, D. C., spoke on the proper sires to use in proving the Guernsey breed. Vincent Phelps, superintendent of Chilimark farms, Ossining, N. Y., spoke on the Guernsey breed of the Atlantic coast as compared to the Pacific coast. Mrs. A. Macrae Smith of Bellingham, Wash., owner of the Fircrest farms, spoke on the show on Guernsey island. Mrs. Smith has recently returned from Europe and told of some very interesting things in connection with the Guernsey cattle industry on that Island. Mrs. Minnie W. Miller of Thousand Springs farm, Wendell, Idaho, spoke on Guernseys in Idaho. Gordon Hall, owner of the Osceola farms, Cranford, N. J., and judge of Guernsey cattle at the Pacific International, spoke on the importance of type in the dairy herd. J. D. Mickle, secretary and manager of the Oregon dairy council, spoke on the importance of milk in the diet.

At the meeting of the Oregon Jersey Cattle club the committee on the purebred sire campaign favored the survey proposed by the extension service of the Oregon Agricultural college and the use of salesmen who are to receive $15 for each bull sold. The campaign is to be in charge of the local committee in each county. Each breeder also is to be charged $5 in addition to the commission.

D. C. Howard moved that a chautauqua be held in place of the Jersey jubilee next spring and the president appointed to have charge of the affair L. C. Daniels of Tillamook, E. C. Howard of Beaverton, Clarence Brown of Shedd and Jacob Fox of Silverton. The president and secretary were made members of the committee. On motion of D. Brooks Hogan, it was decided that no sale be held by the association during the chautauqua.

In addition to the "Holstein school," which was held during the Pacific International Stock show, the annual meeting of the Oregon Holstein breeders was held. W. E. Meyer, who was the principal speaker, explained the plan for a purebred sire campaign, which is to be under supervision of the extension service of the Oregon Agricultural college and is to be worked a county at a time. Indorsement of the plan was voted and active participation was pledged by most of those present.

After the judging of the Brown Swiss cattle at the Pacific International Stock show the breeders exhibiting and a few others met and organized the Northwest Brown Swiss Breeders' association. Nine breeders became charter members. Joe Schumacher of Stayton, Ore., was elected president; W. O. Bohart, Bozeman, Mont., vice president, and Theodore Brugger, Gresham, Ore., secretary-treasurer. An appropriation of $250 was made for boys and girls' calf club work.

Official testing was urged.

At the annual banquet of the Northwest Shorthorn breeders the principal speaker was John Robbins of Horace, Ind., who judged the Shorthorns and who urged the breeders not to go out of the business just now, when beef cattle are beginning to "come back."

At the Oregon Shropshire breeders' banquet Gordon True of the University of California declared some of the classes at the Chicago International were no stronger than at Portland. Frank Robertson, treasurer of the stock show association, said that about $450,000 had been expended on the plant on which the show was held. B. L. Clark of the Bodine & Clarke Live Stock Commission firm urged orderly marketing. Walter Priddy of the Corriedale Sheep company of Hollister, Cal., spoke of the early maturity of the Shropshire which enabled them to be marketed as lambs. Superintendent of the sheep department said that 721 sheep were on the grounds, the increase in Shropshires being 20 per cent. W. F. Renke of Wisconsin, who judged the middle wool sheep, complimented the show.

At the sale of the prize fat stock O. M. Plummer, manager of the show, bid in the champion Shropshire wether at 35 cents per pound, which was the high price for any fat sheep. He gave the banquet to the Shropshire breeders and used the wether, which, under the competent hand of Henry Thiele, made a most appetizing lamb roast.

The meeting closed with the presentation of an all-wool blanket to Judge W. F. Renke by President Doerfler.

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Town.....State.....

FARMERS' WANT ADS

MONUMENTS F

COMPLETE STOCK. WRITE FOR DESIGNS and prices. Inland Monument Co., N1001 Monroe, Spokane.

PERSONALS R

WILL MARRY THE MAN WHO WILL PAY my $400 doctor bill. Am strong and all right. Bessy Arnold, Hood River, Ore.

HELP WANTED—MALE 3

LEARN A TRADE IN THE LARGEST AND fastest growing industry in the world. High grade automobile mechanics, electricians and trouble shooters are in demand everywhere. Our training has placed scores of men into pleasant, well paid positions. Write for free booklet which gives full details. Y. M. C. A. Automotive School. Fourth and Madison, Seattle, Wash.

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RAILWAY POSTAL CLERKS, CARRIERS AND forest rangers; experience unnecessary. For free details write Mokane, Dept. A11, Denver, Col.

WANTED—EXPERIENCED DAIRYMAN. PERfection Dairy, Pendleton, Ore.

HELP WANTED GENERAL 5

MEN AND WOMEN, AGE 17 TO 30, AT ONCE to train for positions with Western Union Telegraph Co. and various railroads. Pacific Telegraph Institute, Spokane, Wash.

SITUATIONS WANTED—Female 18

MIDDLE-AGED WIDOW (SMALL BOY), DEsires housekeeping, gentleman's house or cooking, small crew; modern convenienecs; reasonable wages only considered. A 9, Washington Farmer, Spokane.

SCHOOLS AND COLLEGES 26

EARN $110 TO $250 MONTHLY; EXPENSES paid as railway traffic inspector; position guaranteed after completion of 3 months' home study course or money refunded. Excellent opportunities. Write for free booklet G-157, Stand. Business Training Inst., Buffalo, N. Y.

FRESH FOOD PRODUCTS 51-3

FISH—4 LBS. SMOKED SALMON, $1; 4 LBS. Alaska salmon bellies, $1; 4 lbs. black cod, $1; 3 lbs. best codfish, $1; delivered by mail. Coffin Fish Co., Seattle, Wash.

ALMONDS, SOFT SHELL, 7 LBS., ROYAL apricots, 5 lbs., seedless raisins, 4 lbs., all for $3.60, delivered; satisfaction or money back. P. S. Vawter, Arbuckle, Calif.

CHOICEST DRIED FRUITS, DIRECT—Prunes, cherries, loganberries. Send for complete list of prepaid prices. Kingwood Orchards, Salem, Ore.

DRIED OREGON PRUNES, $7 PER 100 pounds. Fred Kubin, Route 2, Salem, Ore.

MERCHANDISE 51-5

YOUR ANNUAL OPPORTUNITY—FOR QUICK disposal we offer salesmen's samples of woolen goods, underwear, hosiery, blankets, sheep-lined coats, mackinaws, leather vests, etc., at one-third to one-half less than regular prices. Our price list of sample goods is now ready. Send for it today. Minneapolis Woolen Mills Co., Dept. 23, 612 1st ave. North, Minneapolis.

FARMERS DRY GOODS STORE, 1211 FIRST, Spokane, undersells them all on dry goods, notions, shoes, rubber footwear, bedding, household supplies, etc., because we're out of the high rent district. Mail us your orders.

SPECIAL—ONE-POUND TIN "SATISFACTION tobacco" and pipe for $1. Smoking, chewing tobacco, cigars, cigarettes and complete line of pipes. Wholesale and retail. Peter M. Jacoy, 3 Washington st., Spokane.

HONEY 53

FINEST HONEY, FIVE POUNDS, $1; TEN pounds, $1.95, postpaid; sixty pounds, $7.50; two cans, $14.50; add transportation. Satisfaction guaranteed. Bancroft Apiaries, Hermiston, Ore.

KING CLOVER'S ALFALFA-SWEET CLOVER honey; 60-lb. can, $7.50; two cans, $14.50; 60-lb., prepaid, second zone, $8.29. King Clover, Sunnyside, Wash.

ALFALFA, SWEET CLOVER HONEY, PREpaid second zone, 3 10s, $5; 60 lbs., $8.30; two cans, $14.50, not prepaid. Harry Fisher, Prosser, Wash.

HAPPY HOME HONEY — ALFALFA AND clover; 60-lb. can, $7.50; two cans, $14.50; case six 10-lb. pails, $8.50. H. N. Paul, Mabton, Wash.

HONEY—FRESH ALFALFA-SWEET CLOVER honey; one 60-lb. can, $7.50; two cans, $14.50. A. L. Traner, Touchet, Wash.

ALFALFA-SWEET CLOVER HONEY, 10-LB. pails, $1.45 f. o. b. Rigby, Idaho; quality guaranteed. MacDonald Co.

EXTRACTED HONEY FOR SALE—WELLS D. Rose, Sunnyside, Wash.

MISCELLANEOUS—FOR SALE 60

TOBACCO—EXTRA FANCY SMOKING, 10 pounds, $2.50; good smoking, 5 pounds, $1; 10 pounds, $1.50; 20 pounds, $2.75; chewing, 5 pounds, $1.50; 10 pounds, $2.75; quality guaranteed. O'Connor Smokehouse, S104 Mayfield, Ky.

NATURAL LEAF TOBACCO — CHEWING, 5 lbs., $1.75; 10 lbs., $3; smoking, 5 lbs., $1.25; 10 lbs., $2. Pay when received; pipe and recipe free. Farmers' Tobacco Union, D19, Paducah, Ky.

MISCELLANEOUS—FOR SALE (Continued) 60

SASH AND DOORS—O. B. WILLIAMS CO., 1943 First ave. So., Seattle. Chicken house sash, 20" wide by 25" high, 80c; a dozen different sizes in stock for immediate shipment. Skylights for chicken houses, 36"x40"; price, glazed, $2. This is the size recommended by the Western Washington experiment station. We carry them in stock for immediate shipment. Sash and doors for all purposes at lowest prices. All orders receive prompt attention. Our large illustrated catalog No. 35, showing full line of building material and built-in fixtures for the home, free on request. O. B. Williams Co., Established 1899.

PIPE—GET PARTICULARS ON OUR SPEcial flue pipe, 1¼, 1½ and 2 inch. Big saving on it. We also have all sizes second-hand and new standard pipe at low prices. We also save you on roofing, belting, pumps, engines, cables, etc. Alaska Junk Co., S120 Adams, Spokane, Wash.

TOBACCO — SELECT THREE-YEAR-OLD leaf; nature cured; 3 lbs. chewing, $1; 4 lbs. smoking, $1; 7 lbs., No. 2 smoking, $1. Pay for tobacco and postage when received. Farmers' Grange, Hawesville, Ky.

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NATURAL LEAF TOBACCO—5 LBS. CHEWing, $1.75; 10 lbs., $3; 5 lbs. smoking, $1.25; 10 lbs., $2. Pay when received; pipe and recipe free. Cooperative Farmers, Paducah, Kentucky.

TOBACCO — KENTUCKY'S PRIDE; EXTRA fine chewing; 10 pounds, $3; smoking, 10 pounds, $2; 20 pounds, $3.50. Farmers' Club, Mayfield, Ky.

ALL WOOL KNITTING YARN FOR SALE from manufacturer, 95c up per lb.; golf and plain socks. Free samples. H. A. Bartlett, Harmony, Maine.

ARMY GOODS BARGAINS — WRITE FOR catalogue. Simon's Army Supply Store, 309 Riverside ave., Spokane.

MACHINERY—For Sale 93

DOLLARS IN YOUR POCKET ON OUR USED engines, wood sawing outfit, farm equipment. New sawmill outfits, etc. Fallquist Brothers, W20½ Riverside, Spokane.

AUTOMOBILES—FOR SALE 115

SEE CHEVROLET FIRST—NEW AND USED cars at prices that will surprise you; stop in or write Inland Empire Chevrolet Sales Corp., 916 2d ave., Spokane. Open evenings. Open Sunday.

AUTO ACCESSORIES AND PARTS 119

NEW AND USED AUTO PARTS, NEARLY all cars. Our low prices and prompt service will convince you. Money refunded if not satisfied. C. & D. Auto Salvage & Supply Co., 1904 Grand ave., Kansas City, Mo.

SATISFACTORY SERVICE—THE MOST COMplete stock of new standard make automobile repair parts. Pacific Gear & Auto Parts Co., 1022 First ave., Spokane, Wash.

STOVE REPAIRING 128

WRITE MYER RUBENS, SPOKANE, ABOUT stove repairs, welding broken parts, nickel plating.

PATENTS 150

PATENTS, TRADEMARKS, COPYRIGHTS. Write to B. P. Fishburne, registered patent lawer, 398 McGill bldg., Washington, D. C.

PETS—Dogs, Birds, Etc. 171

FIFTY PAIRS YEARLING ROLLER CANARies, fifteen dollars a pair. Mrs. J. Wellborn, Warren, Ore.

FOX HOUND PUPS, BEST BRED DOGS ON the coast. J. E. Bateman, Gales Creek, Ore.

WHITE COLLIE PUPPIES FOR CHRISTMAS delivery. Urbandale Farm, Oakley, Idaho.

RABBITS and HARES. 173

RABBITS, TOULOUSE GEESE HAVE MADE my living for 10 years. Prize winning blue Flemish Giants, New Zealand Reds, Himalayans, at utility prices. Agnes Brenner, R4, Box 49, Tacoma, Wash.

POULTRY—Baby Chicks 174

CERTIFIED WHITE LEGHORN QUALITY chicks from selected free-range, heavy-laying, utility hens, mated to double pedigree cockerels with authentic trapnest records. Our breeding flocks are inspected and accredited by the Sonoma county farm bureau. Safe arrival and full count of live, vigorous chicks guaranteed. Booking orders now for the spring season of 1924 delivery. Send for catalogue and attractive prices. Must Hatch Incubator Co., Inc., the world's largest electric hatchery, 445 Seventh st., Petaluma, Cal.

ANCONAS—BACKED BY OFFICIAL CONTEST records and splendid list of winnings in the west's leading shows. Booking chick and egg orders. Oscar Dunlap, Junction City, Ore.

SPECIAL PRICES ON GUARANTEED DAY-old pullets; fall and winter delivery. Write for particulars. Eureka Hatchery, Petaluma, Cal.

SUPERIOR WHITE LEGHORN BABY CHICKS at very low prices for 1924 delivery. Write the Rio Linda Hatchery, Rio Linda, Calif.

(Continued on the following page.)

POULTRY (Baby Chicks) (Continued) 174

"FRESHLAID" WHITE LEGHORN CHICKS in 1924 will produce results. Thirteen years hatching of real chicks. High record males, vigorous, mature females, unlimited free range, a chick producing proposition hard to beat. We send out chicks that will make you a permanent customer. Discount on large orders. World's largest electric incubator. Free catalog. Freshlaid Farm, Colfax, Wash.

ACCREDITED CHICKS — ALL OUR CHICKS for 1924 will be from accredited flocks mated with certified cockerels sired by hens with 225-egg record. A limited number of chicks from cockerel sired by our $1000 champion cockerel and our world's record pen of hens. Write for special prices for those who order early. Queen Hatchery, 1430 1st ave., Seattle, Wash.

"HENACRES" BABY CHICKS FOR 1924—Booking orders now. Early orders get delivery when wanted. We never have enough February, March or April chicks to meet the demand. Strictly high grade chicks at common chick cost. $22 per 100; $200 per 1000. Free catalog. "Henacres," Box A, Prosser, Wash.

BABY CHICKS—YOU GET THE BEST FROM successful breeders, using nothing but eggs from their own trapnested stock. Order them from the Carnation W. Leghorn Farms. My 16 years' experience in breeding enables me to give you entire satsifaction. Ernest W. Raush, Carnation Poultry Farms, Kent, Wash.

WHY DELAY?—PLACE YOUR ORDER FOR 1924 chicks with the White Hatchery, the hatchery with a reputation for good chicks. Safe arrival, full count guaranteed. Member Accredited Hatcheries, Sonoma county. "A" and "AA" stock. Price right. Send for catalog. White Hatchery, Petaluma, Calif.

S. C. WHITE LEGHORN CHICKS, 100 PER cent live, delivery guaranteed; 20 per cent books order. 100, $16; 500, $75; 1000, $140, postpaid; hatch only eggs from my own flock; no lights; trap records to 292. Absolutely only one grade. Catalog free. Roy S. Hands, B614, Cottage Grove, Ore.

WHITE LEGHORN BABY CHIX FROM flocks mated to males having sire's dam record of 240 to 297 eggs per year. Full particulars and interesting literature on request. We are accredited by Sonoma county farm bureau. The Pioneer Hatchery, 422 Sixth street, Petaluma, Cal.

TRAPNESTED WHITE LEGHORNS, HOLLYwood and O. A. C. stock. We offer 75,000 chicks, 25,000 hatching eggs, 5000 pullets. 11 years at the business. Satisfaction guaranteed. Booking orders now. Send for price list. Inwood Leghorn Farm, Corvallis, Ore.

BEST QUALITY CHICKS AT MONEY-SAVing prices. 100 per cent live delivery guaranteed. White Leghorns, Reds, Barred Rocks, White Rocks, Black Minorcas, Anconas. Write today for price list. Salem Chickeries, Salem, Ore. C. N. Needham, Mgr.

PREPAID—WHITE LEGHORN CHICKS, OREgon Agricultural college stock; the famous egg producers; $16 per 100; prices on quantities. Only 10 per cent deposit. Safe arrival strong, husky chicks guaranteed. Russell Poultry Yards, Corvallis, Ore.

1924 WHITE LEGHORN CHICKS FROM FAmous egg strains; Corvallis bred; low price, high quality; enlarged capacity to care for large orders as well as small. Oregon-Corvallis Hatchery, Corvallis, Ore.

Turkeys.

FOR SALE — THOROUGHBRED MAMMOTH Bronze turkeys from early hatch. Toms, $6; hens, $4; if taken by Thanksgiving. Also two two-year-old Bourbon Red gobblers, $10 each. Mrs. C. Patterson, Midland, Ore.

FINE, FULL BLOOD RED BOURBON TURkeys, hens and toms; young stock for breeding; finest in northwest; hens, $5; toms, $9. W. D. Gladwill, R1, Box 37, Roseburg, Ore.

PURE MAMMOTH BRONZE TURKEYS; choice breeding stock. Toms, $10; hens, $6; until December 1st. Pure Toulouse geese. Mrs. F. Crane, Hagerman, Idaho.

PUREBRED MAMMOTH BRONZE TURKEYS, prize winning stock. Hens, $8 to 10; toms, $10 to $15. Order early. Mrs. K. Tontz, Beaverton, Ore.

GIANT BRONZE TURKEYS FROM PACIFIC International winning strain; circular free. Herbert Stoneberg, Route "B," Eugene, Ore.

FOR SALE—MAMMOTH BRONZE TOMS prize winners at county, state fair; from $10 to $25. W. H. Edmunds, Gold Hill, Ore.

MAMMOTH BRONZE TURKEYS—CHOICE OF 500; sires, 45 lbs.; hens, $6 to $8; toms, $10 to $20. Harry Smith, Coupeville, Wash.

MAMMOTH BRONZE TOMS FROM PARENTS with four blue ribbons, $10. John R. Montgomery, Route 4, Bellingham, Wash.

22 YEARS A SPECIALTY BREEDER OF M. B. turkeys; prize-winning stock. Mrs. Frank Browning, R. 1, Nampa, Idaho.

MAMMOTH BRONZE TURKEYS, LARGE, well developed toms and hens. Joseph M. Loomis, Cherry Grove, Ore.

GIANT STRAIN PUREBRED MAMMOTH Bronze turkeys. Mrs. C. R. Lowery, Route 2, Boise, Idaho.

PUREBRED BOURBON RED TURKEYS; hardy stock. Napton & Napton, Homedale, Idaho.

THOROUGHBRED BRONZE TURKEYS—Toms, $10; hens, $7. Cora Burroughs, Ione, Ore.

PUREBRED MAMMOTH BRONZE TURKEYS. Mrs. S. L. Maltby, Rogerson, Idaho.

Miscellaneous Poultry.

FOR SALE—PUREBRED SPECKLED SUSsex prizewinners, Portland fair. Toulouse geese. Bronze turkeys for breeding. Indian Runner ducks. Beautiful ferns, first prize, Pacific exposition. Imported from Norway. Rhododendron roots, blackberry. Mrs. Swan Hansen, Box 9, Quilcene, Wash.

KEEP INFORMED — SELECT POULTRY reading with care. Only paid writers of recognized authority featured in The Pacific Poultryman. Must read it to get the best. Has guided thousands to success. Special, four months for two bits; two years for a dollar. 503 Polson bldg., Seattle, Wash.

PUREBRED S. C. RHODE ISLAND REDS, pullets and cockerels; beautiful color; good laying strain, $3, $5 and $10 each. Send your order now. Mrs. L. Wham, Double Diamond Ranch, Omak, Wash.

IMPERIAL PEKIN DUCKS, PRIZE WINNING, long bodied, heavy kind; large, choice young drakes, $3; eggs and baby ducklings. Mammoth Bronze turkeys. Low prices. H. L. Moody, Parkland, Wash.

PULLETS—CHOICE W. L. PULLETS, APRIL hatch; husky, free range birds of Hollywood strain; heavy laying stock; ready for the laying pens; $1.85 each. Pulletpens, Prosser, Wash.

FARMERS' WANT ADS

This is the farmers' "want," "sale" and "exchange" department for small advertisements of farmers, including live stock and poultry.

Advertising rates for ads running 1 to 3 times, 10c per word per insertion, with a special rate to Farmer subscribers, as follows: Ads running 4 to 12 times, 9c per word per insertion; ads running 13 times or more, 8c per word per insertion.

All commercial and land advertising, 10 cents per word per insertion. Open also to nonsubscribers.

In using these columns advertisers must observe (1) No advertisement will be accepted for less than $1.00 per insertion. (2) Every word, number and initial, including name and address, must be paid for. (3) New advertisements, changes of copy or cancellations must reach general office, Spokane, Wash., 10 days in advance of publication date. (4) Cash must accompany order.

Above rates include insertion in The Washington Farmer, The Idaho Farmer and The Oregon Farmer, which constitute the Pacific Northwest Farm Trio, 46 Review building, Spokane, Wash.

POULTRY—Miscellaneous (Continued) 174

HUNT'S BARRED ROCKS, UTILITY COCKerels from the best egg producers, Imperial Ringlets, both matings. Prices right, satisfaction guaranteed. W. A. Hunt, Lebanon, Ore.

S. C. RHODE ISLAND RED COCKERELS; fine, large birds; beautiful color; Rainey strain. Special price, $5. Mrs. Archie Hatten, Creston, Wash.

APRIL HATCHED ROSE COMB AND SINGLE Comb Black Minorca cockerels; bred for exhibition and utility. Oakley Durham, Polson, Mont.

PUREBRED S. C. WHITE MINORCA COCKerels, also White Rock cockerels; price $2 each. Mrs. Arthur Schmidt, Charlo, Mont.

FOR SALE—PRIZEWINNING WHITE WYANdotte and White Minorca cockerels. Roy Canary, 2201 Highland, Everett, Wash.

USED INCUBATORS AND BROODERS, Queens, Cyphers, St. Helens. Hi-Quality Poultry Ranch, Yelm, Wash.

PHILLIPS STRAIN COLUMBIAN PLYMOUTH Rocks; a few choice cockerels for sale. L. N. Petersen, Bliss, Idaho.

S. C. BROWN LEGHORNS, PEDIGREED stock. Write your wants to E. H. Rosenkranz, Colfax, Wash.

VERY FINE YOUNG LIGHT BRAHMAS FOR sale, $5 to $15; some at $1.50. Adam Schafer, Hillyard, Wash.

ROSE COMB BLACK MINORCAS—COCKERels, $2; pullets, $1; hens, $2. Mrs. Carley, Carley, Wash.

TO MAKE ROOM, WILL SACRIFICE ROCK and Leghorn breeders. D. W. Allen, Laconner, Wash.

PRIZEWINNING IMPERIAL WHITE PEKIN ducks for breeding. R. E. Baumgardner, Chelan, Wash.

PRINTING FOR POULTRY MEN. EMPIRE-Pacific Printing Co., Auditorium bldg., Spokane.

FOR SALE—PUREBRED BROWN LEGHORN cockerels. B. H. Campbell, Freewater, Ore.

WHITE MINORCA COCKERELS FOR SALE. G. W. Baun, Monmouth, Ore.

POULTRY AND LIVE STOCK WANTED 175

WE GUARANTEE TO PAY THE HIGHEST market price for your poultry and live stock. Owing to the constant changes in the market we are unable to quote prices in this paper from week to week. We will furnish tags and prices when you are ready to ship. Write us what you have to sell. Prompt returns. John Lewis & Co., Spokane, Wash.

DOLLARS FOR YOUR EGGS—WE PAY THE top market prices for your eggs and poultry. Daily cash remittances. McClintock-Trunkey Co., produce department, Spokane.

WE PAY TOP PRICES FOR YOUR LIVE OR dressed veal, hogs and poultry. Your check by return mail. Shipping tags on request. M. & J. Packing Co., Spokane.

TOP PRICES PAID FOR CREAM, EGGS, poultry, turkeys, geese, ducks. Inland Products company, Second at Cedar, Dept. E, Spokane, Wash.

LIVE POULTRY WANTED — WE REMIT promptly at market prices. Commercial Creamery Co., 1327½ Railroad, Spokane, Wash.

SHIP YOUR POULTRY AND EGGS TO THE Washington Meat & Poultry, Spokane, Wash.

LIVE STOCK 177

CALVES, CALVES—HEIFER CALVES AT $6.50 from the famous Tillamook dairy herds. Jersey, Guernsey, Holstein, Durham. Don't delay. Supply limited. Order now. Smith, "The Calf Man," Tillamook, Ore.

REGISTERED SHORTHORN BULLS OF quality and breeding; red, white or roan; polled or horned; of serviceable age or younger; priced to sell. Wm. Mulhall, Buena, Yakima county, Wash.

FOR SALE—FIVE HEAD REGISTERED Guernsey bull calves, nicely marked, from high producing cows. Priced at $50 each for quick sale. Kineth Farms, Coupeville, Wash.

FOR SALE—REGISTERED DUROC, POLAND China, Chester White and Berkshire gilts and sows. Simcoe Stock Farm, Box 85, Goldendale, Wash.

FOR SALE—O. I. C. SWINE; LARGE, SMOOTH fellows; price is right and the pigs are right. Write for prices. James Stafford, Sumner, Wn.

SPOTTED POLANDS—HOGS ARE AT THE bottom, now is the time to buy purebreds. Howard Tucker, Route 1, Boise, Idaho.

FOR SALE — CHESTER WHITE BOARS. Write for prices. Booking orders for bred gilts. H. S. Curtis, Palouse, Wash.

FIFTEEN MONTHS' JERSEY BULL; DAM 600 lbs.; sire's dam, 1080 lbs. fat. Price $150. Floyd Otto, Roy, Wash.

HIGH CLASS DUROC JERSEY SWINE. Young stock for sale; bank references. Dimick Stock Farm, Hubbard, Ore.

CHOICE DUROC JERSEY SERVICE BOARS, open and bred gilts; priced to sell. Geo. De Bok, Oregon City, Ore.

MILK GOATS—REGISTERED SAANENS AT prices that will please you. Ferd. H. Dietzel, Portland, Ore.

WANTED—25 TO 50 GRADE HOLSTEINS, soon to freshen; good cows. F. C. Holibaugh, Clatskanie, Ore.

REG. SHROPSHIRE AND HAMPSHIRE rams. Write McK. Edwards, Valley, Wash.

PUREBRED CHESTER WHITE SHOATS FOR sale, $15 each. Meryl Davis, Elberton, Wash.

HEREFORD BULLS FOR SALE OR EXchange. Frank Roberts, Westport, Wash.

MILK GOATS, BRED DOES, $10 TO $25. Fannie Branson, Dallas, Ore.

HAY FOR SALE 200

ALFALFA, GRAIN HAY, TIMOTHY AND straw; guaranteed quality; prompt shipment. Prices upon application. Richard Nyman, Walla Walla, Wash.

HARNESS and SADDLERY 189

SEND FOR FREE HARNESS AND SADDLE catalog today; cut out the middleman, buy direct from the manufacturer. Lowest prices in the west; satisfaction guaranteed. Established 1881. Write Pierce Harness Co., Dept. T, Spokane, Wash.

HOTELS 306

WHITE'S HOTEL AND RESTAURANT, ROOMS $1 and up; special weekly rates. Stevens and Sprague. Right on the corner; 5 minutes from all depots. In the heart of the business district, Spokane.

FAIRMONT HOTEL—RATES $1 DAY AND UP. 319 Riverside, Spokane. Free bus.

JOB PRINTING 372

CHRISTMAS AND NEW YEAR'S CARDS, LETter heads, business cards, wedding announcements and invitations, circulars, sales bills and other kinds of printing. Peterson & Ross Printers, 815 Main ave., Spokane, Wash.

WEDDING ANNOUNCEMENTS AND INVItations, catalogs, booklets, high school annuals, letter heads, envelopes, cards, butter wrappers, etc. Union Printing Co., 412 First ave., Spokane, Wash.

CLEANING, DYEING, Etc. 420

FRENCH DRY CLEANING BY PARCEL post. Ladies' and gents' suits, furs, hats, etc., prompt service. Address City Dye Works (Dept. A), E422 Sprague ave., Spokane, Wash.

TANNING 425

WE WILL TAN YOUR COW OR HORSE HIDE for robes or coats, and guarantee our work. We are custom tanners, manufacturers and taxidermists. Write for prices. Spokane Fur Tanning Co., 7 Pine st., Spokane.

ANY KIND OF HIDE TANNED WITH HAIR on, or for leather. Fur and taxidermy work done to order. M. R. Mohr Co., 321 Sprague, Spokane, Wash.

SEATTLE FUR DYEING AND TANNING CO., 3503 Phinney ave., Seattle, Wash.

TAXIDERMISTS 426

DEER HEADS AND BIRDS MOUNTED, HIDES tanned and made into rugs and robes. Withers Bros., 913 Sprague ave., Spokane.

KODAK FILM DEVELOPING 432

FREE ENLARGEMENT WITH 75C ORDER high gloss print. Spokane Film Co.

FILMS DEVELOPED FREE—KODO, THE PIcture King, 815 Stevens, Spokane.

MATERNITY HOMES 497

MATERNITY HOSPITAL; STRICTLY PRIvate; doctor in attendance; prices reasonable. Mrs. Elizabeth Peel, matron, W1324 Broadway, Spokane.

BUILDING MATERIAL 588

TACOMA SASH & DOOR CO., 15TH AND Dock, Tacoma, Wash. Direct selling means direct saving. These prices demonstrate: Chicken house sash, 20"x23," 75c; other sizes in stock. Chicken house skylights, 36"x40," glazed, $1.95; western Washington experiment station recommends this size. Sash and doors correspondingly low priced. Prompt delivery, careful filling of orders guaranteed. Catalog No. 1 is yours for the asking.

TO PATCH A HOLE OR BUILD A HOME use Perfection Plaster Wallboard. Easily handled with hammer and saw; fireproof, waterproof. Western Wallboard Co., Seattle, Wash.

SEEDS 620

HUNGARIAN AND PURPLE VETCH SEED, 6c pound. Farm Bureau Cooperative Exchange, Roseburg, Ore.

NURSERY STOCK 621

ISLAND BELLE GRAPE PLANTS FOR SALE —Write for the grape book, giving directions how to grow them successfully, etc. Issued by E. H. Urban, Box 777, Bremerton, Wash., grower of Island Belle grape vines.

IMPROVED FRENCH PRUNES, ITALIAN prunes, apple, cherry, pear, peach, franquette grafted walnut and filbert trees. Order direct and save agents' profit. Fruitland Nursery, 161 South 14th st., Salem, Ore.

TREES—NOW BOOKING MAIL ORDERS AT reduced prices for limited time only. Apples, pears, peaches, nut trees, prunes, cherry, small fruits, etc. Live agents wanted. Lafayette Nursery Co., Lafayette, Ore.

ITALIAN PRUNE TREES, 4 TO 6 FEET, ONE year old, $12.50 per 100; 3 to 4 feet, $7 per 100. All kinds of fruit trees at reduced prices. Powell Valley Nursery, R. 1, Portland, Ore.

NURSERY STOCK—PRUNES, WALNUTS, FILberts, fruit trees of all kinds, gooseberry and small fruits. Buy direct and save 50 per cent. Brooks Nursery, Lafayette, Ore.

TREES—CHERRY, PEAR, PRUNE, APPLE, walnut, filbert. Mazzard cherry seedlings. Prices based on production costs only. Homer R. Brixey, McMinnville, Ore.

NURSERY STOCK SOLD DIRECT TO PLANTers; apple trees a specialty; no agents employed; can save you money. Write for prices. Lawson Nursery, Gates, Ore.

FILBERT AND WALNUT TREES, THE BEST paying crops for the northwest. Write for prices on the different grades. Villa Nurseries, Route 1, Portland, Ore.

STRAWBERRY PLANTS—SIXTEEN VARIEties. Asparagus and Munger black caps. Prices low. Brigg's Fruit Ranch, Olympia, Wn.

EVERYWHERE TO SELL OUR COMPLETE line of fine nursery stock. Cash weekly. Kimberly Nurseries, Kimberly, Idaho.

FARM LANDS FOR SALE 651

ROGUE RIVER VALLEY PEARS WIN OUT again this year; fine return. We have some good orchards. Write for data. Rogue River Land Company, Medford, Ore.

SIXTY ACRES, SOME STOCK; NEAR SCHOOL. $3750 down. E. Schilling, Route 1, Sherwood, Ore.

FARM LANDS FOR SALE (Continued) 651

CUTOVER LANDS, EASY TO CLEAR; $8 TO $20 per acre; 25 miles north of Spokane; on hard surfaced highway; Great Northern and Milwaukee railways; excellent opportunity for dairying and stock raising with Spokane markets and creamery near at hand. Will help the man who will live upon the land and agree to clear a part each year by giving lumber to help start his buildings, and a purebred Jersey bull to groups of farmers. Interest and payments low. Write Milan Farms Development company, Dept. T, Old National Bank bldg., Spokane, Wash.

5000 ACRES, SMALL TRACTS; NEWAUKUM river valley lands; easy terms; employment. Big mill and timber companies are selling their large holdings in this well known and fertile valley, at Chehalis, Washington, on most advantageous terms and conditions, where settlers are assured steady employment, good wages and live at home. Positively all high type agricultural land; level bench and valley. No gravel. No mountains. No irrigation required. Already well settled community; good schools and markets. 20 acres or more, $15 to $50. Terms to suit purchaser. Graham Land Company, 1008 American Bank bldg., Seattle.

RAISE HOGS IN SUNNY SOUTHERN Alberta and increase your profits. Large crops of alfalfa, corn, oats, barley, produced cheaply on irrigated land. The bringing of 105,000 acres rich land under irrigation in the Lethbridge Northern Irrigation District gives you wonderful opportunity to secure paying farm at low price and on easy terms. Excellent climate, rich soil, ample water. Near towns, railways and schools. Write for particulars to the Irrigation Council of Alberta, 12 Provincial Building, Lethbridge.

HARRINGTON DISTRICT — 540 ACRES good wheat land; 100 acres pasture; creek; good buildings; macadamized road; two miles from Harrington; main line Great Northern; good schools, churches, stores; small payment will handle, balance easy terms; bargain; no trades. Owner, W. E. Shrader, Harrington, Wn.

319-ACRE WHEAT RANCH FOR SALE—ALL in cultivation; one-half summer fallow; in winter wheat; fenced and cross-fenced; hog-tight; good seven-room plastered house and good outbuildings. This is a real farm. Price $90 per acre; best of terms. Albert Reiha, Reardan, Wash., owner.

FOR SALE—BARGAIN. OWNER MOVING TO city; 80 acres alfalfa, grain and dairy farm; gravity irrigation system; 1½ miles from town; moderate improvements; no encumbrance; on R. F. D. and rural school route. Write for description and easy terms. Postoffice Box 236, Shoshone, Idaho.

BIG OPENING SALE OF YAKIMA VALLEY farm land, under an assessed state and government approved irrigation project; best, deep soil; close to town and good roads. Price $25 per acre and up. Very easy terms. Western Lands, Inc., owners, 918 Green bldg., Seattle.

BIG LUMBER COMPANY LAND SALE—IN Skagit county; 40-acre tracts, $1400; $200 cash, balance easy. Lots work for the settler. Splendid district, roads, schools, towns. Information free. H. C. Peters, 726 3d ave., Seattle.

WHATCOM COUNTY, WASH.; 47 ACRES; EXceptional fertility; 2 springs; family orchard, etc.; fine dairy section. For quick sale, $5250; terms if desired. Owner, Mrs. Laura Smith, 802 Cole ave., Los Angeles, Cal.

SELL YOUR PROPERTY QUICKLY FOR cash; no matter where located. Particulars free. Real Estate Salesman company, 501 Brownell, Lincoln, Neb.

1280 ACRES WHEAT LAND; GOOD BUILDings; ample water; for $58,000; good terms; write for particulars. Bessie Gross, Rural 6, Walla Walla, Wash.

FAILING HEALTH COMPELS ME TO SELL 5-acre poultry ranch; fully equipped; modern improvements. C. Dimmick, Gig Harbor, Wash.

160; GOOD LOCATION; SOLD FOR 1-3; small trade; near town; possession now or spring. Box 1620, Bossburg, Wash.

140 ACRES, ALL OR IN PARTS; LOCATED in heart of poultry industry. Write today, Carl Laakso, Winlock, Wash.

BARGAINS IN DRY AND IRRIGATED farms. Oregon Mortgage Co., Paulsen bldg., Spokane.

OLE H. SATHER, REAL ESTATE. FARMS and city property. Canby, Ore.

FARM LANDS—Wanted 654

NO COMMISSION — SELL YOUR FARM through Washington Farm Bureau Exchange, represented in 45 states. Lists of farms for sale by owners mailed free. 312 Lindelle bldg., Spokane, Wash.

I HAVE INQUIRIES FOR FARMS IN NORTHwest. Describe fully and state price. R. A. McNown, 310 Wilkinson bldg., Omaha, Neb.

WE HAVE BUYERS FOR SEVERAL FAIR priced farms and ranches. Central Land Bureau, New Franklin, Mo.

FARM WANTED FROM OWNER ONLY—SEND full particulars. Ray Smith, Maplewood, Mo.

FARM LANDS—Wanted to Rent 660

WANTED—TO RENT, LEASE OR WORK ON a salary, a farm with implements and horses and seed; term of year. L. M. Boyer, Crabtree, Ore.

IRRIGATED LANDS—For Sale 663

OPENING OF THE NEW WHITESTONE IRrigation district—8000 acres of irrigable land. This project was constructed under the direction of the Department of Observation and Development of the State of Washington. Adapted for diversified farming, livestock, dairying, poultry and fruit growing. A picturesque location in the foothills of the Cascade range, Okanogan county, Washington. Write for free picture folder, giving full details. E. C. Leedy, general agricultural development agent, Great Northern railway, Dept. 109, St. Paul, Minn.

FARMERS AND STOCK MEN—THE COLUMbia irrigation district has several tracts of irrigated lands of various sizes, in the famous Kennewick valley, with plentiful water supply. The district wishes to get these tracts into the hands of good farmers who will put them to work, and will make very low prices and long terms to such men. No speculators need apply. One tract 580 acres, especially suitable for stock or dairy ranch. Write the secretary, Columbia Irrigation District, Kennewick, Wash.

THIS FARM IS SHOWING A GOOD PROFIT — $7000 income this year; 131 acres; close to Yakima; good water rights; excellent buildings; well equipped; good dairy herd. Good terms. Western Lands, Inc., Owners, 918 Green building Seattle.

72-ACRE IRRIGATED FARM; YAKIMA VALley; ½ mile from Outlook; paved highway, schools, churches; thirty acres alfalfa, rest general farming; fine fruit land; $175 acre; terms. W. C. Wright, Outlook, Wash.

Cattle Ranch To College

Russell Doubleday Copyright by Doubleday & McClure Co.

CHAPTER XXI.

Twelve Hundred Miles Awheel to College.

The academy reopened with some new pupils and many old ones. John shook hands with his few friends, glad to get back, and, with firm determination to carry out the purpose that now possessed him, started to work.

Professor Marston kept his word about the winter job, and John was duly installed as janitor of the building, with opportunity to make extra pay by sawing wood and doing errands.

He was fully occupied, as may well be imagined, and poor Lightning, though sure of good care, missed the companionship that both he and his master delighted in. John foresaw that he would not be able to keep the horse, and he finally decided what to do with him. He would give him his freedom.

One day the boy took him out on the prairie some distance from the town.

"Lite, old boy," he began, rubbing his nose and patting him, "we've had good and bad times together, and we've been good friends, but we've got to separate now."

He took off the saddle and bridle: "Take care of yourself, old boy."

The horse looked at him a moment inquiringly; then curvetted around a minute in high glee; but as he saw his much-loved master leaving him he turned and followed, refusing to be cast off. "Go back, Lite," John commanded, waving his hat to scare him. "Go back!" But the little horse refused to leave him, and followed him back to town, where he was taken in and petted again. John was touched to the heart by this loyalty and affection.

Next day a stableman took him out among the range horses and dismissed him. This time he stayed, and John never saw or heard of him afterward.

That was a wrench.

Lightning gone, John allowed himself no pleasures, but instead took every bit of work that came his way, whether it yielded money or knowledge.

He joined the debating society and made it a duty to do his best when called upon. Toward spring, as wood sawing became scarce, he took to delivering morning papers to the more distant parts of town; and in order to do this more quickly he hired an old bicycle, learned to ride it, and made his rounds just after daybreak on that. So he was able to get back to the schoolhouse and study a while before opening up.

"I don't see how you do it all, Worth," said Professor Marston.

"Well, I couldn't, I guess, if I didn't have a big stake to work for. If I keep my present school work up and study this summer I'll get into college this fall," and John told him of the offer Sherman had made him.

"I hope your friend won't forget," the professor suggested, fearing that his pupil was building high hopes on an insecure foundation.

"He won't forget; he's not that kind."

"I hope not; but how are you going to get there? It's a long way."

John looked up quickly; he had not thought of that before. It was a serious question.

"I don't know; but I'll get there somehow." He spoke confidently, but he was much perplexed, for he was without money, his clothes were threadbare, and it was a necessity to study all summer, with no chance to earn money. It was certainly a question that could not be answered offhand. He studied over this matter for days and no solution presented itself. Borrow he might, but this he would not do without giving security, and of security he had none. He left it for a while, hoping to be able to think of a way out of the difficulty later.

Before he realized it commencement had arrived, and with it the open meeting of the debating society at the opera house. To his astonishment he found that he was appointed one of the two orators of the occasion. In vain he protested that he was busy, that he was unfitted; he had to accept. "Orator—Opera House—Me!" he fairly gasped with astonishment. He was rather worried about it, but Gray, whom he consulted that night, reassured him.

"Don't worry, anyhow," he advised. "Take a subject you're interested in, write out what you think about it, boil it down so you can repeat it in 20 minutes, then memorize it."

John also consulted Beeman, the other orator, who said he was going to speak about the Chinese question.

"Against them," he said, in answer to the other's sharply put query. "That's the only way to please a crowd—take the popular side."

"Well, I'm going to take the side I want, and I'll tell 'em what I think about it, too," said John vehemently, his spirit thoroughly roused.

"Go ahead," said Beeman, visions floating before him of an opportunity to hurl

"He did not know that he had aroused the enthusiasm of people naturally prejudiced against his side of the question."

his thunders at a definite champion (and an inexperienced one) of an unpopular cause.

John set to work on his speech with his usual eagerness and energy. His heart was in it, and the prospect of a contest of wit or muscle always stirred him. He wrote, rewrote, cut down, filled in and polished until Gray, his friend and critic, pronounced it "good stuff."

In the meantime, he not only kept at work at his studies, his duties as janitor and paper boy, but he was at work at something else that he thought might prove most important.

At a half-mile race track, a little distance out, a very early rising citizen, if he happened to be in that vicinity at daybreak, would have wondered greatly to see a half-clad figure on an old bicycle go flying round and round the track. If, overcome by curiosity, he had waited a while, he would have seen the same figure, neatly clothed, appear from under the grand stand carrying a bundle of papers under his arm. Then if he watched he would see him mount an old bicycle and ride off. But this performance took place so very early that no one witnessed it.

At last the day of the debating society's open meeting came—the day on which John was to make his first public appearance. His speech was complete, memorized and ready for delivery. He spouted it for the last time to Gray, who put the stamp of his approval on it and advised him to forget it all till the time came to speak.

The opera house was crowded when John and Gray reached it, for the town's people took great interest in its institutions, and of these the academy was one of the most important.

John looked out from the wings on the sea of upturned faces, appalled.

Beeman came first. He went out before the audience, cool, self-possessed, graceful, and delivered his oration smoothly, forcibly and well. He chose the popular side, and the audience rewarded him with generous applause.

Then John heard the chairman announce, "Oration by John Worth."

He walked out from the dimness of the flies into the full glare of the brightly lighted stage, bewildered, and, without any preliminaries, began:

"In the history of every country, however just, however good or great, there are certain pages besmirched by the record of black deeds of wrong."

So his carefully written, carefully memorized speech began. As he stood before his audience he saw nothing but the pages of his manuscript; he felt that he must keep his mind on them or he would be lost. He followed down the first page, mentally turned it over, and began the second. Beeman had touched a point on the second page, and treated it in a ridiculous way, he thought. His concentration was broken, and he began to fear for the first time that his memory would fail. A dozen lines down the second page he faltered, stopped, and stood riveted, miserable. The few moments' pause seemed endless. He tried to think of the next line, next page, anything; in vain, it was all a blank. The pile of manuscript, a minute ago so clearly before his mind's eye, had vanished, and he stood staring at the crowd before him. Some one behind tried to prompt him; it brought him to life. Beeman's fallacies had incensed him; he'd tell them so, and in no uncertain way. With a whole-arm gesture he mentally cast away his carefully prepared speech.

"It's wrong! All wrong!" he said intensely, and with conviction in his tones. His own voice electrified him. His first few sentences were mere bursts of indignation, his tongue went on of its own volition, it could scarcely give utterance to his stirred feelings. As he went on, his emotions grew more quiet, but none the less earnest. Constant yodeling to cattle for years had given him a voice which carried to the farthest corner of the building. He had carefully studied his subject, and now that he had regained his nerve he spoke his mind with enthusiasm and vigor. His arguments were well chosen and his language terse and to the point. Stimulated by excitement, new ideas came, and he uttered them with a confidence that afterward amazed even himself. Parts of his own prepared oration came back to him and he spoke it as if it was impromptu, with force and freedom.

The time had come to stop, and without a pause he launched out on his original peroration with the ease, confidence and fire of a veteran orator. The closing sentence rang out clear and strong: "Men and women of America, let us wipe out the blot from this page of our country's history and make her in truth the Land of the Free and the Home of the Brave."

His speech over, John stumbled, rather than walked, off the stage to the street. The reaction was great. He did not hear the applause, the cheering; he did not know that he had aroused the enthusiasm of people naturally prejudiced against his side of the question.

John went straight to his room and to bed, but not to sleep—his nervous tension would not allow that. The thing uppermost in his mind, the thing that worried him, was that he had forgotten his speech—the speech he had so carefully prepared and learned by heart.

The papers had to be delivered in the morning, however, and a certain self-imposed engagement at the racetrack kept, so he was up betimes.

After these two duties were finished, he rode down the street to discover if possible the depths of ignominy to which he had been brought by forgetting his speech. The idea that he had disgraced himself still clung to him. Two fellows appeared right away, and before John could voice his greeting they called out: "Say, Worth, you just ate Beeman up last night. Are you sure you wrote it yourself?"

"He doesn't know that I forgot it," thought John, who hesitated a minute before he answered aloud: "Of course, it was all my own."

"Well, it was a rattling good speech, anyhow."

John thanked him, and then the talk drifted to the games to be held next day, and to the bicycle race especially, where the winner would receive a brand new up-to-date bicycle as a prize.

"That's going to be a hot old race," said Searls, one of the two students. "Every pedal kicker in town is after that new wheel."

"Yes, that's a prize worth riding for," and John had a look in his eyes that Searls did not understand till later.

Several times that day persons of various degrees of importance—among them Mr. Haynes, the financial and political cornerstone of the community—stopped John, called him by name, and chatted pleasantly with him. Mr. Haynes said that he was a credit to the school and the town. So John's self-respect began to come back. His good fortune was dawning, now that he was making preparations to leave it all.

Field day came clear and beautiful, and the crowd came en masse to see the sports. A series of well-advertised events were to be run, the climax of which was the one-mile bicycle race. The prize wheel had stood labeled in the donor's window for a week, and every wheelman and boy in the neighborhood had gazed at and coveted it.

The early events were well contested, and worked the spectators up to a fever heat of interest. By the time the bicycle race was announced the crowd was wildly enthusiastic. Discussions as to the probable winner were rife.

"There's none of them that'll beat Tucker," said one. "He'll have a walk-over."

"He won't walk over Bolton," declared another.

And so it went, till the contestants appeared on the track. Tucker and Bolton were the favorites.

As the men lined up at the stake some one remarked: "Why, there's Worth, with the old bike, too. He's the fellow that made the speech. I thought he had more sense than to go out with that old rattletrap."

"They're off!" The shout went up as the starter's pistol cracked.

Tucker jumped to the front, and everybody cheered him; but Bolton was near, and as the riders passed the stand for the first time it was seen that he was close behind. Following Bolton's rear wheel closely was a strange rider on an old wheel, whom the crowd did not recognize at first.

"By George! It's Worth," said a student, surprised. The men swept by, closely bunched, their wheels rattling, their legs going like pistons, and the bodies of some swaying as they exerted themselves to the utmost to keep up.

"Bolton's going past. He's leading!" And the speaker jumped up and down in his excitement. But John clung to the leader's rear wheel and went with him. Faster and faster they raced, past Tucker, opening a big gap between the bunch. Bolton was riding for glory, but John was riding for something besides glory; his

(Continued on page twenty.)

Bits of Fun FOR Everyone

As It Is Spoke.

Tom—'S'neagle.
Dick—'S'not n'eagle. 'S'nowl.
Harry—'Sneither, 'S'nostrich.—Patton's Monthly.

Fired for Cause.

"Say, mamma, was baby sent down from heaven?"

"Why, yes."

"Um. They like to have it quiet up there, don't they?"—The Legionnaire.

Wouldn't Give It Up.

Miss Cora was taking her first trip on the train.

The conductor came through and called for the tickets. Cora readily gave up her ticket.

A few minutes later the butcher-boy coming through called, "Chewing gum!"

"Never!" cried Cora bravely. "You can take my ticket, but not my chewing gum."—Bison.

Practical Admiration.

Soon after the first baby was born, a certain man's wife went up stairs one evening and found her husband standing by the side of the crib and gazing earnestly at the child. She was touched by the sight, and tears filled her eyes. Her arms stole softly around his neck as she rubbed her cheek caressingly against his shoulder. He started lightly at the touch. "Darling," he murmured dreamily, "it is incomprehensible to me how they can get up such a crib as that for 99 cents."—The Staley Journal.

Good Enough.

Mrs.: "I must dress at once, dear. The Browns are coming this evening to make us a visit. Should I put on the percolator?"

Mr.: "Don't bother; you're dressed good enough the way you are."—Flamingo.

Hands to Hold.

Mrs. Henpeck (sartastically)—I s'pose you've been to see a sick friend—holding his hand all evening!"

Mr. Henpeck (sadly)—If I'd been holding his hand, I'd have made some money!—Harvard Lampoon.

True Enough.

"Young man," said the boss, "you told me yesterday afternoon you had an engagement with your dentist."

"Yes, sir, I did."

"Well, I saw you at the ball game."

"Yes, sir. The tall man sitting next to me was my dentist."—Boston Transcript.

An Inspired Definition.

Miss Simpington, the teacher, was reading to her class when she came to the word "unaware," and asked if any one knew the meaning. One little girl timidly raised her hand and offered the following definition:

"It's what you put on first and take off last."—Philadelphia Public Ledger.

FAMILY CIRCLE

ALICE W. BARLAND
EDITORIAL CONTRIBUTOR

WORTH WHILE.

It is easy enough to be pleasant,
When life flows by like a song,
But the man worth while is the one who will smile
When everything goes dead wrong.
For the test of the heart is trouble,
And it always comes with the years,
And the smile that is worth the praises of earth
Is the smile that shines through tears.

It is easy enough to be prudent,
When nothing tempts you to stray,
When without or within no voice of sin
Is luring your soul away;
But it is only a negative virtue
Until it is tried by fire,
And the life that is worth the honor on earth,
Is the one that resists desire.
—ELLA WHEELER WILCOX.

Dear Family Circle Girls: This is to be a reply to the poor, little, misguided and headstrong "flapper" girls who haven't given me their names that I might have tried to set right some of their expressed ideas in personal letters.

Let us imagine that we are alone, just you who have written me claiming to belong to the "flapper" class, or the "gang" or the "bunch." We will say that there are 40 or 50 of you and that we are gathered around a cheerful fireplace in a cozy room. We are met to talk these things over that have been mentioned in your letters. We will get started right, and the first thing I want to impress upon your minds is that I have no idea of scolding or lecturing you, but that we may have a quiet little talk just such as I would give you if you were my girls.

There are some things I want to tell you. In reading your letters I have noticed one very strange thing, and that is that almost every one of you who have laid claim to wildness, such as vulgar dancing, smoking, midnight (and later) auto rides, have laid claim also to drinking. And all of you who have so written have added this accomplishment to the others of your own accord, for that habit was not under discussion except as brought into it by yourselves.

This fact is to me significant. It makes it appear that the loose and misguided ideas of the girls who claim they have the right to smoke are sufficiently broad to include drinking, even to the extent of getting drunk. By the admission of many, the two go together where girls are concerned. This is not true of all, for a good many girls have admitted that they smoke, but in the next sentence express themselves strongly against drinking.

The impression I received is that smoking does have a tendency to pervert the minds of the girls and to make it easy to slide one degree farther down the grade into the drinking habit. If there were no other argument against the smoking habit for girls, that one should be sufficient. Girls, it is hard enough to be good, to be decent, to have a clear head and a right balance in this rather complex business of leading a useful life, without befuddling the brain with alcoholic drinks.

There are none among you who advocate drinking who would think of breaking into a house and stealing, or picking anybody's pocket, or murdering some one; but you admit drinking liquor and claim that you have a perfect right to do so. And yet, every time any one does take liquor as a beverage he breaks the law of our country just as completely as he who murders or steals. I wonder if you ever think of it this way. I am not going to discuss the public dance—I gave my views on that several months ago—but this I wish to state, that you girls who claim to belong with the wild set, without one exception, have grouped dancing, smoking, petting parties and drinking together, as things you claim you have a perfect right to do and which express your idea of a "good time."

For a number of years I had under my personal supervision a household of 30 girls, different ones from week to week as they were sent out on parole and others committed to the care of the state. I came in closest touch with them and was fully informed as to the causes of their being taken from their parents and their homes. I know the history of hundreds of these girls, and 99 out of every 100 were sent to this reform school because the law laid hands on them in their headstrong course, and they were traveling the very same road that you girls tell me you are determined to travel, because it is there you find your "good time" which you must have "while you are young."

You are perhaps thinking that these girls were different from yourselves. Well, every sort of girl was represented, so there were many of your kind, whatever that may be. They were many of them very pretty girls, bright and with some education, a few having been to high school.

It was the same old story—girls deceiving the parents, lying, sneaking out at night to go to public dances, on wild rides, suppers in questionable restaurants, smoking, drinking. You know it all or write me that you do. And this is what you call a "good time," and say it is positively no one's business, since this is what you want to do.

You have taken the reins into your own hands and claim the right to do all sorts of things that common decency forbids, because you are young but once, as you say, but after you have read this message I am sending you, telling you what I know out of my own wide experience with girls, you can never again say that you didn't know.

Many have written me since we have been discussing these social questions, that they had gotten started just a little way in the wrong direction and the letters and my private appeals to them in personal letters have made them see their mistakes and they have changed their course. This is what I am striving to do, dear ones whom I have gathered around my imaginary fireplace, for our heart-to-heart talk. Oh! if I can turn some of you back, yes if I can turn even one of you back from the wild race you are on, I shall feel repaid.

You are not yet bad at heart; I know many are not by the way you write to me. You are just misguided and mistaken in your ideas. You are ignorant of the consequences of your course. I am not. I could tell you of girls who were under my care who, regardless of all that was done for them, and that was a great deal, are now down to the very deepest abyss in social mire and are hopelessly lost forever. The brightest girl I had, the most lovable, the most capable, is one of them. I would save you from a fate like hers. Another had a wonderful voice and the state had a director of music who taught her for three years, she had an opportunity to become a professional singer of much note. After she became of age and the state had no further control of her, she went out into the world and in just two weeks had gone down straight to perdition. I could go on and on, dear girls, but I have told you enough, I am sure.

Think this message over and let me know what you think about the matter. I shall be very glad to hear from you.

There is no noble height you can not climb.
All triumphs may be yours in time's futurity,
If whatsoe'er your fault, you do not faint or halt,
But lean upon the staff of God's security.

And now goodnight, your friend,
ALICE W. BARLAND.

FIGURES WENT UP.

The census valuation of farms in the United States increased, between 1900 and 1920, from $20,429,000,000 to $77,924,000,000, or over 271 per cent, while capital employed in manufacturing increased from $9,814,000,000 to $44,688,000,000, or over 355 per cent. The wealth produced on farms increased from $5,099,000,000 to $18,263,000,000, or more than 258 per cent, while the value of manufactures increased from $11,407,000,000 to $62,418,000,000, or over 447 per cent. The figures are those of inflation plus actual growth, but show the relative degree of the various increases, at least.

NO TOPERS FOR HIM.

Drunkenness was punishable by death in Scotland in 870 A. D., during the reign of the Scottish king, Constantine.

"EAT MORE WHEAT"

THERE'S something *to* a Roly Poly, even when made with ordinary flour. It's a hearty, substantial winter dessert in which any variety of fruit may be used. And, when it's made with Sperry Drifted Snow Flour, there's *something more* to it. There's a crunchy crispness, a delicious even-baked "feeling" that can come only from a uniform, even-blended flour. Try this tested recipe for Sperry Roly Poly. You'll find it a fitting match for the heartiest appetites that grace your table:

2 cups Sperry Drifted Snow Flour
1 teaspoon salt
4 teaspoons baking powder
2 tablespoons shortening
½ cup milk or equal parts of milk and water

[*Note:* All measurements are level and flour is sifted once before measuring. One-half pint measuring cup is used.] Mix and sift dry ingredients; work in shortening with knife or finger tips. Gradually add the liquid, mixing it with a knife to a soft dough. Toss on a floured board, pat or roll lightly to one-half inch in thickness, cut in four-inch squares. In the center of each square place fruit; bring the four points of the square together at the top and press edges together. Place in greased baking pan or muffin tins, and bake in a hot oven. Serve with the fruit juice boiled down until thick, adding one teaspoon of butter, or use a pudding sauce.

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High Points in News of the Week

Frederick William, the former German crown prince, his wife, Princess Cecilie, and their children arrived at Oels, Germany, November 13 from Holland. Three cars brought the former German heir and his followers 400 miles from the Dutch border. There was nothing spectacular about the arrival, which was said to have been completely in keeping with the promise to the German government to avoid ostentatious display during the course of the journey. The party is housed in a famous sixteenth century castle at Oels and are reported to have enjoyed a happy dinner party, it being the first complete reunion of this branch of the Hohenzollern family in more than five years. Great Britain, which took the initiative in the sending of a coercive note to Germany regarding the return of Frederick William, is now said to be desirous of dropping the whole matter, while France, who was at first indifferent, but later came to favor action of some sort, is ready for such action.

President Coolidge believes that the American people will sympathize with any move to be taken by the allied government to prevent restoration of the Hohenzollerns to power in Germany, although the American government can not, in accordance with long established policy, take definite action in the matter which has been brought up by the return to Germany of the crown prince, Frederick William.

GERMANY TO REPUDIATE TREATY.

Germany has decided to repudiate the treaty of Versailles and not to comply with either the reparations clause or any other of the clauses of the treaty as long as the French and Belgians occupy the Ruhr, says a dispatch to the London Daily Mail from Berlin.

England definitely refuses to sanction further French punitive measures against Germany, while the Italian government decides not to give approval to any further invasion of Germany by France.

In the meantime, the French chamber has given a decisive vote of confidence to Poincare, who rides roughshod over all opposition.

WHEAT COMMISSION.

A wheat commission plan of handling America's surplus wheat is being worked out in his department, Henry C. Wallace, secretary of agriculture, indicated November 14 in an address before the Chicago Association of Commerce.

"Such a commission as I suggest," he said, "and which we are now outlining will look after the wheat surplus, from behind a tariff wall, so that prices can rise in the domestic market to the point where a bushel of wheat will buy as much for the farmer as it did before the war."

The secretary suggested that any effort to fix wheat prices by governmental agencies will only add to the difficulties of the producers.

PARLIAMENT DISSOLVED.

King George, acting on the advice of his cabinet, Friday dissolved parliament in preparation for the general elections to be held December 6. Parliament will reassemble on December 20.

The British election will be fought on the square issue between protection and free trade. It is estimated that between 30 and 40 women will seek admission to the house of commons.

TO ENFORCE PROHIBITION.

President Coolidge has given his approval to treasury plans for expansion of the coast guard for prevention of rum smuggling. The plans contemplate expenditure of $20,000,000 for new craft and additional personnel.

In addition to the $20,000,000 lump sum, congress will be asked for an appropriation of $8,500,000 for pay and maintenance of the additional personnel. It is proposed to increase the number of commissioned officers from 209 to 353, warrant officers from 396 to 716, and enlisted personnel from 4051 to 7122.

DISCUSS FARM RELIEF.

Burton L. French, representative from the First district of Idaho, and expected to be chairman of the naval subcommittee on appropriations, called on President Coolidge Saturday and discussed the administration program of agricultural relief. He gave the president his views on legislation to help the wheat farmer. Mr. French is a member of the house appropriations committee.

OREGON'S INCOME TAX.

The official returns show that the state income tax in Oregon was carried by a majority of 506, the vote on the measure being 58,647 in favor and 58,141 against.

Farm Business and Markets Outlook

(Continued from page five.)

LATEST QUOTATIONS.

The Live Stock Market.

PORTLAND, Ore., Nov. 17.—Cattle—Beef steers, good grade, $6.75@7.50; medium grade, $5.75@6.75; common, $4.25@5.75; beef cows and heifers, good grade, $4.75@5.25; medium, $3.50@4.75; common, $3@3.50; canners and cutters, $1.50@3; bologna and butcher bulls, $3@4; feeder steers, $5@5.50.

Calves—Medium to choice, 190 pounds down, $9.50@10; 190 to 260 pounds, $6.50@9.50; 260 pounds up, $4.50@6.50; cull and common, $3.50@4.50.

Hogs—160 to 200 pounds, medium, good and choice, $7.75@8.25; 200 to 250 pounds, $7@7.75; 250 pounds up, $6.25@7; packing hogs, smooth, $5.50@7; packing hogs, rough, $4@5.50; slaughter pigs, $6.50@6.75; feeder pigs, $6@6.75.

Sheep and lambs—Lambs, 84 pounds down, medium, good and choice, $10@11.25; cull and common, $7.50@10; yearling wethers, medium to choice, all weights, $6@9; wethers, $5.50@7.50; medium to choice, $3.50@6.50.

SPOKANE, Nov. 17.—Cattle—Prime steers, $6.75@7.25; good to choice steers, $6.25@6.75; medium to good steers, $5.50@6.25; fair to medium steers, $5@5.50; common to fair steers, $4.25@5; choice cows and heifers, $4.75@5.25; good to choice cows and heifers, $4@4.75; medium to good cows and heifers, $3.50@4; fair to medium cows and heifers, $3@3.50; canners, $1.50@2.25; bulls, $3.25@4; light veal calves, $8@9; heavy veal calves, $6.50@8; stockers and feeders, $4@5.25.

Hogs—Prime mixed, $7.25@7.35; medium, $7@7.25; heavies, $4.25@6.35; fat pigs, $6.50@6.75; stockers and feeders, $6@6.25.

Sheep—Prime lambs, $9.25@9.75; fair to medium, $8.50@9.25; yearlings, $6.50@7.50; wethers, $5.50@6.50; mutton ewes, $3@5.

Hay and Feed Grain.

SPOKANE, Nov. 17.—Wheat—Feed wheat, $36 per ton. Oats—$38 per ton; rolled, $40. Corn—$50 per ton; cracked corn, $52 per ton. Barley—$38 per ton; rolled, $40. Bran—$27 per ton. Bran and shorts—$28 per ton. Shorts—$32 per ton.

Hay—Alfalfa, $22 ton in ton lots; $19 carload lots; new timothy, $22 in ton lots, delivered; mixed timothy, $20 in ton lots.

The Grain Market.

PORTLAND, Ore., Nov. 17.—Wheat—Hard white, Bluestem, Bart, $1.01; soft white, $1; western white, 99c; hard winter, northern spring, western red, 97c.

SEATTLE, Nov. 16.—Wheat bids: Hard, soft and western white, $1; Big Bend bluestem, $1.02; hard and soft red winter, northern spring, western red, 98c.

PULLMAN, Wash., Nov. 17.—Red, 78c; white wheat, 81c.

DAYTON, Wash., Nov. 17.—Club, 86c; red, 85c.

LEWISTON, Idaho, Nov. 17.—Red, 79c; white No. 1, 81c.

RITZVILLE, Wash., Nov. 17.—Bart, 82c; red, 80c; Fife, 80c.

WALLA WALLA, Nov. 17.—Bluestem, 88½c; Club, 86½c; Turkey red, 84c.

DAVENPORT, Wash., Nov. 17.—Bluestem, 80c; Gold Coin, 80c; northern spring, 78c; turkey red, 78c.

General Produce.

PORTLAND, Ore., Nov. 16.—Butter—Cubes, extra, 45c lb; prints, parchment wrapped, box lots, 49c; cartons, 30c. Butterfat, 51c, delivered, Portland.

Eggs—Buying prices, white hennery, standards, 50c; mixed color standards, 42@43c. Selling prices, Front street: Selects, 55@56c; candled ranch, 48@52c; storage, white, 38c; storage No. 1 candled, 35c; Association selling prices, cash at store, extras, 53c; pullets, 42c.

Cheese—Price to jobbers, f. o. b. Tillamook: Triplets, 30c; longhorns, 31c; loaf, 30c per lb.

Poultry—Hens, 16@24c; springs, 20@22c; ducks, 17@20c; geese, young, 15c; turkeys, live, young, 25@26c; dressed, 35c.

Dressed meats—Veal, fancy, 14c; pork, fancy, 11c per lb.

Apples—Per box. Oregon—Delicious XF, large, $2.50@3, mostly $2.50@2.75; smaller, $2; face and fill, $2.25@2.50; Winter Bananas C, $1; cookers, 75c@$1; Jonathans XF and F, 125 and larger, $1.25@1.50; F, $1.25; C grade, $1; Grimes Golden, face and fill, $1; Rome Beauty XF, large, $1.75@2; F, $1.50@1.75; Spitzenburg XF, $1.50@2; face and fill, 90c@$1.

Brussels sprouts—California, per lb, 15@17½c.

Bunched vegetables—Per dozen bunches, carrots, radishes, turnips, beets and onions, 40c; turnips, 50c.

Cabbage—Oregon, crated, per cwt, $1.75@2; sacks, per cwt, $1.50; red, per lb, 4c.

Cauliflower—Oregon, per doz—No. 1, $1.75@2; No. 2, $1.50@1.65.

Celery—Oregon, per doz bunches—Large, 75@85c; fancy branded, 90c@$1.10; smaller, 65c.

Cranberries—Washington and Oregon—McFarlins, $3.50@4.75; mostly $4@4.50; Massachusetts Cape Cods, per barrel, $16.50.

SEATTLE, Nov. 16.—Eggs—Select local ranch, white shells, cases included, 50c per doz f. o. b. Seattle; mixed colors, 50c per doz; pullets, 35@38c per doz; pewees, 22c per doz; checks, 22c per doz; cases returned to shippers, 1c less; do to country stores, f. o. b., 47c per doz, loss off; Eastern Washington and Idaho, subject to candling, 50c per doz.

Butterfat—F. o. b. Seattle: A grade, 52c per lb; raw milk, $2.30 per cwt.

Poultry—Hens, 4½ lbs and up, 25c per lb; do over 3½ and under 4½ lbs, 18c lb; springs, 2 lbs and heavier, 22c per lb; do 1 to 2 lbs, 30c per lb; hens, 3 to 3½ lbs, 16c per lb; do dry picked, 2c above live; fryers, roasters, 2½ lbs and up, 22c per lb; capons, live, fat, 6 to 10 lbs, 34c per lb; do dry picked, fancy dressed, 37c per lb; old roosters, 12c per lb; Belgian hares, 3½ lbs and heavier, live, 13@14c per lb; do dressed, 18c per lb; geese, fat, live, 16c per lb; do dressed, 19c per lb; ducks, old, over 3 lbs, 15c per lb; do fancy dressed, 20c per lb; turkeys, fat, dry picked, 12 lbs and heavier, 35@36c per lb; do 6 to 15 lbs, 33c per lb; do live, 28c per lb; squabs, large, dressed, $4 per doz; pigeons, $2; guineas, live, $8 per doz.

Beef—Steers, fancy, 7c per lb; cows, fat, 7c per lb.

Mutton—Fat, 7c per lb; spring lambs, fat, 15c per lb.

Hogs—Good block, 90 to 150 lbs, 10@11c per lb; do heavy, 5@10c per lb.

Veal—Fat, fancy, 75 to 150 lbs, 10@15c per lb; do heavy, 80 to 150 lbs, 7@13c per lb; medium, 12@13c per lb.

SPOKANE, Nov. 17.—Poultry, live weight—Hens, 4 lbs and over, 18c; light hens, under 4 lbs, 14c; springs, 20@22c; old roosters, 8c.

Fresh ranch eggs—$11@13; fancy poultry farm, $15; pullet eggs, $10.50@13.50.

Butterfat, 49c.

Hides, Pelts, Wool.

PORTLAND, Ore., Nov. 16.—Hides—Salted hides, all weights, 4c; green hides, all weights, 3c; salted bulls, 4c; green bulls, 3c; salted or green calf, 10c; salted or green kip, 7c; half-slipped hides and pelts, half price; flint dry hides, 9c; dry salted hides, 5c; culls and damaged, half price. Horse hides, green or salted, each $1; colt hides, each, 25c; dry horse with tail and mane on, 50c.

Pelts—Flint dry sheep pelts, long, 20c; flint dry sheep pelts, short, 10c; flint dry sheep pelts, pieces, 10c; dry salted pelts, 15c; salted pelts, longs, each $1@1.50; salted pelts, short, each 10@30c; salted goats, long, $1@1.50; dry goats, long, per lb, 12c; dry goats, short, each 10@30c; goat shearings, each, 5@10c.

Wool—Valley wool, fine, 28@30c; medium, 28@30c; coarse, 25@27c; Cotswold and braid, 20c; matted, 15c; Eastern Oregon, good average, 32c.

BOSTON, Nov. 16.—The Commercial Bulletin will say tomorrow:

The wool market is strengthening on somewhat broader buying, including some speculation. Medium wools, especially, are eagerly sought, both scoured and greasy, while low wools are also in good request, with fine wools sentimentally, if not actually, stronger.

In consequence of this hardening of prices, exports are made more difficult. The manufacturers are lending more or less support to the market, although apparently anticipating heavy weight season's requirements in part, while the goods market is still hardly settled.

The foreign markets, both secondary and primary, are tending upward. South America, especially, advanced this week and prices were about 5 per cent higher for the week for the best wools in Australia, America buying rather freely in the light of favoring exchange. Fall wools in Texas brought 85 to 90 cents, clean basis, landed Boston, according to the character of the wool.

Scoured basis: Texas fine 12 months, $1.15@1.20; fine 8 months, $1.05@1.10.

California — Northern, $1.15@1.20; middle county, $1.10; southern, $1@1.05.

Oregon—Eastern No. 1 staple, $1.25@1.28; fine and F. M. combing, $1.20@1.25; eastern clothing, $1.10@1.15; valley No. 1, $1.15@1.18.

Territory—Montana, fine stable, choice, $1.28@1.30; half-blood combing, $1.18@1.22; three-eighths-blood combing, $1.02@1.05; quarter-blood combing, 85@88c.

Pulled—Delaine, $1.20@1.25; AA, $1.10@1.12; A supers, $1.

Mohair—Best combing, 78@83c; best carding, 70@75c.

Range of Live Stock Prices for Week Ending November 14

CATTLE.	Chicago.	Spokane.	Portland.	N. Salt Lake.
Choice and prime heavy steers (1100 lb. up)	11.00@12.50			
Good heavy steers	9.75@11.50			
Medium heavy steers	7.60@10.25			
Common heavy steers	5.50@ 8.00			
Choice and prime light steers (1100 lb. down)	11.25@12.50			
Good light steers	10.00@11.50			
Medium light steers	8.00@10.35	6.25@ 7.25	6.50@ 7.60	6.45@ 7.25
Common light steers	5.25@ 8.00	4.25@ 6.25	4.50@ 6.50	4.00@ 6.45
Common to choice butcher heifers	3.75@10.75	3.50@ 5.00	3.25@ 5.50	2.85@ 4.40
Common to choice butcher cows	3.10@ 8.25	3.00@ 4.50	2.75@ 5.00	2.00@ 4.25
Bologna and beef bulls	2.50@ 6.75	3.25@ 4.00	3.00@ 4.00	2.00@ 3.50
Canners and cutters, cows and heifers	2.25@ 3.10	1.50@ 2.25	1.50@ 3.25	1.00@ 2.00
Canner steers	3.25@ 5.25			
Medium to choice light veals	7.00@10.25	8.00@ 9.00	9.50@10.00	6.50@ 7.50
Common to choice heavy veals	4.50@ 7.25	6.50@ 8.00	3.50@ 5.50	4.50@ 7.00
Common to choice feeders (1000 lb. up)	5.35@ 7.75	4.00@ 5.25	5.00@ 5.50	4.60@ 6.00
Common to choice feeders (750-1000 lb.)	4.50@ 7.75			
Common to choice stocker steers			5.00	
Common to choice stocker cows and heifers	2.60@ 4.75			
HOGS.				
Top of market	7.65	7.75	8.00	7.10
Bulk of sales	6.40@ 7.40			
Heavy (250 lb. up)	6.70@ 7.65	6.50@ 7.25	6.00@ 6.75	6.25@ 7.00
Medium (200-250 lb.)	6.75@ 7.60	6.75@ 7.50	6.75@ 7.25	6.25@ 7.00
Light (150-200 lb.)	6.30@ 7.40	6.75@ 7.75	7.25@ 8.00	6.50@ 7.10
Light lights (130-150 lb.)	5.50@ 7.05	6.25@ 7.00		
Smooth packing sows (250 lb. up)	6.30@ 6.75	5.25@ 5.75	5.50@ 7.00	5.00@ 6.00
Rough packing sows (200 lb. up)	6.00@ 6.60	4.25@ 5.25	4.00@ 5.50	
Medium to choice pigs (130 lb. down)	5.00@ 6.25	6.25@ 6.50	6.75@ 7.00	
Stock pigs		6.00@ 7.00	6.50@ 7.00	6.50@ 7.00
SHEEP AND LAMBS.				
Medium to prime lambs (84 lbs. down)	10.75@13.50	10.00@ 9.75	10.00@11.25	10.25@11.00
Culls and common lambs	8.75@11.25	8.50@10.00	7.50@10.00	
Medium to prime yearling wethers	8.25@11.50	6.50@ 7.50	6.00@ 9.00	6.50@ 7.25
Medium to prime wethers	5.00@ 9.50	5.50@ 6.50	5.50@ 7.50	
Medium to choice ewes	4.00@ 7.00	3.00@ 6.00	3.50@ 6.50	4.00@ 5.00
Culls and common ewes	1.00@ 4.00			
Feeder lambs	11.50@13.10			8.50@11.00

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Few rich, a crowd of poor and a growing middle class ambitious to live like the rich—this seems to be the modern program of life.

They tell us that the so-called poor of today are rich when compared with the poor of yesterday; that the middle class outvies the nabob of yesterday.

Is there one standard of life for the rich, another standard of life for the middle class, and yet another standard of life for the poor? Or is there only one standard of life—the American standard—and is it only a matter of money as to the extent you can attain that standard of life? The rich man can easily attain that standard, the middle class man can approach it half-way, while it is up to the poor man to dream of it, hope for it, and work for it, and haply might find it.

It goes without saying that the standard of life today is a question of money, but is it a question of just so much money? Is it a question of just a particular make of automobile, just a particular cut of quality of clothes, just the number of electrical conveniences in your house? What is the standard of life, anyway?

HANDY LIFTERS.

Several pads to lift hot kettles or pans off of the stove will be found handy in the kitchen. These may be made by putting several thicknesses of overall cloth, outing flannel or woolen material together and stitching around the edge. The tops of old stockings also make good pads and are easy to wash. These pads should be about five or six inches square. Sew a metal ring or put a loop of strong cord in one corner and hang them on a nail near the stove and you will have fewer dish towels to launder.

Latest High Class Patterns for the Home

Please order the patterns you desire at least two or three weeks before you wish to use them. Desiring to obtain the latest high-class patterns for its readers, THE FARMER has made arrangements to have them sent direct from the east, and under present mailing conditions it takes about that time for them to reach you

4553. Lady's Dress. Cut in 5 sizes: 34, 36, 38, 40 and 42 inches bust measure. A 38-inch size requires 3 1-2 yards of 54-inch material. The width at the foot is 2 3-4 yards. Price 10c.

4560. Girl's Dress. Cut in 4 sizes: 6, 8, 10 and 12 years. A 10-year size requires 3 3-4 yards of one material 27 inches wide. If made as illustrated, waist and sleeves will require 1 3-4 yard and facing, collar, vest and skirt 2 yards. Price 10c.

4351. Girl's Dress. Cut in 4 sizes: 8, 10, 12 and 14 years. A 12-year size requires 4 1-4 yards of 32-inch material. Price 10c.

4555. Junior's and Misses' Dress. Cut in 5 sizes: 12, 14, 16, 18 and 20 years. A 16-year size requires 3 1-2 yards of 40-inch material. The width of the skirt at the lower edge is 2 3-8 yards. Price 10c.

3743. Child's Coat and Cap. Cut in 4 sizes: 6 months, 1 year, 2 and 4 years. A 2-year size will require 2 1-2 yards of 27-inch material for the coat and 3-4 yard for the cap. Price 10c.

4554. Lady's House Dress. Cut in 7 sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. A 38-inch size requires 7 3-8 yards of 27-inch material. The width at the foot is 2 yards. Price 10c.

4567. Child's Dress. Cut in 4 sizes: 1, 2, 3 and 4 years. A 2-year size requires 2 yards of 27-inch material. Price 10c.

4213. Lady's Apron. Cut in 4 sizes: Small, medium, large and extra large. A medium size requires 3 3-8 yards of 36-inch material. Price 10c.

2970. Set of Toys for the Nursery. Cut in one size. Either style requires 3-4 yard of 27-inch material. Price 10c.

3438. Two Dainty Aprons. Cut in one size: medium. No. 1 will require 7-8 yard of 36-inch material, and No. 2 will require 1 1-4 yard. Price 10c.

4095. Lady's Corset Cover. Cut in 4 sizes: Small, 34-36; medium, 38-40; large, 42-44; extra large, 46-48 inches bust measure. A medium size requires 1 1-2 yard of 36-inch material. Price 10c.

3590. Set of Pretty Caps. Cut in 3 sizes: 18, 20 and 22 inches. To make the caps for either head size indicated, will require 1-2 yard for No. 1 and No. 2, 3-8 yard for the lining and 1-2 yard for the outer portions. Price 10c.

4406. Lady's Under Garment. Cut in 4 sizes: Small, 34-36; medium, 38-40; large, 42-44; extra large, 46-48 inches bust measure. A medium size requires 2 yards of 36-inch material. Price 10c.

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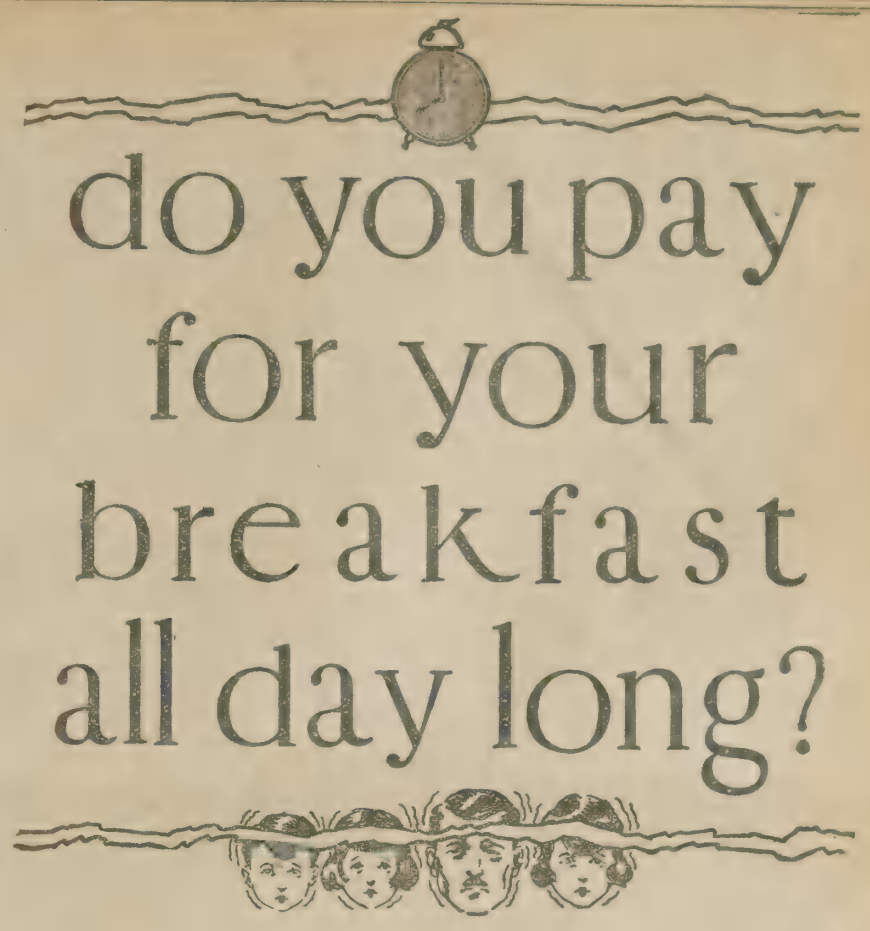

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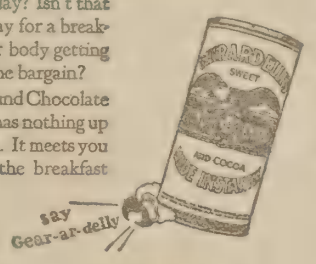

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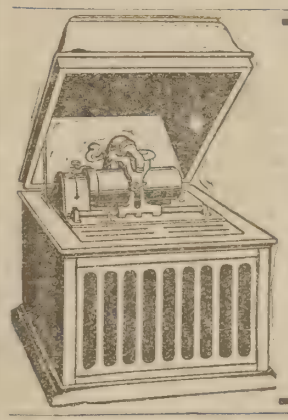

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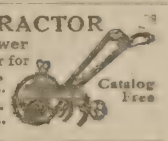

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ART PROOFS
OLD MASTERS
OLD MASTER ART PROOFS
From your own favorite negatives.

Northwestern Photo Supply Co. Inc.
Eastman Kodak Company
1415 Fourth Ave.
Seattle Wash.

Just What You Want

may be offered in this week's want ads at a bargain. It's a good idea to look them over every week

In writing advertisers, be sure to say you saw their advertisement in The Washington Farmer.

Dear Aunt Nellie: I am 7 years old. I have two brothers and one sister. My brother is in the fifth grade at school and I am in the third grade.—Garland Harris, Grant county, Wash.

Birthday Greetings

THURSDAY, November 22—Johnny Melvin Dahl, 9 years old; Hazel Schafer, 11.

FRIDAY, November 23—Leslie John Beardsley, 6 years old; Magdalene Pflugrath, 9.

SATURDAY, November 24—Jewel Field.

SUNDAY, November 25—Helen Magnuson, 11 years old; Edith Spurgeon, 6; Charlotte Treadwell, 10; Evelyn Whitbeck, 9.

MONDAY, November 26—Evelyn Armours, 11 years old; Ruby May Schrag, 10.

TUESDAY, November 27—Jessie Hendersen, 8 years old; Harry Lee Kellogg, 9; Nellie Powell, 11; Jessie Rupp, 9.

WEDNESDAY, November 28—Victor Anderson, 8 years old; Gladys Cook, 11; Erma Sherry, 11.

LETTERS WELCOMED BY AUNT NELLIE.

Among recent letters received by Aunt Nellie are those from cousins whose names follow. A few of these will be published each week in the regular edition of THE FARMER and others will appear from time to time in The Junior Farmer:

Frances Mae Fox, Edna Amend, Myrtle V. Foye, Elsie Boeck, Bertha Boeck, Ellen Olson, Thelma Melger, Vera Ayers, Alice Lavina Halsted, Evelyn Olsen, Mozelle Van Syckle, Gertie Rehn, Pearl Lonie, Florence Molinder, Virginia King, Audell Wilson, Alice Hunt, Marvin Whitman, Mae Sundberg, Freda Stuner, Saima Carlson, Lillian Robinson, Emma Miller, Ethel Miller, Mary Armstrong, Hilda Wagner, Viola Johnson, Lena Boeck.

Bessie Ada Pendell, Nellie Roe, Mamie Richey, Leo Anderson, Grace Shaw, Olaf Swanson, Hisayo Okinaka, Mildred Wuorinen, Beth Verbeck, Peter Wigen, Norma Baines, Cora Kelso, Velma Lewis, Marian Pace, Lester Glover, Ellis Sawyer, Doris E. McDonnell, Mary Lou Jenkins.

BEDTIME STORIES

By THORNTON W. BURGESS.

ALL IS WELL THAT ENDS WELL.

When the storm's over and sun shining bright
The clouds are forgotten and everything's right.

It is just the same way with fears and troubles. When they are over and things have come out right, as they are bound to do in the end, the troubles are forgotten, or at least are little thought of, and this is the way it should be. It was so with Redeye the vireo and his hard-working little mate. Their troubles came to an end at last and then all was well.

That lazy cowbird baby whom they had fed and cared for, and who had forced their own babies to leave the nest before they were really strong enough to, at last made up his mind that he would try his own wings. Perhaps it was because he was so greedy that he couldn't bear to see the Redeye children getting all the food they needed while he got only what he squalled for. You see when they were in the nest with him he got most of their share, as well as his own, because he was so much bigger and stronger than they. But when they left the nest their father and mother could feed them as they should be fed, and he couldn't help himself.

When he found that he was no longer getting the biggest share he made up his mind that it was time to try his wings. There was no reason in the world why he shouldn't have tried them long before. He was big enough and strong enough, but he was too lazy. It was his greediness that finally overcame his laziness. As soon as he was out of the nest he joined the Redeye babies and began his old tricks of crowding in and snatching the food meant for them. But it wasn't so easy to do it now as when they were all together in the nest. So the little Redeyes got their share and grew fast, and presently were beginning to hunt worms for themselves.

But the young cowbird had no idea of doing this until he had to. So he followed Mrs. Redeye about all day long, hurrying up to her and squalling at the top of his lungs every time she caught a worm or bug so that she was glad to give it to him to stop his dreadful noise. It certainly was disgraceful and all the other little people in the old orchard said so. They called the young cowbird a nuisance, and said that it was a shame that little Mrs. Redeye should be so imposed upon. Here was this young stranger bigger than she and demanding that she feed him because he was too lazy to hunt for his own food.

At last several of them put their heads together and decided to do something. "That noisy nuisance is big enough and old enough to take care of himself," sputtered Jenny Wren. "Let's all get together and drive him out of the old orchard. It's the only way we'll ever get rid of him.

"A good idea," said Welcome Robin. "He's a disgrace to the whole neighborhood. Let's do it right now."

The young cowbird had just begun to squall for a worm which Mrs. Redeye had found, when he saw Welcome Robin and Winsome Bluebird and Jenny Wren and Tiny the warbler and a lot more of the little orchard people headed his way, and they looked so angry and determined that he suddenly made up his mind that he didn't want that worm at all. In fact, right then and there it came over him that he was tired of the old orchard and it was time he saw more of the great world. So without a word of thanks to little Mrs. Redeye for taking care of him when his own mother, Sally Sly, had deserted him, he spread his wings and flew as fast as ever he could in the direction of the old pasture and never once looked back.

The others followed to the edge of the old orchard to make sure that he had really gone, and then returned to tell Redeye and Mrs. Redeye how foolish they had been to be so tender hearted to such a lazy, good-for-nothing fellow. But now that their troubles were at an end Mr. and Mrs. Redeye could remember only that it wasn't the young stranger's fault that he had been hatched in their nest, and in their hearts they were glad that they had not been cruel enough to let him starve when he was helpless. They thanked their nighbors for having got rid of him for them, and then sighed thankfully. "All is well that ends well," said little Mrs. Redeye, cocking her head wisely.

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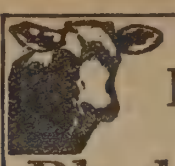


Prevent
Blackleg
by using
Blacklegoids

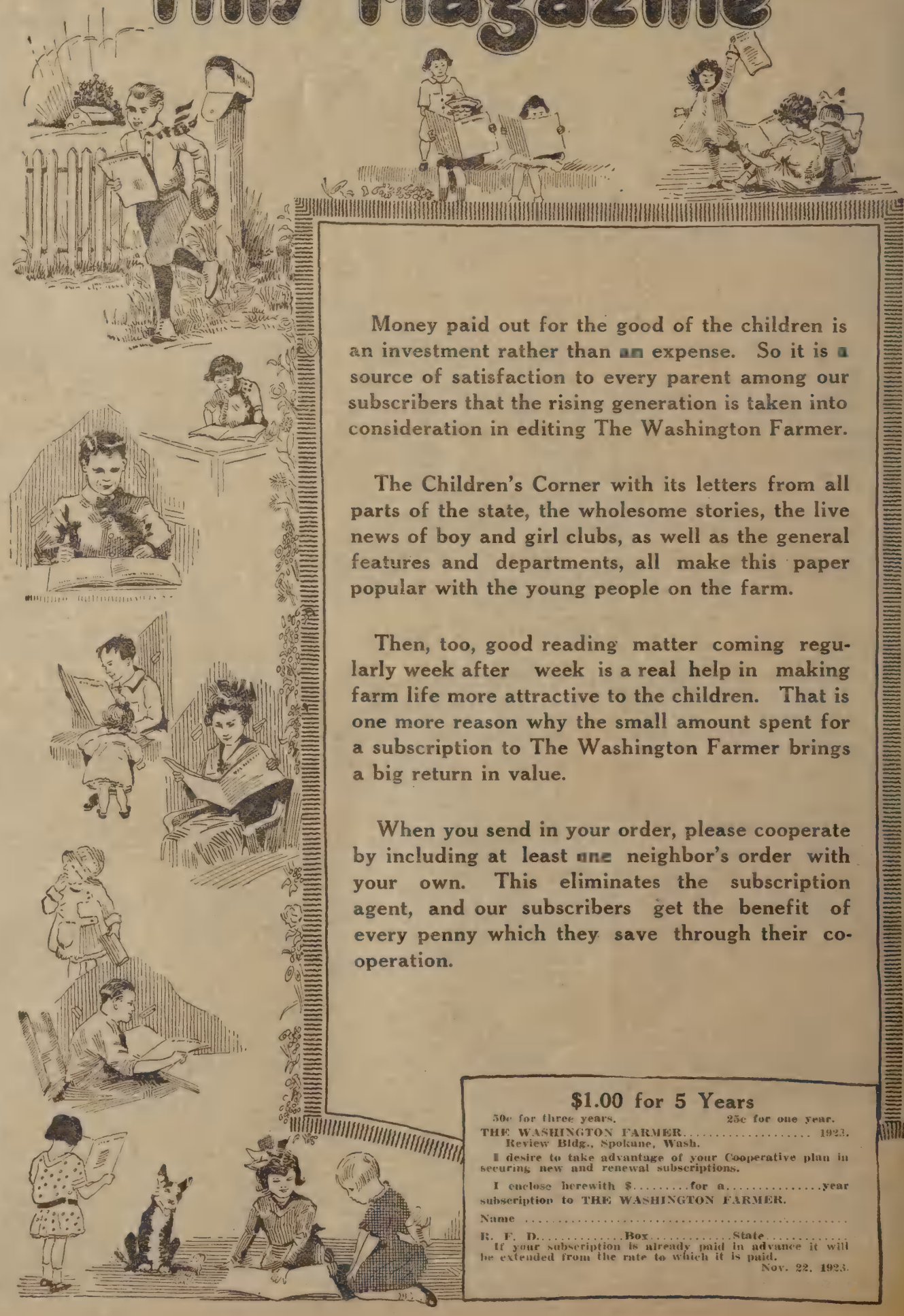
Scientifically Prepared and Tested
Blackleg Vaccine in Pill Form

Consult your veterinarian or druggist.
Write for free booklet on blackleg. No. 351.

Animal Industry Department of
Parke, Davis & Company
DETROIT, MICH.

In writing advertisers, be sure to say you saw their advertisement in The Washington Farmer.

Children Welcome This Magazine



Money paid out for the good of the children is an investment rather than an expense. So it is a source of satisfaction to every parent among our subscribers that the rising generation is taken into consideration in editing The Washington Farmer.

The Children's Corner with its letters from all parts of the state, the wholesome stories, the live news of boy and girl clubs, as well as the general features and departments, all make this paper popular with the young people on the farm.

Then, too, good reading matter coming regularly week after week is a real help in making farm life more attractive to the children. That is one more reason why the small amount spent for a subscription to The Washington Farmer brings a big return in value.

When you send in your order, please cooperate by including at least one neighbor's order with your own. This eliminates the subscription agent, and our subscribers get the benefit of every penny which they save through their co-operation.

$1.00 for 5 Years

50c for three years. 25c for one year.

THE WASHINGTON FARMER..... 1923.
Review Bldg., Spokane, Wash.

I desire to take advantage of your Cooperative plan in securing new and renewal subscriptions.

I enclose herewith $.....for a.....year subscription to THE WASHINGTON FARMER.

Name .....

R. F. D.....Box.....State.....

If your subscription is already paid in advance it will be extended from the rate to which it is paid.

Nov. 22, 1923.

News for Breeders

ANOTHER RECORD HOLSTEIN.

Washington now has another record Holstein cow. Donnybrook Cornucopia Clothilde, a mature cow owned at the Western State hospital at Fort Steilacoom, recently completed a 10 months' test in which she produced 22,042.4 pounds of milk and 987.8 pounds of butter. This is a new butter record and raises the record of Cascade Blossom of Yakima by four pounds of butter and 2000 pounds of milk.

She comes from Todd breeding on the sire's side, her sire being a grandson of Sir Johanna Ruth Payne, and her dam, a daughter of the noted Sir Colantha Prilly, is from a 32-pound dam. At the end of her 10th month this remarkable young cow made an official seven-day record of 646.1 pounds milk, 28.22 pounds butter, the highest milk record ever made in a seven-day test so far after calving.

NORTHWEST AYRSHIRE OFFICERS.

Following a banquet and meeting of the Northwest Ayrshire Breeders' association, held in Portland on November 8, the following were elected for the various offices of the association for the year 1924: E. W. Van Tassell, Wenatchee, Wash., president; J. D. Honeyman, Portland, Ore., vice president for Oregon; E. V. Ellington, Pullman, Wash., vice president for Washington; L. K. Saum, vice president for Idaho; A. E. Wells, Sardis, B. C., vice president for British Columbia, and J. U. Smith, Route 1, Newberg, Ore., secretary.

DOUGLAS FARMERS BUY BULL.

Ed Hoem of Snohomish reported to County Agent A. Z. Smith the sale of a Holstein bull calf to farmers in Douglas county. The Valley Gem farms report the sale of a purebred Guernsey bull calf to James McCauley and also the sale of two grade heifer calves to L. O. Stubb of Norman. The sale of the two calves was conducted through the Snohomish Cow Testing association's "Sales" scheme. In the "Sales" idea the cows are classified according to production of butterfat, based on cow testing association records.

HIGHEST MILK RECORD.

Kolrain Finderne Bess, a Massachusetts Holstein, recently completed a strictly official yearly record of 35,087.5 pounds of milk and 1117.43 of fat, that has been exceeded for both milk and butterfat only by Segis Pietertje Prospect, Carnation's world champion. The milk record is the highest strictly official one ever made, and the butterfat record the second highest, at this writing.

Lays Early Ground Work

The picture herewith is that of Max Merritt, aged 7, of Rosalia, Whitman county. In his left hand is a silver cup that he won at the Spokane Interstate fair in September when he showed the best colt in the boys' and girls' contest for the trophy given by John H. Roberts of Spokane, superintendent of the horse division at the Interstate fair. The animal that the young horseman is riding is not the colt with which he won, but is a Shetland of which he is perhaps little less proud. The colt that he showed at the fair was a purebred Shire only a few months old, but tall enough that the youngster need-

ed a step-ladder or a manger to groom him thoroughly, which his showmanship at the fair indicated he had done many a time in preparation for the event. In fact, the interest that M. W. Merritt, the lad's grandfather, with whom he lives, and one of the well-known Shire breeders of the west, took in the lad's winning has led horsemen generally who know the situation to believe that he had devoted much of his time and skill for several weeks previous to the show in training his grandson in the art of showmanship and horse judging.

"Do you want to know why your colt didn't win?" Max asked the boy who showed the winner of second place. Without waiting for an invitation to tell the reason, he continued, "Feet too flat," indicating that he had learned already that one weak point may defeat an otherwise high-class horse.

We Buy and Sell
Grade and Pure Bred Dairy Cattle.
We can save you money whether you wish to buy or sell. One or a carload.
Graham Livestock Co.
E2605 Broadway, Spokane, Wash.
NEAR CARSTENS' PACKING PLANT.

Breeders' Dept.

Royally Bred Jersey Bull
Pilot's Model's Fern Lad
PROVEN SIRE, DROPPED AUG. 15, 1919.
Sire, the grand champion bull, Count's Foxy Lad of Waikiki, sire of this year's grand champion bull, Pacific International Stock show, and of 12 register of merit daughters, one a silver medal winner.
Pilot's Model's Fern Lad's dam, Pilot's Model, is a show cow and producer, having 5 official records, and is a gold medal cow. She is by Eminent's Pilot, with Financial Count Eminent and Coomassie in her pedigree. He has nicked remarkably well with St. Mawes bred cows. One or two young cows for sale.
O. P. DOSLAND, Grays River, Wash.

Hewitt Farms Jerseys
Bulls ready for service of Rinda Lad and St. Mawes Lad breeding, from register of merit dams.
G. G. HEWITT, Rt. 1. Independence, Ore.

Pacific Farm Jerseys
Bred for type and production. Rinda Lad and St. Mawes Lad blood lines.
I. NORDSTROM, Bandon, Ore.

Wenatchee Ayrshire Farm
Every cow in milk in the herd has official record or is on test. Greatest show winning on entire circuit. Choice young stock of both sexes for sale.
E. W. VAN TASSELL, Wenatchee, Wash.

Fort Steilacoom Holstein Herd
Where the high records are made. Several exceptionally well bred bulls for sale at most reasonable prices, sired by Chimacum King Korndyke Sadie Vale or Carnation King Matador Mutual, son of a world record senior yearling.
WESTERN STATE HOSPITAL,
Ft. Steilacoom, Washington.

Linn County Holsteins
Cows, heifers, bulls and calves.
LINN CO. HOLSTEIN ASSOCIATION.
GEO. A. McCART, Sec. Harrisburg, Ore.

Milking Shorthorns
FARMERS! Why not diversify, work from both ends? Produce beef as well as milk at a minimum cost. We are offering bull calves from profitable milking cows of approved Shorthorn type. Herd headed by Gretna Challenger, grand champion Washington state fair and Western Royal, 1922. Visit the herd or write
NORTHWOOD FARMS, Redmond, Wash.

Milking Shorthorns Kamaduk herd, Junior herd bull, Peerless White Clay 1131261; sire Glenside Roan Clay, world's heaviest bull, by General Clay. Dam, Silver Belle, by Silver Knight.
J. E. DANILS, Murphy, Ore.

Sunny Hill Brown Swiss
Federal accredited herd. Choice young stock for sale.
JOHN BOECKLI, Linnton, Ore.

Mistland Brown Swiss
Bulls and heifers of good breeding and individuality at reasonable prices.
JOE SCHUMACHER, Stayton, Ore.

Registered Herefords cows and heifers, yearling and bull calves of popular breeding; priced very reasonable.
WALTER BLANCHARD, Buhl, Idaho.

Royal Ranch Durocs
We have the best boars we ever raised for sale at less money than you ever bought them for. The type and breeding you want, including the 1923 junior champion of Idaho. The strongest Duroc show of the northwest. 26 herds competing. Write us your needs.
ROY SHUTWELL, R. F. D. NO. 3, Boise, Ida.

Duroc-Jerseys For sale, a choice lot of spring boars and gilts, Pathfinder type, from prize winning stock. Terms, C. O. D.
HILLCREST FARMS, R. 9, Hillyard, Wash.

Gano's Durocs Have size, quality and individuality. Am offering a choice lot of breeding boars, also booking orders for fall pigs. Prices reasonable.
F. D. GANO, Sunnyside, Wash.

Buy Them in Carload Lots at the Greatest Holstein Auction Held in the United States This Year.

200 Head

Registered, Tuberculin State Tested

To be sold on the Puyallup fairgrounds, located at Puyallup, Wash., between Seattle and Tacoma, Monday and Tuesday, December 3 and 4, 10 a. m. each day.

Remember, you can buy in carload lots, extra choice selections of fresh, or springing cows, bred heifers, and high record bulls, suitable for bull associations.

These animals are all highly bred with high records; they are in calf to world's record bulls. Never in the history of the west has such an opportunity been offered the buyer.

Remember, 200 head Registered Holsteins all to go without reserve to the high bidder. Every animal selected by the state association.

Remember—Puyallup, December 3 and 4.

Write for catalogue or information to H. C. Stimson, Secretary, Washington State Holstein-Friesian Association, Hollywood, Wash., or GEO. A. GUE, Auburn, Wash, Sales Manager

H. W. MERRITT, Rosalia, Wash.

SHIRE HORSES

"BEST IN THE WEST"

At the Pacific International Stock Show, November 3-10, the Merritt Shires won every blue ribbon for which they competed, except two, and were awarded three of the four championships. They won junior champion stallion, on Prince Albert; senior and grand champion mare, on Martha Washington, and junior and reserve champion mare, on Henry Retta.

They won first, second, third and fourth on get of sire, and first, second, third and fourth on produce of dam. All these were the get of the great herd sire, March Ankeny.

Substantially the same winnings were made on entire fall fair circuit.

A few choice animals of both sexes for sale at all times.

FOR SALE

A choice lot of Holstein calves, both sexes, finest Hollywood breeding, excellent individuals. Several are out of yearly record dams. Have no room for them and they must be sold. Breeding and individuality considered, they are the very best bargain on the market. Write for prices and descriptions. Excellent heifers for calf clubs, fine bulls for bull associations.

A CALF OR A CARLOAD.

HOLLYWOOD FARM, Hollywood, Wash.

BERKSHIRES
For sale—2 fall, 1922 boars. Also choice lot of last March and April boars. Four of these are full brothers to junior champion boar and junior champion sow at Washington state fair, 1923.
FRED H. SINNES, R. 2, Prosser, Wash.

BERKSHIRES
The big kind with quality and finish. Breeding stocks, both sexes, different ages, for sale. Special prices on spring boars and unrelated trios. Popular blood lines.
REICK BROS., Macleay, Ore.

Berkshires Improve your stock on my easy payment plan. Grand champion boar and Jr. champion sow at Spokane fair. Blood lines unsurpassed. Cedar Canyon Farms.
F. M. CURTISS, Prop., Fruitland, Wash.

Big Type Polands
The Royal Designer herd of the best blood lines. We offer a few March boars, 1 two-year-old boar and a number of March gilts, tried sows and fall pigs at weaning time. Write for prices. Satisfaction guaranteed. JOHN F. LYNN & SON, Peach, Wash.

Pioneer Herd Hampshire Swine
10 head choice boars; 10 head of sows and gilts, backed by show records.
J. M. FRUITTS, Cambridge, Idaho.

American Hampshire Sheep Association
has a valuable booklet with illustrations telling you the superiority of this breed. We believe the Hampshire to be the best all round sheep in the world. Also have list of breeders; some near you. This literature is free. Write
COMFORT A. TYLER, Secretary.
72 Woodland Ave., Detroit, Mich.

Shropshire Ewes A few choice registered yearlings and two-year-olds, bred to first prize yearling ram, 1923 Oregon state fair.
G. H. THOMPSON, Macleay, Ore.

Have you glanced over the farm bargains on the "Want Ad" page?

COMP G O EXPERIMENT STATION URBANA ILL

Cattle Ranch to College

(Continued from page fourteen.)

success meant position, standing, a great opportunity, a future.

A hundred feet from the finishing tape he bent his head and made a tremendous effort. Early morning training stood him in good stead now, for he began to gain on Bolton, and inch by inch to pass him. The old machine groaned alarmingly, but it stood up to its work in spite of its protests. Twenty feet from the finish John seemed to leap forward, and crossed the tape just ahead of the laboring Bolton.

The crowd was rather disappointed to see its favorites beaten, but applauded the winner generously as he went up to the judge's stand to receive his shining prize.

Gray was the first man to wring his hand; his was an honest, unfeigned, glad congratulation.

"Say, Gray," said John, "you ride her home. I want a farewell ride on this old wheel. I pull out tomorrow."

"What!" ejaculated Gray in astonishment.

"Yes, that's what I wanted that wheel for. I straddle it tomorrow and go east. I haven't said anything about the plan, for I wasn't sure the wheel would be mine."

"Did you expect to win?" Gray asked.

"I've trained a month. That's what gave me the wind to finish so strong. You see, my plans need transportation east. I had to win. I'm going to ride that wheel to college."

That evening John bade the Marstons goodby. They tried to dissuade him from going; they pictured the career that was open to him in the town where he had made friends and had gained a reputation, but his mind was made up, and though he was touched by their kindness, go he must.

"I don't like to have you leave," said the professor. "You'll be thrown into circumstances unlike any you have ever met before. But I know that you can adapt yourself to new conditions, and for that reason it may be best for you while your mind is growing. You will never forget the west, but I feel sure you will not leave the east, once you are settled there. Goodby, my boy, and God bless you."

John never forgot the kind parting words nor Professor Marston's always considerate treatment.

The two friends, Worth and Gray, talked long and earnestly that night and it was late when they retired, but at daybreak they were stirring. John ate a deliberate breakfast, strapped a few necessaries to his wheel, bade his friend a sincere farewell, and rode off.

He pedalled on in the crisp morning air till he reached a high point, where he dismounted and took a long look at the town where he had struggled so hard, but which was the scene of his triumph as well as his trials. His satisfaction was mixed with regret, for he left behind good, true friends and a known esteem, for—he knew not what. The town lay in the hazy valley below, morning smoke-wreaths now curling from many chimneys, the gray shingle roofs embedded in dark-green foliage; it was a scene of contentment and rest. He contrasted this with other scenes, active, restless, hazardous ones; the cattle range, the sheep camp and the mine. The thought of his home was not so clear as the later scenes, though he had visited it during his stay at school. He had found Ben an almost grown-up, vigorous, business-like ranchman, glad to see his brother, but interested in his own affairs; not the same old boyish Ben of old.

It was with real regret that he turned and left the town that had in a way been a cradle and a home to him.

Day after day the traveler pushed on, following the windings of the roads now where formerly he would have ridden his horse as the crow flies.

Seventy miles a day. Eighty miles a day. Population increased; roads were better, 90 miles a day. His training for racing stood him in good stead. One hundred miles a day; his face aldays turned eastward.

Rains came; the roads became rivers of mud. He was driven to the drier railroad track and jolted along over the ties. Sixty miles a day. The end not yet in sight, money exhausted, prospects not very cheerful; but with resolution undaunted he pushed along. A brickyard afforded temporary work. Five dollars earned, he "hit the trail" again.

Midday was fiercely hot; he took advantage of the cool mornings, and by twilight pedalled continuously. Wide swamps intervened. Insects, stinging vicious, beset him. The sand along the river banks was heart-breaking to a wheelman and the mountains formed almost unsurmountable barriers. People he met misdirected or were ignorant, and he often went far out of his way.

But the goal was sighted at last. The day he reached Sherman's town he made 120 miles and rode up the main street a sorry specimen — tired, dirty, tanned leather color by sun, wind and rain.

His plans were fully made. The wheel was pawned at once, and two hours later John Worth emerged from a little hotel bathed, shaved and neatly clothed.

The address of his friend written for him was made nearly illegible by friction, sweat and dirt. But by the aid of a friendly policemtn he was able to find Sherman's house. He rang the bell, was admitted promptly by a neat maid, and ushered into a sumptuously furnished parlor, the like of which he had never seen before. The chair that he at last dared to use was soft and luxurious, and the journey had wearied him so that he was just about dropping off to sleep when Sherman entered.

"How do you do, sir?" Sherman's greeting was rather formal. "What can I do for you?"

At the sound of his voice John started to his feet with a jump.

"Don't you know me, Sherman?" he said.

"You—you can't be John Worth? Why, bless my heart, is it really you?" cried Sherman.

In an instant the one idea that had sustained him through the trying hours and apparently endless miles of his journey came to John's mind.

"Yes," he said, the light of triumph in his eyes. "I'm John Worth. And I've come to college."

(The End.)

Valley Apple Show

(Continued from page three.)

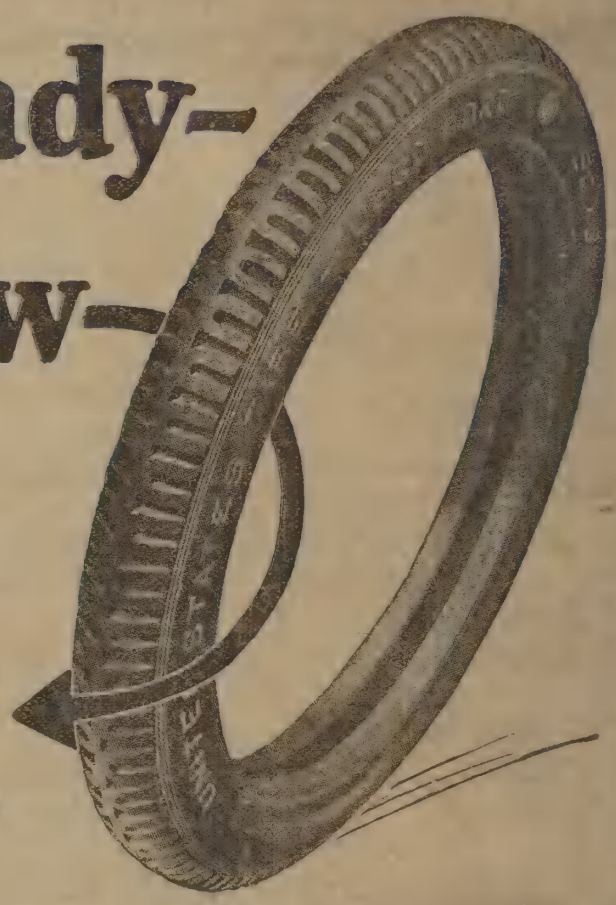
and retailers exhibited also.

The evening programs were well varied and excellently attended. Monday's, that of opening night, included music by the Spokane valley and Millwood bands, fancy dancing, community singing and the president's address. Fred Krug spoke on strawberry culture. Tuesday evening the Vera Community club put on an entertainment program, with additional features by the Spokane Chamber of Commerce and with an address by Professor C. L. Vincent of the University of Idaho, on head lettuce culture and a talk by Commissioner David T. Ham on pioneer conditions. The Opportunity and Pinecroft community clubs staged the fun Wednesday evening, with the Spokane Advertising club assisting, and possibilities of poultry were discussed by Helen Dow Whittaker. Thursday night was Greenacres night, and the Lions and Kiwanians of Spokane contributed to the entertainment features. Professor O. M. Morris of Washington State college discussed orchard problems. Friday evening the Orchard Avenue, Millwood, Dishman and Pasadena clubs entertained the crowd, asisted by the Spokane Rotarians, and John Wiley, district horticultural inspector, advocated pest-control districts made up of solid blocks of orchards, to curb leaf roller and codling moth. The opportunity is to be given the growers of the region to meet again and talk over this plan of control, which, it is estimated, would protect the orchards at a cost of but $1 per acre. There were 400 paid admissions that evening. On Saturday evening the successful show closed with a harvest carnival dance.

There were, in addition to the educational evening features, instructive afternoon features, in the course of the week, including a demonstration by Miss Inez Arnquist, county home demonstration agent, of home manufacture of pectin, the jelling principle, from apples, and a review of the outlook for head lettuce growing in the valley by Professor C. L. Vincent of the University of Idaho.

Read the "Want Ad" page this week for good offers of all kinds.

Now Ready—
The New—
USCO CORD



THE makers of Royal Cord Tires consider this, next to the Royal Cord, the greatest tire value that has ever been produced. The price is only a little more than that of the celebrated USCO Fabric.

The new USCO Cord is made in all regular sizes including 30 x 3" clincher and in both clincher and straight side in 30 x 3½".

It has the familiar, time-tested, practical USCO tread. It is distinguished from the USCO Fabric by three circumferential ribs beneath the tread pattern and the United States Rubber Company Seal in white on the side-wall.

Built on a new construction principle the USCO Cord in spite of its low price more nearly approaches the famous Royal Cord in service value than any other tire that has ever been produced.

Do not confuse the USCO with other low-priced cords.

It is a high-grade cord tire in every respect.

A scientific tire through and through—

A remarkable tire at a remarkable price—one that is stirring up the liveliest interest among value seeking tire buyers and legitimate tire dealers.

See the new USCO Cord Tire at the U. S. Sales and Service Dealer —on your next trip to town.

United States Tires
United States Rubber Company

NOVEMBER 29, 1923. Washington's Great Farm Magazine EVERY THURSDAY

THE WASHINGTON FARMER

ESTABLISHED 1894

SPOKANE. SEATTLE.

Not Afraid

Third Annual Pacific Northwest Potato Show---Page 3

Northwest Hay and Grain Show

The third annual Northwest Hay and Grain show was held at Portland the week of the Pacific International and was by far the most successful of any so far held. There were 750 entries all told of different grains, seeds, corn and hay. The sweepstakes awards were divided quite evenly between several Oregon counties. Idaho and Washington came in for their share.

The wheat exhibits were especially good. The sweepstakes award for the best bushel in the show went to Jaeger brothers of Condon on a bushel of Turkey red which weighed 63 pounds, was a beautiful dark copper red in color and free from mixtures of all kinds.

Its closest competitor for the $50 prize was an entry of Marquis from Walter Kraft of Bozeman, Mont. Mr. Kraft won the sweepstakes premium last year at the International Hay and Grain show at Chicago.

The outstanding feature of the wheat exhibit was the splendid showing of all varieties of wheat from Umatilla county, nearly 200 entries in all. This county won the big majority of the ribbons, taking six blue ribbons on wheat and dozens of lesser places. The Umatilla exhibit of White Club was especially noteworthy. There were about 150 entries in this class in the show, over half of them coming from the one county. The judge working on this class went over the entire lot carefully, eliminating all of the lots except those of outstanding merit. When he had selected only the very good lots he found that these numbered 5. This gives some idea of the splendid quality of the whole show.

Contest is Close.

The contest for first place in the White Club class was close between lots owned by C. A. Knowles of Dufur, Wasco county, and J. A. Gaskill of Imbler, Union county. The blue ribbon finally went to Mr. Knowles, but both lots were exceptionally pure and of fine quality. There were 15 other placings made and Umatilla county won most of them.

In the hard red spring class all of the honors went to Montana Marquis. Many of these Marquis entries had been previously shown at the big grain show at Wichita, Kan., where they also carried off the ribbons.

As was the case last year and in 1921, the showing of Hard Federation was spectacular. In the class hard white, where it was competing with dozens of entries of Bart, Bluestem and Galgalos, it won all of the 10 places. As was the case last year, the leading competitors for first place were J. A. Gaskill of Union county and Otto Reiman of Umatilla county. Last year Mr. Reiman's wheat placed first. This year it placed below that of Mr. Gaskill. Other owners of exceptionally fine lots of this variety were Roscoe Myers, Echo; John Marten, Pendleton; E. F. Zaugg, La Grande; W. L. Ledbetter, Alicel; Ralph Reese, Echo; Harry Lanius, Prineville; A. S. Gangier, Pendleton, and Herbert Egbert, The Dalles. Several of the above men, notably Marten, Ledbetter, Reese and Egbert, have been consistent winners with Hard Federation at shows for the last two years.

Turkey red entries showed a big improvement over last year. There were 125 entries of this variety. Both of the leading entries came from the Jaegers of Condon, although the competition was keen for all of the 17 placing. R. J. DeGroot of Antelope, Wasco county, is a new exhibitor at this show, but his bushel placed third in a very close class. In former years Montana has had no trouble in annexing the first four or five places in this variety, but this year had to be content with only the fourth and fifth places. Last year James Dolan of Columbus, Mont., won first place with no difficulty, but this year he placed fourth. It is unusual for wheat cut with a header or combine to be in as good show condition as that cut with a binder, but this year dozens of Oregon and Washington entries of combine and header cut Turkey red had the same rich dark color as the binder cut Montana grain. Other entries of outstanding merit were grown by T. A. Krause, Pendleton; J. B. Schwerger, La Crosse, Wash.; Tom Boylen, Echo; George Hill, Pendleton; Boylen & Smythe, Echo; Shumway & Krause, Echo, and Jess Fleming, Maupin.

In the variety special on Jenkins Club the Wheatland stock farm of Worley, Idaho, won first place. Claude Price of Weston won first on Red Chaff Club, and S. R. Thompson of Pendleton won the blue ribbon for the best entry of Forty-fold.

All premiums on Bluestem were won by farmers near Pilot Rock in Umatilla county, Mrs. Johnson taking first.

A new class in the show this year was a special premium for Willamette valley white wheat. In this class the placings were: Theo. Vanderzanden, Banks, first; Baker Cummings, Corvallis, second; and W. M. Hathorn, Laurel, third.

Barley and Oats.

The barley and oat entries this year were far superior to former years. Ed Moser of Aberdeen, Idaho, won the $25 sweepstakes on barley and Lay Brothers, Molalla, Clackamas county, won the oat sweepstakes. The entries of barley from Weston and Cabbage Mountain of Umatilla county were particularly good. Western Washington and Oregon carried off most of the oat money.

The sweepstakes money on corn went to William Brewer of Parma, Idaho, on exhibit of 10 ears of White Dent. The corn show is divided into two parts, exhibits from east of the Cascades and those from west of the Cascades.

In the eastern division Malheur county and adjacent Idaho points won all premiums with corn which would have been a credit to many shows of the corn belt.

In the western division the outstanding exhibit was as usual the exhibit of the White Dent from the Hughes family of Woodburn.

Boys' and Girls' Corn Contests.

In the boys and girls' club corn contests most of the eastern division money for Yellow Dent went to the Parker family of Parma. These boys live in Malheur county, but get their mail at Parma. In the White Dent class Volmer Hickox of Adrian, Ore., and Lee Johnson of Parma won first and second. They are both of Malheur county. In western Oregon some of the winners were R. Anderson, Central Point; George Weisner, Gervais; and Fred Herb of Banks.

The hay exhibit was small. C. S. and J. F. McNaught of Hermiston had little trouble in winning the bigger share of the alfalfa premiums, and H. G. Ziegler of Barlow won on red clover.

For the first time an intercollegiate crop judging contest was held as a part of the show. Students from O. A. C., the University of Idaho and Montana State college competed. Each school sent a team of three men. The Montana team had little difficulty in winning with a score of 4760 out of a possible 5400 points. Idaho followed with 4555 points, and Oregon was third with 4430.

The judging was done by G. R. Hyslop, professor of farm crops at O. A. C., and H. W. Hulbert of the farm crops department at the University of Idaho.

Vetch for Green Feed

The farmers of Thurston county have been growing vetch for green feed and silage crops for several years, but this year a total of 40 acres were grown for seed crops alone. Both spring and winter vetch have been grown in this district with good results, according to E. B. Stookey, the county agent.

A total of 200 acres of Rosen rye have been recorded for the last year. This crop produced better yield by 10 bushels to the acre than the common rye, which has formerly been grown in this district. The acreage of this crop for next year is expected to be much greater.

"Power at Cost"

Municipal ownership advocates are constantly asserting that a so-called privately-owned utility must operate at a profit, while a municipal or state owned utility does not need to make a profit but can sell "power at cost." A brief analysis shows how ungrounded this claim is.

Every utility, whether municipally or privately owned, must raise the money to construct its plant. Municipal corporations do this by issuing bonds. Private companies by issuing bonds and stocks. In either case the investor must receive the interest upon his money.

The operating expenses of both plants must be paid, a depreciation fund to take care of worn out equipment must be created, and a surplus maintained to take care of unusual conditions.. The state department of public works permits the privately owned company to earn its operating expenses, its depreciation, a small reserve and a fair rate of return in the form of interest and dividends upon the capital actually and honestly invested. A municipal plant must meet these same charges. It must make sufficient profit from its operation to pay its bond interest.

The rates which either plant charges must be sufficient to pay these charges and in case of a privately owned utility they are limited to doing this and no more.

It will thus be seen that both plants require the same revenue unless the municipal plant operates at a deficit and seeks to throw the burden on the tax payers of the state.

The people of this state are today getting "power at cost" —the cost of operation plus the cost of money.

Northwest Electric Light and Power Association

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Grading Counts Big in Potato Market

Pacific Northwest Potato Growers Show and Conference Give Rise to Important Points

The Pacific Northwest Potato Growers, at their annual sessions and banquet at Spokane last week, heard and discussed many interesting phases of the potato industry, reelected their president, George J. Cannon, and their secretary, E. R. Bennett, and took unto themselves a new staff of vice presidents. The nominating committee, in making its report, deemed it unwise to make changes in the principal offices at an early stage in the history of the association, but regarded a distribution of the vice presidencies over new territory as conducive to new local centers of interest in the organization.

The newly elected vice presidents are: F. W. Cater of Burley, Idaho; Thomas Herrin of Helena, Mont.; A. E. Skidmore Colville, Wash., and E. M. Alderman of Dayton, Ore., while in British Columbia C. Tice of Victoria was retained in office. The principal committees stand as organized last year.

Discussions this year were led by representatives of the grower's, the broker's, the retailer's and the scientist's standpoint.

The potato exhibit was not so extensive but of higher quality, on the whole, than that of last year, it was generally considered. H. O. Werner of the University of Nebraska judged the exhibits, assisted by Chester L. Vincent of Washington State college, F. M. Harrington of Montana State college and L. E. Longley of the University of Idaho.

Certification, strain of potato, type of seed-piece and growing environment, and their comparative importance in seed potato production, were the theme of live discussion at the first session. W. C. Edmundson, of the federal field experiment station at Greeley, Col., rolled the ball into the field, presenting results of five years' investigation in the seed potato. Strain and the knowledge of where you can get it reliably, is a factor that pays, and that you can afford to pay for, in the experience of Mr. Edmundson. It began, he said, to seem a tenable conclusion that potato strains only "run out" under unsuitable soil conditions or when affected by disease. Bin selecting of the seed and hill selecting and marking had given so little difference of result, where the seed was rogued with care in any case, as not to seem to justify the more laborious methods of selecting superior seed. Irrespective of varying methods, some growers had been able to develop highly productive and disease-free strains, roguing carefully, it goes without saying.

> The interplay of two factors was noticeable throughout the potato conference which was held in Spokane last week. There was the man and the thing, the producer and the production including the marketing of the production.
>
> Obviously the means of production and especially the means of marketing have been monopolizing attention of late.
>
> But the man, the producer himself, should never be lost sight of. F. Benz, the well-known Yakima valley potato producer and now working with the Northern Pacific railway in furthering the development of the country through which that road passes, laid stress on the man. There was considerable talk at the conference about potato seed certification. Mr. Benz declared that the man was of more importance than the documentary certification; that he would rather buy potatoes of a man whom he knew to be an intelligent, industrious and upright producer of seed, whether that man's product was certified or not, than to buy the common run of certified seed produced by a man in whom he did not have confidence.
>
> Of course, here again there might be an argument as to the man who certifies. If he knew what he was about, one might say that the producer might be left out of the question.
>
> It remains, however, that Mr. Benz struck the keynote of the problem. The man is more than his product. The man finds the means of production and the means of marketing and it is to the man that we must revert in seeking fundamentals. In cooperative marketing, however perfect the system, the man, the manager, is the important factor.
>
> Here again morals enter into the question of producing and marketing potatoes as a dominant factor. Again and again, it was brought out in the conference that the stamp of a grower, whose word was known to be as good as his bond, on a sack of potatoes facilitated the sale of that sack at a premium price. It is the man element in a cooperative association that grades and stamps the potatoes to be sold which has the same effect as the individual stamp in fact, it is the individual integrity of the cooperative management that counts.
>
> The ambitious and upright man who has learned how, through sweat of brow and brain, to economically produce quality potatoes, and who, through sweat of brow and brain, has learned how to economically market potatoes either individually or through an association, is the important factor in the potato problem.

"Irrespective of varying methods, some growers had been able to develop highly productive and disease-free strains, roguing carefully, it goes without saying.

"In other words," questioned C. L. Smith, agriculturist for the O.-W. R. & N. railway, "since you emphasize strain so highly and not the special method of growing it, beyond careful roguing, one could say that the increased yield of good strains is due to the absence of disease more than any other factor?"

"Probably that is so," was the reply. At Greeley, Mr. Edmundson said, good strains had continued to yield highly after nine years, in the case of well cared for Pearls and Rural New Yorkers, tending to refute the notion that potato strains "just naturally run out." Furthermore, even the celebrated Forbling super-strain went to naught with two years of careless growing, it was said.

"One sure way of improving the seed stock," remarked President Cannon, "is to have it understood by the grower that he will pay for it." Whereupon followed the next speaker, F. Benz, a resident of Toppenish, Wash., and agricultural agent for the Northern Pacific railway. "I would say that the selection of the grower is even more vital than selection of the seed," he declared. "In poor hands the best stock will go down." Certification had in his experience meant little to a seed potato, but very bad stock obtained under certification had been brought to standard and better under careful management. Planted alongside, uncertified stock had yielded at the same high rate, which had eventually climbed to 800 bushels per acre.

Rising in defense of certification, Mr. Edmundson quoted figures from the north Atlantic coast of yields, respectively, of certified and uncertified stock, as follows: Vermont, certified seed, 200 bushels, to 150 of uncertified; New Hampshire, certified 337 busheds, uncertified 160; New York, certified 175, uncertified 103; Pennsylvania, certified 316, uncertified 83; Maryland, certified 210, uncertified 65.

"I say, only," responded Mr. Benz, "that some certification doesn't certify. We should have to be able to certify the farmer who handled the stock just before us, and the soil conditions. The grower of certified potato seed must be on the lookout every hour, day and night, of the growing season. In the Yakima valley, at least, the potato with the best of breeding yields to environmental conditions." He hoped a day of wholly reliable verification yet would come. A critical market, he added, is to the advantage of the conscientious and careful producer, but hard upon the other type. Mr. Benz, who had just been through the east, pronounced the 1923 potato crop in Maine this year of high quality and bringing good price, while that of the middle west was extremely poor in quality and that of the west was better. The Yakima region had produced smaller yields, and on the West Side the quality was but medium and the yield less than last year, he said.

"We can grow good seed potatoes in the Yakima valley, but it demands extra work," said Mr. Benz, "so we discourage their production there, leaving it for your lighter soils and shorter season."

J. K. McCornack of Spokane, as president of the show, welcomed the growers with brief opening remarks. "The quitter is the man who loses," he declared. "Results over a number of years show at least moderate gains for the man who stays in."

R. C. McCroskey, Jr., of Garfield, Wash., a vice president of the association, pronounced the potato game, like any other, that of survival of the fittest. Bankers in the Palouse, at least, he remarked, had been perhaps, if anything, too obliging and big-hearted, not holding the producer down quite enough for his good.

H. E. Morris, a pathologist at the Bozeman station, reported on potato diseases for the Montana territory, and observed

(Continued on page nine.)

Louis J. Taber Elected Master of National Grange

Four Thousand Members Initiated in the Seventh Degree at the Big Gathering in Pittsburgh

The outstanding event at the 57th annual session of the National Grange of the Patrons of Husbandry, which opened at Pittsburgh, Pa., November 14, was the election of Louis J. Taber as national master. Sherman J. Lowell having positively declined reelection.

Mr. Taber is well known as a farm and grange leader, as master of the Ohio State grange, member of the National Wheat Price committee, president of the Ohio Home Protective league, a rural organization. He was born at Mount Pleasant, Ohio, in 1878 and was reared on a farm.

A forward movement will be inaugurated to strengthen the Patrons of Husbandry in every section of the United States, Mr. Taber, the newly elected master, declared in a statement outlining the policies of the new administration.

Mr. Taber's statement says:

"There seems to be a feeling in all sections that the hour of grange opportunity is at hand. The new administration, recognizing the strategic position in which the grange finds itself, will inaugurate a forward movement to strengthen the grange in every section of the nation. Next to grange growth it will be the purpose of the administration to broaden and extend the service that the grange can render to the American farmer. After fifty-eight years of honorable service it is believed it will be possible to rally the enthusiasm and earnest purpose of our organization to the cause of agriculture and to the service of the nation."

The other national grange officers elected were:

Overseer, John J. Black, Roslyn, Md.
Lecturer, Orlando J. Martin, Plainfield, Vt.
Steward, Herman Ihde, Nenah, Wis.
Assistant Steward, Allen B. Cook, Niantic, Conn.
Chaplain, Rev. W. W. Deal, Nampa, Idaho.
Treasurer, R. P. Robinson, Wilmington, Del.
Secretary, C. M. Freeman, Tippecanoe City, O.
Gatekeeper, J. H. Hutchinson, Brookings, S. D.
Ceres, Mrs. W. Grace Sawyer, Atkinson, N. J.
Pomona, Mrs. Isabelle C. Chapman, Westerly, R. I.
Flora, Mrs. GGeorgia Johnson, Boaz, W. Va.
Lady Assistant Steward, Mrs. Cora Agans, Three Bridges, N. J.
Member Executive Committee, Leslie R. Smith, Hadley, Mass., re-elected.
Other executive committee members are W. J. Thompson of Maine and E. A. Eckert, Illinois.

With an attendance at the opening days' sessions which reached its high point on Friday, when more than four thousand members of the grange were initiated in the seventh, or highest, degree of the secret work of the order, and the ceremonies witnessed by two or three thousand others already admitted to the Court of Demeter.

The emphasis placed at every annual session of the National Grange upon the esoteric, secret, and social features, occupying the first four days of the session, emphasize the great importance which is attached in this farmers organization to the development of the home life, the duties of citizenship, and of education, and the development of better men and better women, as superior to, and underlying the work emphasized by most other farmers' organizations, of crop, and live stock improvement, more profitable agricultural and marketing, and the making of more money.

The annual address of the national master, Sherman J. Lowell of Fredonia, N. Y., was a valedictory, as well as a discussion of both grange and national problems, as in it he announced positively that he would not accept another election as the head of the order. High points in his address were opposition to class rule, and to its development in the form of congressional blocs, in any interest, opposition to the sales tax, and the ship subsidy, a strong declaration for a "dry America" and for united effort for law enforcement, opposition to radicalism and paternalism in government, a statement that rural education was of outstanding importance, but that consolidation was a local problem, rather than a state or national one, and an urgent appeal for more active and devoted work in organization and extension by those responsible in the order for these activities.

The organization of over 800 new granges in his term of four years, and the organization of 145 granges, and a fine growth in membership, was noted, along with a note of regret that the rate of growth which has been found in the three previous years had not continued during the past year.

"Pay-as-you-go" was stressed as the only safe method of state and federal financing, especially as to highway construction, and the message took strong ground in opposition to increasing costs of government, and the burden it has imposed on agriculture in the form of state and local taxes.

The Pennsylvania State grange gave a banquet Wednesday evening in honor of the National grange, with 1100 seated. Governor Pinchot of Pennsylvania was chief speaker.

The sixth degree, preparatory to the big seventh degree class, was conferred by the Pennsylvania State grange, Wednesday afternoon. Secretary of Agriculture Henry C. Wallace spoke to about 6000 at the opening of the big public meeting Wednesday evening.

The National Grange has continued to flourish because it has kept constantly in mind the thought of the farm as home. President Coolidge declared in a message read by Secretary of Agriculture Wallace before the National Grange.

The president in his message, characterized the grange as "one farm organization which has survived through many periods of adversity and prosperity," he continued:

"It seems to me that one of the reasons why the grange has continued to flourish is that it has kept constantly in mind the thought of the farm as a home and is represented in its membership by the various members of that home. It has recognized the need of a full home life and a wholesome rural life and has never failed to present these as things most to be desired. At the same time it has recognized the fact that a satisfactory home life and rural life must be based upon reasonable reward for labor on the farm.

"The progressive conservatism of the

(Continued on page twelve.)

First Chapter Next Week

Our New Serial Story Contains About All the Elements We Like—Adventure, Love, Heroism, Nature, Mystery

We have all heard about trackless woods, but every woodsman knows that woods are not trackless. Jack Warhope was a true son of nature. He knew the trees, the birds, the wild life and things under foot with unerring accuracy. And the way he read the signs of the Flatwoods and acted upon what they revealed to him makes our new story, "The Red Lock," one of the most gripping that we have been able to offer our readers. There are bad men in the story, and we do not exactly like them, but the sterling manhood and the ability of Jack Warhope to defeat their wicked purpose will make every boy that reads this story resolve to do big, worth-while things, to be a man.

It is not possible to hint the theme or outline of this story without disclosing that surprising thing which David Anderson, the author, has held back, not only from the reader, but from the actors in his drama as well.

But as in "The Blue Goon," Mr. Anderson has gone again to his native soil, the Flatwoods, for his romance. He has portrayed again the men and women he knows as a doctor knows his patients; he has once more painted the Wabash scenery with a brush of many colors, and has told as before a neighborhood drama of violent action and elemental emotions.

"The Red Lock" is a most unusual story and the first chapters will appear in THE FARMER next week, December 6. We urge every member of our big family to begin this story at the very outset. Don't depend upon a synopsis later on, for no synopsis can lay the foundation for the remarkable developments of "The Red Lock" as does the author in his own inimitable style.

Next week!

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Growth of Pacific Trade

Back in the year 1850, Asia was selling the United States about one-eleventh of the amount of merchandise we bought in Europe. In the year ended with June, 1920, Asia sold us actually more merchandise than did Europe. In the two immediately preceding years we had imported from Asia more than twice what Europe sent us. Those two last-mentioned years, when Asia doubled Europe's shipments to us, were admittedly abnormal years. But again, as late as the year ended with June, 1922, Oceania and Asia together sold us more than did Europe. In the calendar year 1921 all Europe and Africa sold us less goods than Oceania, Asia and South America, and in the calendar year 1922 the latter group sent more of our imports, by $217,500,000, than did Europe and Africa.

What does this mean to America? Just that we have begun—barely begun—to feel the tremendous thing we did to the world when we cut the mighty gateway at Panama. Long-established coastwise routes of trade are slow to yield to more direct new routes that involve new-sought markets. But, slowly, new trade relations will come, as attests this growth of our imports from Pacific and west Atlantic waters over those from east Atlantic waters.

During that year ended in June, 1920, Japan, alone, sold us more goods than did the United Kingdom; in the calendar year 1921 she again sent us more than, and in 1922 very nearly, the amount we purchased in the United Kingdom. In the year ended with June, 1921, Brazil, alone, sold us almost as much as did France, and in the preceding year half again as much as France had sent; in the fiscal years 1921 and 1922 Brazil sent us more goods than we bought of Germany; Chile, more goods than we bought in The Netherlands; Colombia, more than we bought in Switzerland; Australia, more than we imported from Norway or Sweden. The Philippines sent us, from mid-1920 to mid-1921, more than did Germany. The smallest republic in South America—Uruguay—sent us, between mid-1920 and mid-1921, more merchandise than did Denmark, and in the preceding year nearly four times as much as Denmark did. Moreover, these southern and oriental markets are opening markets, capable of indefinitely greater production. Uruguay has nearly five times the area of Denmark.

Yet there are thousands of people in the United States today who are not aware that the relative commercial weight of our Atlantic and Pacific seaports has been shifting a bit.

Our export trade is still a somewhat different story, to be sure. But with daily growing communications with the southern continent and the orient, both developing industrially very fast, is bound to come heavy demand for our iron and steel goods—already our second largest export product—and, with that demand, new payrolls, new consuming power, at home.

One Reason Why the Freight Rates Are High

Sherman J. Lowell, master of the national grange, went to the heart of one big farm problem when he told the delegates at the annual convention at Pittsburgh last week that "there is a wide demand for lower freight rates on the railroads and, without question, the heaviest tax the farmers of this country are paying is through the medium of high freight rates."

That tax is especially heavy on the farm producers of the Pacific coast and mountain states, for their surplus products must be carried long distances to the eastern markets.

The railroads of the United States are doing a record-breaking business. Since July 14 last their loadings of revenue freight have averaged more than 1,000,000 cars a week. The Chicago, Milwaukee & St. Paul, one of the transcontinental lines serving the Pacific northwest, carried more freight in October than ever before in its history.

But this enormous volume of business is not bringing the large profits to the American railroads that would naturally be expected. There have even been rumors on Wall street of the Chicago, Milwaukee & St. Paul's going into the hands of a receiver. These rumors were emphatically denied by the president of the company, but it is significant that there is even talk of the bankruptcy of a road that is doing the greatest business in its history.

Why are so many railroads squeezing along with lean profits, when freight rates are high and business is booming? The answer is that they are weighted down by the high cost of doing business, just as the wheat-growers and some other farmers are suffering from the high cost of production. The wages of railway employees are high and going higher; prices of coal, locomotives, cars and all supplies are higher than ever. Then, the railroads, like the farmers and all the rest of us, have to pay high taxes.

But the biggest item on the railroads' expense account is the labor bill, and there is no prospect of its coming down. The railway employees are too well organized, too strongly entrenched, and the railway managers, rather than take a chance on a nationwide strike and paralysis of the industries of the country, prefer the alternative of keeping up their revenues by keeping up freight rates.

So, in the last instance, farmers and other producers and consumers are paying the big wage scales of the railroads and their big tax bills. In the end it all comes out of the producers and consumers.

Ownership and Tenancy

Of the Washington farm acreage operated by white farmers 82 per cent in 1920 was under owners' or managers' operation and 18 per cent under tenant operation.

Of the state's farm lands under other than white occupancy 41.5 per cent were under owners' or managers' operation and 58.5 per cent under tenants.

In Washington the average size of the farms under operation by the owner is 175 acres; of farms operated through a management 463 acres, and of tenanted farms 277. The owner-operator averages 86 acres of improved land; the manager, 219.5; the tenant, 188.7.

On the average, in this state, 48.9 per cent of the farms operated by the farm-owner is improved acreage; 47.4 per cent of the acreage operated through a farm-manager, and 68 per cent of the acreage under tenancy. The latter farm is perhaps the more frequently longest developed, having passed to tenancy from a retired farmer.

Size of Washington's Farms

There was a gain in the total acreage of lands in farms in Washington in the last census decade, and a lesser gain in the percentage of improved farm land. The lag in the percentage improved was on the farms under operation by white farmers, for in the improved acreage occupied by other than white farmers there was a gain of over a third, while their total occupied acreage increased less than 1 per cent.

Washington State Gleanings

The Northwest Hay association of Yakima has received orders to ship by ocean freight 200 tons of alfalfa via Seattle to Jersey City and Brooklyn. This will be shipped by boat from Seattle and is considered by Lee M. Lampson, manager for the association, as opening up a new market for valley hay, even when charges of $12.20 a ton are added to the price.

BUYS PUREBRED SHEEP.

E. H. Kimble of Pomeroy bought at Washington State college 50 purebred Hampshire ewes and a ram 7 months old that weighs 168 pounds. Mr. Kimble will range these sheep and expects to increase the number to 500. He says they are valuable for destroying weeds.

FARMERS ORDER CAR OF SODATOL.

County Agent E. E. Hupp reports that tentative orders for one carload of the war salvage explosive, sodatol, have been received from 44 Pend Oreille county farmers. Mr. Hupp believes that local farmers will use three small carloads of the explosive by spring. The orders are being booked at $7.50 a hundred pounds, Newport.

CUTTING CHRISTMAS TREES.

That the sentimental admonition, "Woodman, spare that tree," will be rigidly enforced in so far as it applies to the indiscriminate cutting of Christmas trees in this state, is being brought to the minds of professional cutters through circular letters being sent out by Supervisor of Forestry Fred E. Pape of Olympia.

They are being reminded that the last legislative session passed an act requiring all persons to secure the permission of the owners, in the case of privately-owned land, before any trees are taken for decorative purposes. Cutting will not be allowed on state land.

CLUB BOYS DO GOOD WORK.

Among those from Washington well pleased with the showing of their boys' and girls' club charges at the big show was E. O. Scott, club leader in Yakima county. In addition to the county judging team ranking high in the contest, live stock of various kinds owned by Yakima "club kids" won in several classes. Chester Schlien of Mabton won first on junior Guernsey calf, Gerald Varnum and Harold Holmes of Mabton first and second, respectively, on beef type heifer, Harvey Varnum fourth in a class of fat steers, and Keith Jones seventh in two classes. George King of Mabton won fourth in a boar and third in a sow class of Poland Chinas, and Joseph C. Lumpkin of Cowiche won second prize of $30 for the eastern Washington district in the Portland Union Stock Yards company special feeding contest.

MANY ATTEND AUCTION SALE.

One of the most successful sales ever held in the Big Bend took place November 12, when G. M. Witt, pioneer farmer, ended his wheat farming operations at an auction on the Ochs place, four miles south of Mohler.

Between 300 and 400 automobiles were counted and, although Mr. Witt had prepared lunch for 1000 persons, he ran short of food. People were in attendance from all parts of the Big Bend, Walla Walla, Spokane, Rathdrum and other points.

Fifty horses were sold, the top price being $470 for a team. Two harvesters brought $1250 and $1400 each. Bidding was spirited and everything sold well. Mr. Witt was well pleased. This farm outfit was used in farming 2800 acres, from which Mr. Witt harvested 50,000 bushels of wheat this year.

HUGE WHEAT CROP RAISED.

Wheat receipts at warehouses of the Davenport district up to November 17 totaled 1,000,000 bushels, according to reports of local grain dealers. This total includes wheat received at Davenport, Rocklyn and the Seattle branch lines stations, all of which is handled through Davenport.

Grain dealers estimate that three-fourths of the 1923 crop has been hauled to warehouses and that Davenport receipts will be more than 1,000,000 bushels. Of the amount received, approximately 800,000 bushels are stored.

J. A. Richardson, Northern Pacific railroad agent at Davenport, reports that 320 cars of wheat have been shipped from the district this year, or approximately 416,000 bushels. There were 147 cars shipped from Davenport, 134 from the Seattle branch and 39 from Rocklyn.

Wheat men say this year's crop is from two to two and a half times larger than last year's. They estimate that the 1923 crop will exceed any ever raised in the county.

BOY IS PRIZE PIG RAISER.

Robert Zindell, son of Mr. and Mrs. W. H. Zindell, Finley, Benton county, has been declared the champion pig raiser of the state and awarded the Armour & Co. prize, which entitles him to a trip, with all expenses paid, to the second annual boys and girls' club camp at Chicago December 7 to 8. Announcement of the award was received in a letter from Elmina White, assistant state club leader, to Miss Gertrude Gage, Benton county club leader.

The pig club, of which the boy is chairman, has continued its activities without cessation since its organization. The youth has gone about raising pigs in a business-like manner and his enthusiasm has sustained the interest of other members of the club.

In the competition for the Armour prize the boy submitted a complete cost record from the time he purchased his first pig. He has raised only purebred Poland Chinas and every transaction has shown a profit.

JOINS ENGINEERING DEPARTMENT.

Mayor W. L. Malone, formerly of Spokane and a graduate of the Washington State college in 1907, has been appointed to assist in the civil engineering department at Pullman. He will teach work in reenforced concrete, applied mechanics and plane surveying.

Major Malone was with the Spokane bridge department engineer's office and for a year was in charge of the department. From 1912 until 1914 he was superintendent for the Bates & Rogers Construction company, Chicago, in construction of tunnel linings, snowsheds and bridge foundations.

During the three years following Major Malone was in private practice at Spokane and then joined the army, becoming superintendent of construction at Camp Grant, Rockford, Ill. In 1918 he was commissioned a major and was stationed at Washington, D. C., as supervising construction quartermaster in charge of interior warehouse construction involving the expenditure of $35,000,000 and cantonment construction, for which $25,000,000 were expended.

Stick to Reclamation

Western States Association Still Calls for $250,000,000

Avoiding any expression of approval of the Smith-McNary bill, or any other specific measure, the Western States Reclamation association, at its meeting in Salt Lake City last week, adopted a resolution that congress "be requested to appropriate $250,000,000 or more for expenditure under the reclamation law as promptly as such money can be wisely expended. This was a reaffirmation of the resolution adopted by the association in 1919.

The Western States Reclamation association was made up of men appointed by governors of 11 far western states who understand irrigation and know its benefits.

The convention elected R. E. Shepard of Jerome, Idaho, as president. Mr. Shepard is a practical irrigationist of long experience and a successful business man.

The association took a firm stand against the agitation in some project communities for a further extension of 40 years of the period within which settlers should be required to make their contract payments to the government. Speaker after speaker at the convention declared himself and his state against any semblance of repudiation.

Farm Implements and Buildings

In the Pacific coast states, Washington, Oregon and California, taken together, implements and machinery on the farm average a value of $4.52 per farm acre on land operated by the owner, as against $4.01 per acre on land operated by a tenant, and but $2.33 on land under a manager.

Buildings, where the owner operates, have a worth of $10.36 to the acre, as against $6.61 under tenancy. But live stock is worth slightly more to the acre on the tenant's farm at $7.43, as against $7.34 on the owner's and but $6.19 on farms under a manager.

Owner and Tenant

Resident ownership in the United States remains highest in proportion to farm acreage, and to number of farms as well, in the state of Maine, where 94 per cent of the number of farms, or 93.7 per cent of the improved farm land, is operated by the owners. At the other extreme stands Georgia, where owners operate but 32.9 per cent of the number of farms, or 39.1 per cent of the improved farm acreage.

Operation through managers is at its highest proportion to number of farms in Nevada, Massachusetts and Rhode Island; but in Nevada, Arizona and California, as regards the total improved acreage, while Florida, instead of California, has the third largest proportion of all her farm lands under managership. One-third of all Nevada's farm lands are operated through a managership.

Tenant operation is at its highest rate of prevalence in Georgia and Mississippi, as regards number of farms; in Georgia and South Carolina, as regards improved acreage; in Delaware, Illinois and Georgia, as regards total acreage in farms.

Per Acre Value of Farms

The United States census shows that the average per acre value of farms under 20 acres in size is $282.31 per acre, while the average value of farms of between 500 and 999 acres in size is $54.80 per acre, and of farms of over 1000 acres, $25.37 per acre.

Between these extremes the value varies somewhat irregularly, in the averages, inversely with the size of the property.

In Washington and Idaho the average farm is of 199 acres, with 107.4 acres improved; in Oregon farms average 270 acres, with 98 acres improved; in Montana 608 acres, with 191 improved.

SPELLING EFFICIENCY.

Ohio Farmer: Last winter we attended a farmers' institute in northern Ohio where there were fully 200 in attendance, a large portion of them high school students, and a list of 50 farm words was given in a spelling contest. All but four were of quite common usage on the average farm. Yet of that list the best speller in the room missed 16 words—68 per cent efficiency.

COMMODITY MARKETING.

St. Paul Farmer: Minnesota farmers will serve their own best interests by quickly putting over the potato marketing organization. Once that is accomplished, our first experiment in the plan of commodity marketing organizations as applied to general crops will be under way.

What the Lord Requires

To Do Justice and to Love Mercy and to Walk Humbly

He hath showed thee, O man, what is good; and what doth the Lord require of thee but to do justly and to love mercy and to walk humbly with thy God?—Micah, 6:8.

The foregoing is the verse which the late Warren G. Harding kissed in the formalities of taking the oath of office as president of the United States. It is a wonderful "constitution" of religion.

People are not able to agree on all the fine points that enter into religious forms. But here are things that we can all agree upon.

Do justly. Injustice finds no favor with a just god.

Love mercy. Loving kindness is one of the basic attributes of God as the Christian world understands him. "The mercies of the Lord endureth forever," said the psalmist. God has no mansion reserved for the unmerciful man.

Walk humbly. Humility is fundamental. It was an outstanding element in the character of the man of Galilee. Pride is the twin of selfishness and selfishness is the millstone about the neck of mankind. Humility evidences the absence of selfishness and the presence of a willingness to serve God through service to one's fellow men.

It is well that theologians should search for all the facts about God. But he who is content to do justly, to love mercy and to walk humbly is far along the pathway toward a knowledge of him whom to know "is life eternal."

USE OF SKIM MILK.

Orange Judd Farmer: A new idea has been brought out by E. V. McCollom, one of the most prominent educators who has conducted researches on vitamines in food. In a speech before the American Bakers' association recently McCollom suggested to them that in order to make a loaf of white bread, so popular in America, more nearly a balanced food they ought to use skimmed milk in it. This would not only make better bread, but would develop a tremendous outlet for skimmed milk. Some of the bakers are already making use of milk and find it one of their strong selling points. It will be better for everybody when all make it a part of their regular formula.

FARM BUSINESS AND MARKETS OUTLOOK

INDUSTRIAL production is not on a depression level," is the negative way of saying that in spite of moderate contraction in operation in the last seven months industrial output remains relatively high compared with anything but boom times. In some directions men are being dropped from payrolls, but increases are being made elsewhere and there are few out of work except the usual floaters. Public consuming capacity is but little impaired. No feverish buying is taking place to anticipate price advances but the movement of goods from retailers' shelves for immediate use is well maintained. Car loadings in the week ending November 3 passed the million car level for the 20th time this year, an unprecedented occurrence. This is an index of current distribution of goods.

Business developments last week mostly favored the view that expansion will be resumed in the early future rather than that further contraction will take place.

Foreign political conditions have been changing for the worse apparently, hence the extreme weakness in European exchanges, with sterling down to the lowest point since early in 1922 and francs the lowest on record. Crisis after crisis in foreign affairs has been passed in the last year, so that this one is not yet regarded with extreme concern.

Cattle Receipts Shrinking.

Receipts of cattle have started a seasonal decline in numbers, but are heavy still and the falling off has been chiefly in westerns and undesirable natives. Well-finished yearlings and handyweights were in stout demand at Chicago last week and values moved up 25 to 40 cents to the highest point in a month, reaching a top of $12.65. Big steers on the short-fed order are still mean sellers at no better prices than a week ago. Western she stock was abundant and sold at the lowest level since prewar days. It is probably a case of a "last run of shad," these cows indicating that liquidation of the range industry, which started in 1919, is going through its last gasp. A weak hide market is a contributing factor in low prices. Calves suffered another decline, but are probably close to a stable winter level. Heavy calves will be less numerous inside of 30 days.

The rush to dispose of short-feds means that a sizable fraction of the potential supply for the next three months has already gone to the shambles. The movement from the leading stockyards to the country during the last two months has fallen slightly behind that of last year, which is another symptom of a fairly healthy market later on. It is quite possible that quotations on mature steers will gain on yearlings, as the visible supply to the farmer undoubtedly is reducing rapidly and the country is partial to lightweights in its current purchases of feeders. Westerns will probably improve slightly in price as they decline in numbers.

Sharp Rally in Hogs.

Heavy receipts, a weak fresh pork market, low prices at eastern ponts and a deluge of light hogs and pigs, which make numbers look extremely high without contributing proportionately to the supply of pork and lard, caused a sharp break in the hog market early last week. Prices reached the low point of last June, but an equally sharp rally has occurred in the last few days, when the supply became lighter and shipping orders larger. The action of the market is quite encouraging, indicating that all buyers want hogs below $7 at Chicago and that prices probably are near bottom for the season, if indeed the low point has not already been passed in the break of last week.

Disease outbreaks as well as discouragement with prices are playing a part in the flood of light hogs. The department of agriculture reports that cholera is becoming more prevalent this fall than in any year since the decline of the last extensive outbreak, which reached its height in the fall of 1914. The disease is reported in communities which have been free from it for 25 years.

Receipts of hogs at the leading markets in the last two and a half months have been so much heavier than at the corresponding time a year ago that a large part of the increase in stocks of hogs on farms may have already gone to market. In the next three or four weeks it would be no surprise to find the supply begin to run at about the same level as last year instead of far above that level, as it has done, throughout the year. This is especially true if cholera losses are severe.

In spite of the high rate of slaughter, hog product is going promptly into distributing channels. Stocks of both hog meats and lard at Chicago declined during the first half of November and lard holdings are extremely low. Packing sows are becoming more popular because of their lard-yielding capacity. Clearances for export continue on a fairly generous scale.

Lamb Market Disappointing.

Under the lightest receipts of lambs with one exception since last June prices advanced, but a larger run was attracted and values were swatted immediately. Dressed lamb prices are depressed by the abundance of cheap pork loins, veal and poultry and have not responded to the lighter run, although the decline in the latter is due primarily to fewer range lambs, most of which at this season are in feeder flesh. Fed lambs are coming back and show a profit where well finished, but many in amateur hands must make a second trip to the country for another course at the feed bunk and are bringing less than first cost. Demand for thin lambs has fallen off decisively, especially in the corn belt, but Colorado is still in the filling-up process.

Wool Market Stronger.

The wool market has been steadily strengthening during the last month, especially in the last two weeks, in which time clothing wools have advanced about 10 per cent.

Weak Tone in Wheat.

Wheat prices have changed but little in the last 10 days, but the undertone is weak. The large volume in commercial channels compared with the current demand from mills and for export makes the burden increasingly difficult to carry. That some form of governmental help may be extended looms up in the background as a sentimental influence, but it is gradually losing its effect. The possibility of overexporting from east of the Rockies is not forgotten, but it has been talked of so much that the old rule that "what everybody expects doesn't happen" may apply.

The visible supply of wheat at terminal points now stands at 73,379,000 bushels, an amount exceeded only in 1918 and 1919, when a fixed price removed any incentive for holding on the farm and more than twice as much as last year. In addition, more Canadian wheat is being held in bond in this country than last year and some Canadian wheat is being bought by mills, despite the 30-cent duty. Mills also are picking up the choice domestic wheat, but are said to be fairly well supplied. Flour production is lower than usual at this season of the year and the demand is dull, although consumers are believed to be carrying less than normal stocks.

Counting shipments from exporting countries since August 1 and changes in amounts on ocean passage, disappearance of export wheat in importing countries has been about 187,000,000 bushels, compared with 200,000,000 bushels last year and 221,000,000 bushels two years ago. The United States has exported about 35,000,000 bushels less and Canada 12,000,000 bushels less than last year, but exports from Argentina, Australia, India, Russia and the Danube have been larger in the last three months than in the same period last year. Canadian clearances will fall off to some extent when lake navigation closes early next month and the movement will be limited by the amount which can be shipped overland from western Canada during the winter and by the accumulations at Montreal. This may throw a little more of the export trade upon the United States until next March, when wheat from the new crops now making favorable progress in Argentina and Australia can reach Europe.

Corn Movement Increasing.

Primary receipts of corn have increased slightly and country offerings have expanded a great deal in the last few days. Cash prices have declined, low prices for hogs exerting a sympathetic influence.

Receipts of oats have become quite small; the visible supply is beginning to shrink, and farm consumption has been stimulated by low prices compared with corn, so that the market displays stability.

Rye is fluctuating within narrow limits with wheat. Export sales of rye flour increased last week. A better export outlet is the chief need of the rye market. The visible supply is 17,452,000 bushels, against 9,194,000 bushels last year.

Cash Grain Markets.

The range of cash grain prices for the week ended November 21 was as follows:

Chicago—Wheat—No. 2 hard, $1.04@1.04 1-2. Corn—No. 4 mixed, 78@@81c; No. 5, 75@77c; No. 2 yellow, 88@98c; No. 3 82 1-2@88c; No. 4, 77@84c; No. 4, white, 77@82 1-2c; No. 5, 74@79c. Oats—No. 2 white, 43@44 1-2c; No. 3, 42@44c. Rye—70@71 1-2c. Barley—53@72c.

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Water vs. Food Plants and Food Production

By E. C. McCLELLAN

Ever since the western part of the United States came into the Union and irrigation commenced attempts have been made to arrive at some kind of an understanding regarding the quantity of water that should be used to secure the best returns from the limited water supply available.

Utah was the first state that started a comprehensive system of experiments to enable any kind of a determination, and its example has been followed by the other states in the semi-arid regions.

Unfortunately the men who were honestly endeavoring to reach a right determination of what should be done had been raised and educated in places where irrigation was an unknown factor in crop production, and went upon the theory that what they wanted to find out was the amount in bushels or tons or pounds of plant crops that could be secured from a certain area of land, and it did not seem to occur to them that the problem requiring a solution was the amount of food products that could be secured with a certain quantity of water available.

Realizing that plants had to receive a greater quantity of water than was being supplied by precipitation, their experiments were carried on upon the theory that land measurement must be the basis for their calculations and that if a little water was good, more must be better, and tried to find out how much in bulk crops could be secured per acre of land by placing different quantities of water upon a certain area of land.

Another mistake was made in selecting for their experiments a location where the precipitation and water supply for irrigation was the greatest, and then with this greatest precipitation in that section adding to it the increasing applications of water by irrigation, and in most cases making the smallest irrigation supply bring up the total water supply in the ground to a greater quantity than the plants have been receiving at this period by precipitation, and had adapted their growth and food production to that smaller supply.

The reports of the results of these experiments are very interesting, however, and show graphically the evolution of the plants for quite a period back—measured by millions of years without doubt.

The accompanying diagram illustrates the plant life as measured by water supply for five of our principal food plants.

In the diagram given herewith the right-hand side represents a depth of 10 inches of water supply—as that is about the average quantity of water supplied by precipitation in our semi-arid sections—and the left-hand side represents a depth of 80 inches.

The first diagram at the top shows the results of three experiments in raising alfalfa by applying different quantities of water upon several different tracts of land.

The circles are at the points showing the quantities of water each tract of land received during the time the experiments were carried on, as measured from right to left, and also the average number of tons of hay per acre of land cut from each tract annually.

The average annual precipitation during the 10 years the experiments were carried on in Utah was 15.48 inches in depth, and the circles marked with the figure "1" shows the depth in inches of water each tract received and tons of hay cut.

At the left the quality of water received by the tract was 65.48 inches in depth and the return in tons of hay 5.41 tons per acre of land.

The next tract received 45.48 inches in depth and the returns were 4.42 tons per acre of land.

The next received a less quantity of water and returned a greater amount of hay, the records showing 40.48 inches of water in depth and 4.68 tons of hay per acre of land.

The next shows a decrease in both water supply and hay cut—being 35.48 inches in depth of water and 4.55 tons of hay per acre of land.

The next one shows a remarkable drop in crop return, with only a slight decrease in water supply, the water supply of 30.48 inches depth only securing a return of 3.77 tons of hay per acre of land.

The next surprise is shown in the next tract, where a supply of 25.48 inches in depth of water returned 4.94 tons of hay per acre of land.

The next decrease in water supply gives a further great reduction of 3.59 tons of hay per acre of land for 20.48 inches of water.

The last is the amount of 2.74 tons per acre of land with the natural supply of water furnished by precipitation.

Now, if these results were of only one set of experiments carried on in one year, the crop returns could be considered as not worth anything, for the variation is so remarkable and so different from the general idea (that if a little water is good, more must be better) they could be relegated to the waste basket; but when it is considered that they are the results of seven years' careful experiment, placing the same quantity of water each year upon the same tract of land for seven years, the results prove that the plants have been growing along some definite line of evolution that they were living under at some stage in their life as measured by the water supply furnished them.

This set of experiments might also be looked upon as nothing more than interesting had not others in similar experiments along the same line brought out the same facts.

In 1903 Professor Fortier carried along experiments in Montana in the same way, and his results are shown by the circles and lines marked "2." Climatic conditions being different from that in Utah and the natural precipitation supply also less, the returns in tons of hay per acre of land were a trifle different, but the total shows the same result in the line of plant growth.

The precipitation was 14 inches in depth. A total of 38 inches in depth of water returned 6.4 tons per acre (far above the Utah returns for a greater water supply).

A reduction of only six inches irrigation (32 inches of water) gave a return of only 3.5 tons of alfalfa hay per acre of land.

A further reduction of six inches—or a total of 26 inches in depth of water— and the returns increased to 4.4 tons of hay per acre of land.

Another six-inch reduction—or total of 20 inches in depth—and the returns are still greater—or 4.5 tons per acre of land.

With the natural water supply by precipitation of 14 inches, the return was 1.9 tons of alfalfa per acre of land.

Note the closeness of this one year's experiment with the lines shown in the Utah seven years' experiments.

Ten years afterward (in 1913) another set of experiments were carried on in Montana. In this case instead of taking one set of tracts for the experiments, 15 tracts were selected, within reasonable distance of each other, varying in size from one acre to 8.50 acres in area and covering a total area of 79.4 acres.

The irrigation was carried on by the farmers—the only difference being that a man kept the measurements of the quantities of water used in each irrigation—and at the end of the season the total quantity of water used upon each tract was added together, the number of tons in each tract measured, and the average number of tons per acre calculated.

From the published report of this set of experiments the results are shown by the circles connected by dotted lines and marked with the figure "3."

A water supply of 48.08 inches in depth resulted in a crop return of5.00 tons per acre per acre of land.

A water supply of 40.04 inches in depth resulted in a crop return fo 5.00 tons per acre of land.

A water supply of 30.17 inches in depth resulted in a crop return of 3.68 tons of alfalfa per acre of land.

A water supply of 26 inches in depth resulted in a crop return of 4.50 tons of alfalfa per acre of land.

Unfortunateiy, no report of the crop return per acre was published when the natural precipitation alone was used.

Now look at that diagram and you have a pretty accurate history of the evolution of that one plant from some remote period in the past to the present time in its relation to the water supply furnished it.

Remember that all plants originally lived in water for millions of years and then migrated to the land after many of the elements they required for their food had left the water and the air and located in the ground.

At that remote period, and for a long time after they migrated to the land the water supply was so great that it was an easy matter for them to secure it, and very likely their methods were very simple for doing it—by opening their mouths and drinking in all they wanted when they wanted it—and as it was the substance of greatest supply they used the water principally in their structural growth, and are doing it today.

Then after they had migrated to land the water supply by precipitation kept getting less and less, and, of course, their size dwindled also.

This decreased water supply and decreased structural growth continued until the time came when the water as it fell to the ground and entered down into it, instead of remaining there in its liquid form, changed to a vapor and mixed with the air there—exactly as it does when it is evaporated above the ground and mixes in the air above.

When that period arrived the plant not only reached the period of its smallest size, but was forced to invent some way to secure the water in its new form instead of by drinking it.

Apparently the alfalfa plant evolved some method for securing water as a liquid when it was getting scarce, but still remaining a liquid, and responded to this method by an increase in its size; and then the water supply continuing to decrease it had another fall in size to its smallest. Then it either invented another method or perfected the one it was using and the result is shown in the second raise.

Just compare the three sets of experiments as shown upon this diagram and see how closely they coincide in crops returned with equal quantities of water supply.

The next set of lines in the diagram shows the results of four sets of experiments with potatoes carried on in different sections and at different times.

Those in Utah lead in length of time the experiments were carried on and also in quantities of water used and number of tracts used for the experiments.

They are shown by the figures "1" at the circles and lines connecting the circles.

With the greatest quantity of water supply, of an average of 75.48 inches in depth annually the average return was 233.76 bushels of potatoes per acre of land.

This amount decreased with the water supply down to 45.48 inches in depth of water, returning 194.73 bushels per acre of land.

Then came the increase following a decreased water supply, 35.48 inches in depth, returning 215.23 bushels per acre of land.

After that increased peak in plant growth the return gradually goes down to a yield of 97 bushels per acre of land with the natural precipitation of 15.48 inches in depth.

In the case of the two years' experiment in Idaho the greatest water supply, of 39.12 inches in depth, resulted in a return of 241 bushels of potatoes per acre of land.

A supply of 32.15 inches brought only 215 bushels per acre of land.

A further reduction down to 30.84 inches of water supply, and the return increased up to 241 bushels per acre of land—being exactly the same as with the 8.28 inches greater water supply.

With 26.37 inches of water supply the returns were 155 bushels per acre of land and the natural precipitation of 9.73 inches returned 94 bushels per acre of land.

In the four years' experiment (shown by circles marked with the figure "3") a water supply of 43.70 inches in depth returned 223 bushels of potatoes per acre of land; a reduction to 30.42 inches of water supply furnished an increase in the crop of 226 bushels per acre of land; while a further reduction to 17.93 inches in depth of water supply resulted in a return of 105 bushels per acre of land.

The Montana experiment shows a radical difference from the others, but having been carried on by a man noted for his ability in such work should not be overlooked. That is shown by the circles and dotted lines marked by the figure "4."

The crop production is the lowest with the greatest water supply furnished, exactly as in case of all the others, being 145 bushels of potatoes per acre of land with a water supply of 44 inches in depth, and again greater when the water supply decreases to the same quantity that was secured by other cases, at about 32 inches in depth; and then decreasing again to a return of 162.50 bushels at a water supply of 26 inches in depth.

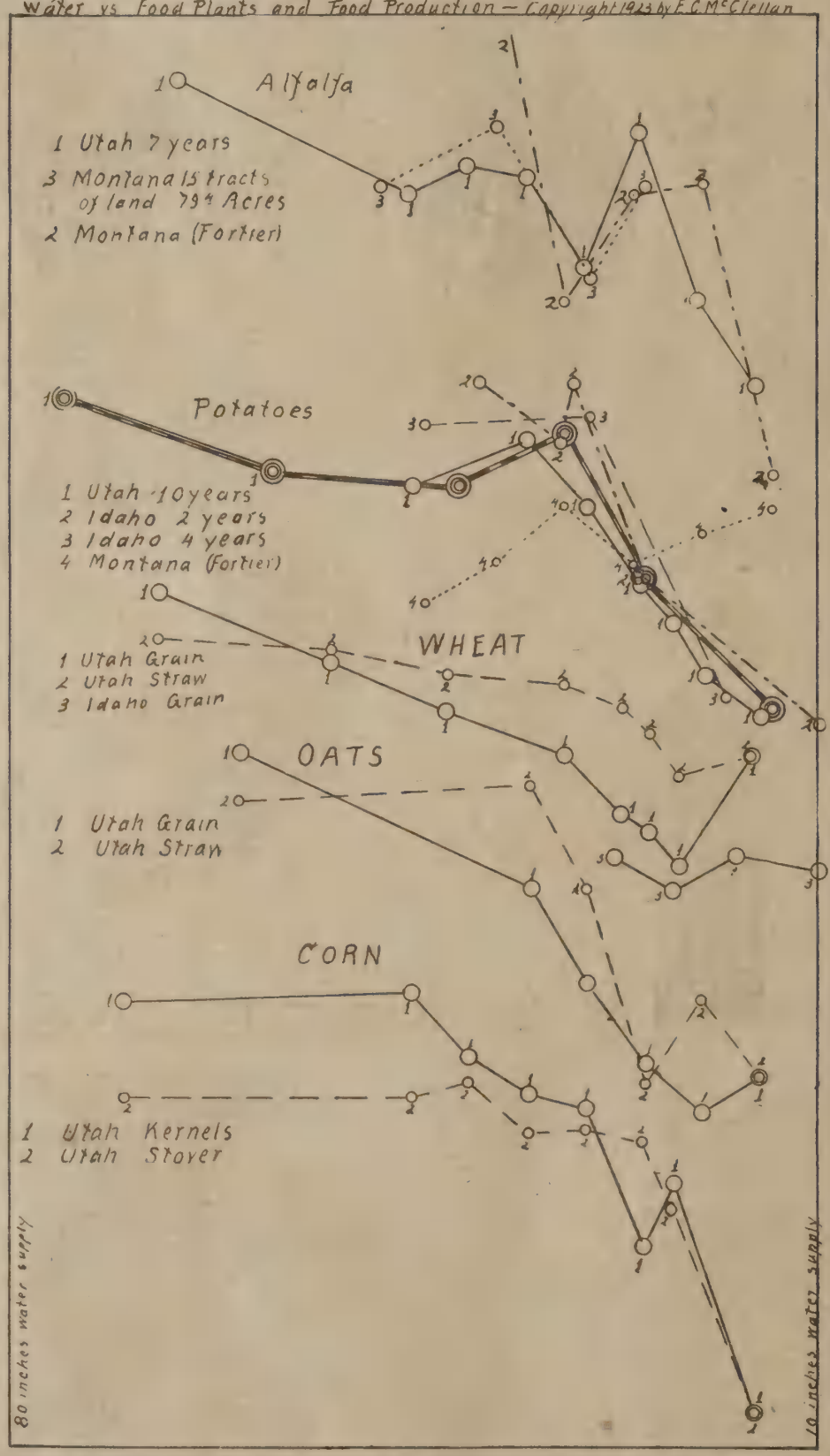
From that point there is a great departure from the other experiments, there being another increase in returns as the water supply decreases until at the natural precipitation of 14 inches in depth, the return of 186.00 bushels of potatoes per acre is almost as much as at the highest peak in production, where the 32 inches water supply secured 187.50 bushels of potatoes per acre of land.

A close examination of these results shows the same remarkable curve in the life of the plant as in case of the alfalfa plant—there being only two minor differences.

The first difference is that, while the alfalfa plant had two revivals in its growth while the water supply was decreasing, the potato plant had only one.

The next is that, while the alfalfa plant reached its second peak in size when the water supply it was receiving by precipitation was between 20 and 25 inches in

(Continued on page twelve.)



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Same quality for children furnished in sizes 2 to 6 years. **Order navy by No. 52E7458. Brown by No. 52E7460. Send no money. Pay $3.48 and postage on arrival for either color. State size.**

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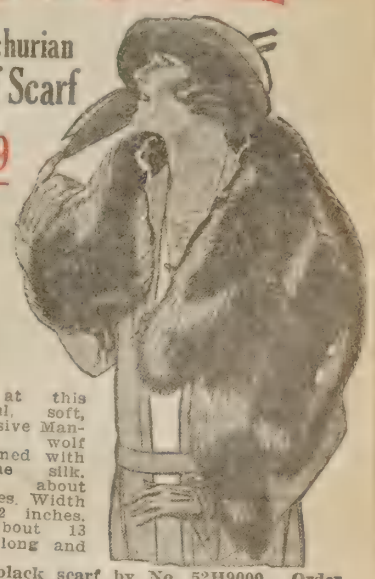

Look at this beautiful, soft, inexpensive Manchurian wolf scarf lined with messaline silk. Length about 44 inches. Width about 12 inches. Tail about 13 inches long and bushy.
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Another sensational value in a warm winter coat. This becoming model is of splendid Thibet cloth in choice of rich brown or navy blue. The ample collar is of genuine brown Coney fur. Coat is finished with all-around self material belt and two patch pockets, trimmed with pretty buttons. Imitation cuff is also button trimmed. Coat measures about 43 inches long, and comes in sizes 34 to 44 bust.
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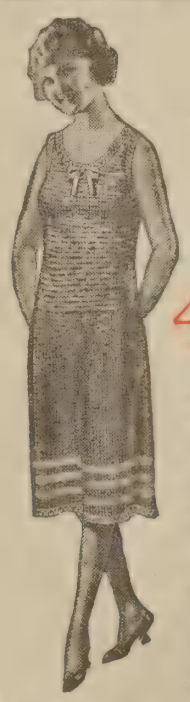

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A leading style in all the big cities for fall wear. One-strap, one-buckle pump of rich black patent leather or brown calf finished leather, is well made with perforated sewed tip and medallion toe. Fancy perforation on vamp, strap and quarter. One-piece medium extension oak sole; low flapper walking heel with rubber top lift. Sizes 2½ to 8; wide widths. **Black patent, No. 52S20. Brown calf finish, No. 52S21. Send ■ money. Pay $1.98 and postage on arrival for either leather. State size.**

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An absolutely new and novel Egyptian style dress pump of rich black velvet. Medium pointed dress toe and patent leather trimming ■ pictured. Patent leather vamp, collar and instep straps fastened on each side by buttons. Neat perforations at sides. Fancy carved Egyptian slave ornament on vamp. Leather insole; genuine oak outsoles; medium height, rubber tipped leather heel. Sizes 2½ to 8; wide widths. **No. 52S257. No money now. Pay $2.48 and postage on arrival.**

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LIVESTOCK AND DAIRY

Feed for Dairy Cows

By E. V. ELLINGTON, Head Department of Dairy Husbandry, Washington State College.

Would like a balanced ration for a herd of Guernsey cows. Have oats and pea ensilagt and native hay, alsike clover, timothy, June grass, ox-eyed daisies and some Canadian thistle. G. M. S.
Deming, Wash.

A good grain ration for dairy cows to supplement native or mixed hay consists of rolled barley, 450 pounds; mill run, 450 pounds, and linseed oil meal, 100 pounds, or two parts rolled barley, corn or wheat, two parts mill run and one part oil meal. Such a mixture at prevailing prices would cost approximately $33 per ton. Such a ration for Guernseys should be fed at the rate of one pound to every three pounds of milk produced daily.

I am going to milk four head of cows this winter and have for roughage good oat and pea hay with possibly 5 per cent alsike clover in it. With this I expect to feed such roots as carrots, mangels and potatoes. I will have to feed all three, since I have not enough of any one to last through the winter. I have wheat which I can have ground or rolled. Please balance a grain ration for me, using wheat if it is cheaptr and as good as bran.
Deer Park, Wash. A. W. L.

Ordinarily wheat, which is the chief cereal used in America for human consumption, is so high priced in comparison to other feed grains that are used for milk production that it is rarely used. When the grain is slightly damaged or discolored so that it does not command the highest market price, it can well be used for dairy cattle feeding. It has practically the same feeding value as barley or corn, and performs the same function in animal nutrition. Wheat should be cracked or ground and should never be fed alone. If it is not mixed with some bulky foods it will form a pasty mass of the same consistency as dough in the digestive tract and may cause the cow to go off feed.

Either of the following grain mixtures can be satisfactorily used for dairy cows: Four parts by weight of mill run, two parts bran, two parts wheat and one part linseed oil meal; or two parts mill run or bran, one part wheat and one part ground oats. Either of these grain rations should be fed at the rate of one pound of the mixture for every four pounds of milk produced daily.

Feed the cows all the hay they will eat up clean and from 30 to 40 pounds of the roots you have. Inasmuch as you do not have enough of any of the three root crops at hand to last you through the winter, a good plan would be to mix the carrots, mangels and potatoes together. A cow is an animal of rather fixed habits and any changes from one kind of feed to another may interfere with her regular flow of milk. By mixing the roots together you will have a standard root mixture for the entire winter.

Will you please inform me what value ground rye would be in a dairy ration and in what quantity should it be fed? Also, has rye hay any feeding value for dairy stock? B. S. G.
Nespelem, Wash.

Rye is a satisfactory feed for dairy cows and has much the same feeding value as corn or barley. Although rye is not as palatable as corn, the cows will take it readily when mixed with other feeds. The Pennsylvania experiment station conducted feeding tests with rye, substituting it for corn in the dairy cows' ration. They fed up to 3 1-2 pounds per day per animal and found that the cows thus fed produced 4 per cent less milk than when fed an equal amount of corn. This indicates that it is slightly inferior to corn. When fed in too large quantities it will also tend to injure the quality of the fat, producing a hard, dry butter.

From 2 1-2 to 3 1-2 pounds of rye mixed with such feeds as mill run and oats should be fed to each cow per day. A satisfactory mixture can be obtained by using two parts by weight of mill run, one part ground rye and one part oats.

Rye hay may be successfully fed to dairy cows. When rye is to be used as hay, it should be cut in the early milk stage and before the awns harden.

LIFE PRESERVERS FOR LIVESTOCK

By DR. E. E. WEGNER, W. S. C.

ANTHRAX.

A few of these diseases which are transmissible from animals to man are of a serious nature, while most of them are not. The diseases previously discussed, tuberculosis and glanders, are very serious indeed and certain others are quite as bad. Anthrax is another that causes great anxiety to the human when it is prevalent in animals. This disease may also infect persons who are not exposed to the anmals themselves, but to the animal products, wool, hides, etc. It is commonly known as "wool sorters' diseases," "rag pickers' disease," "malignant carbuncle," which names indicate something of its nature and its origin.

This disease is infectious and the organism that causes it is very resistant to our common antiseptics when it is in the resting or spore stage. It will live in the ground for years and infect animals that frequent that spot years after. It lives in the animal products, hides and wool for a long time and not infrequently lives with these products through the process of manufacture and appears in the manufactured goods, sometimes being shipped from one country to another in this way.

Not long ago my attention was called to the case of a man who suffered from a very intense swelling of the face, apparently caused by an infection in a scratch caused by the razor. A bacteriological examination of this would revealed the fact that it was a case of anthrax. The man died a few days later. Investigation seemed to justify the conclusion that the shaving brush was the infection carrier, since the man was using a new shaving brush, the bristles of which had come from Russia, where anthrax is common.

People who work at sorting hides or wool, picking rags or working about upholstering establishments and places of that kind are most liable to contract this disease because the materials with which they work are occasionally infected. A good friend of mine lost his life after performing an autopsy on an animal dead of anthrax; whether he did not recognize the disease or became accidentaliy infected I do not know, but this disease is readily transmissible from animals to man.

Cattle Suffer Most.

Anthrax infects most of our domestic animals, but cattle are the greatest sufferers, sheep and hogs come next. The mortality is high in animals, averaging probably 70 per cent; in man the disease may be of a generalized nature and in such cases the death rate is close to 100 per cent in untreated cases, many instances this disease is of a local nature and takes the form of so-called malignant pustule; these cases are not so serious and a considerable percentage recover.

Certain localities are more generally

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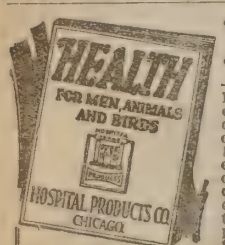

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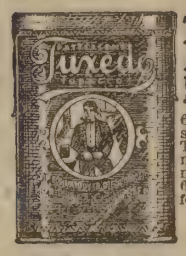

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Potato Show

(Continued from page three.)

that where potato strains were found disease-free it was a matter of their escaping sources of contamination rather than resisting it. Our exceptionally good strains, he said, had originated generally in comparative isolation from weak stocks, and much of the highly recommended stock shipped in for seed from potato-growing centers had brought with it our potato ills, freer strains being produced at home remote in our backwoods. "Perhaps the solution is to be that seed will have to be produced where we can isolate it," he declared. "We may have to have a seed grower for the seed grower." At Bozeman they had suspected the raspberry mosiac of taking kindly to the potato. C. W. Hungerford, pathologist at Moscow, Idaho, thought it more likely that some wild host plant might harbor the potato mosaic diseases.

C. Tice of British Columbia, a potato specialist, explained the relative isolation of some of the province's seed-growing districts, commercial potatoes being cultivated only in the southern and eastern parts of the British Columbia potato district.

"We are going to close up our work at Pullman on rhizoctonia and devote more time to the more destructive mosaics," announced Professor Dana of Washington State college. This invidious disease is apparently on the increase in the state, it was said.

C. W. Hungerford reported on potato diseases for Idaho. Mosaic, there, was less severe on Netted Gem than on Bliss Triumph, Early Ohio and Peachblow, he said, but the Gem suffered more through leaf-roll. The pink and green rose aphis had been found to carry mosaic infection, and both winter on the rose.

Thursday President Cannon fired a broadside he had hoped, he said, to direct toward a larger attendance of those who most needed it. The potato industry depends upon a stable and high-grade seed supply, and the man who grows it must, therefore, get a price for it. There are plenty of the wrong kind of fellows both buying seed potatoes and producing them, declared Mr. Cannon. "We seed growers must give the market a seed such that farmers will be able to increase their incomes reliably by growing potatoes. That," he added, "can't be done when merchants deliberately pound down the market." He threw out the suggestion that there should be trade councils of grower, broker, retailer and consumer.

D. H. Anderson of the Anderson Commission company, Spokane, urged the use of better containers, recommending the crating of potatoes or, at any rate, the use of clean, sound sacks, and the more careful grading of the potato. "The apple industry has its residue of culls. Why don't we see the cull pile after the potatoes are sacked and shipped?" he demanded. "Unquestionably the potato-grower raises culls."

R. C. McCroskey, Jr., asked him from the floor whether he thought the grower, at the prices of last year, could have afforded to use crates or to buy new sacks, if he had others on hand. It was the opinion of Mr. Anderson, corroborated by C. L. Smith, A. A. Kelly and W. L. McEachran, that the farmer would be able to pass on the price of the better container. "Farmer" (C. L.) Smith declared that he would make more on the latter than on his potatoes. A. A. Kelly testified to having got 50 per cent more for onions in Bermuda crates than sacked, though they were onions of identical varieties.

"The farmer pays for the grading, whether he knows it or not, and whether he does it or not," stated Mr. McEachran, who is secretary-treasurer for Burgan & Sons, Spokane. "The retailer has to allow for the shrinkage. He can't arbitrarily decide what quality he demands; he is the purchasing agent for the consumer, merely. The retailer," he said, "does not like to handle waste." He thought the grower who put up a good article in good manner would be paid for it, and need not wait for concerted policy in that practice to get his price. "Though," he added, "the cost to the consumer undoubtedly affects the amount he will use. We can sell perhaps 10 boxes of apples at $1 to one at $1.50." Boxes ran into money pretty fast, and he thought the clean sack might get the potato trade.

The evil practice of the grower who disposes of his culls at any price, to a buyer who will put them on the market, injuring the price of his better article, was deplored. E. R. Bennett, secretary, mentioned a German process by which powdered skim milk and buttermilk are being mixed with a product from cull potatoes and selling as a stock food.

L. Wheeler of the Portland Seed company observed that those who today are sincerely meeting the demand for the seed potato can sell all they raise. At first in a quite accidental way, but latterly in response to a resultant demand, he stated, a few Yakima potatoes extra well graded and put up had appeared on the Portland market, where the fancy quality of the article had created a sudden enthusiasm for Yakima potatoes.

R. G. Newton of Nebraska presented a study in the disease known as spindling tuber. In Nebraska, while dry land potatoes had been formerly considered the best seed, the reason therefor had not until recently been recognized, he stated. Now, the fact that dry land potatoes outyielded others as seed was accounted for by spindling tuber, under which, when the dry potato was brought into the irrigated district and cultivated there for successive years of experiment, the yield went down, the first year 10 per cent, the second 23, the third from 50 to 75 per cent and still more abruptly in the fourth year. Since the susceptibility was more than usual among the potatoes brought down from the high altitudes of dry cultivation to the low levels of irrigation, the dry land seed potato has been rejected by the best practice in irrigated districts, he said. The disease is recognized in elongation of the tuber and shallowness of the eyes.

J. F. Curry of Olympia, Wash., showed with effective statistics the wide prevalence of so-called masked mosaic, not

(Continued on page nineteen.)

Life Preservers

(Continued from preceding page.)

affected than others, that is, where the seed has been sown the crop is more abundant and once the ground becomes generally infected there is little chance to rid it of the infection; as a result the disease continues year after year. Certain areas have been kept clean, due to the vigilance of the veterinary inspectors whose duty it is to suppress the spread of infectious diseases, and it is their aim to keep these areas free if possible, but because this infection can be carried in so many different ways it spread is very hard to control.

The northwest has been free from this disease so far, but we are in constant danger of an outbreak. Careful policing by our veterinary inspectors and the suppression of this disease among animals gives the greatest safety to the human family. This work is being energetically carried on now under the supervision of the United States bureau of animal industry, and since all local veterinarians are interested in its suppression this group of professional men are using their greatest efforts to protect the human family and their efforts are quite successful judging from the way they have been able to prevent its spread.

The Red Lock

By DAVID ANDERSON.

This is the new serial story which will begin in The Washington Farmer December 6. It is a rattling good story. The following table of contents, giving the chapter title, will give you hints what it is all about:

CHAPTER.
I The Bound Boy.
II Curse of Colin.
III East Meets West.
IV Whispering Spring.
V Three Candles.
VI The Room Was Deadly Still.
VII Arrows of the River Gods.
VIII Hermit House-Boat.
IX Mettle of the Minister.
X Fancies and Fence Rails.
XI The Fairy's Secret.
XII Lady Slipper Day.
XIII Bats and Beetles.
XIV Warning of the Frogs.
XV Knives of the Night.
XVI The Open Trail.
XVII Ashes of the Past.
XVIII A Face at the Smudged Window.
XIX The Scrape of a Match.
XX A Cry in the Night.
XXI Six-Gun Persuasion.
XXII Tears of the Mountain Girl.
XXIII Spurs and Flying Sand.
XXIV Brickbat Alley.
XXV Scar of the Gangplank.
XXVI In the Dead Night.
XXVII Core of the Target.
XXVIII The Sprawled Figure on the Broken Floor.
XXIX Search of the Languid Eyes.
XXX Heart of the Flatwoods.

Remember the "Red Lock" will begin next week.

GENERAL ADVERTISING.

NEW LAMP BURNS 94 PER CENT AIR

Beats Electric or Gas

A new oil lamp that gives an amazingly brilliant, soft, white light, even better than gas or electricity, has been tested by the U. S. government and 35 leading universities and found to be superior to 10 ordinary oil lamps. It burns without odor, smoke or noise—no pumping up, is simple, clean, safe. Burns 95% air and 6% common kerosene (coal oil).

The inventor, W. W. Johnson, 161 Union Ave., Portland, Ore., is offering to send a lamp on 10 days' FREE trial, or even to give one FREE to the first user in each locality who will help him introduce it. Write him today for full particulars. Also ask him to explain how you can get the agency, and without experience or money make $250 to $500 per month.—Adv.

In writing advertisers, be sure to say you saw their advertisement in The Washington Farmer.

Why Blame the Esch-Cummins Transportation Act?

THE statement is often made that the famous "Section 15-A" of this law requires the Interstate Commerce Commission to make and keep rates high enough to enable the railways at all times to earn a net return of 5¾ or a per cent on their valuation. It is said the necessity of letting the railways earn these so-called "guaranteed profits" is what keeps rates up. **This is all untrue. The Transportation Act is not in the slightest degree responsible for the fact that railway rates are higher now than before the war.**

Railway Profits Reduced Under Transportation Act

In the two years, 1916 and 1917, the net return earned by the railways averaged $2,800,000 per day. The Transportation Act was passed in 1920, and the war-time "guarantees" to the railways were withdrawn on September 1, 1920. In the three years ended August 31, 1923, **under the Transportation Act,** the net return of the railways averaged only 4 per cent on their valuation and was but $2,100,000 a day.

How can it be said the Transportation Act has kept up rates by "guaranteeing" the railways large profits when the net return actually earned and received by the railways since the Transportation Act was passed has been $700,000 a day less than it was before?

Increase of Expenses Under Government Operation

Main Cause of Present Rates

The principal cause of present rates is the increase in railway operating expenses which was largely due to the war, and which **occurred under the government operation of the railways.**

The government seized the railways and began operating them at the end of December, 1917. In that month their operating expenses were $8,106,000 a day.

The government quit operating the railways in February, 1920. In that month their operating expenses were $14,310,000 a day.

Therefore, the increase in expenses under government operation was ..... $6,204,000 a day.

What has occurred since then? In the first eight months of 1923 the operating expenses of the railways were only ..... $13,528,000 a day.

Therefore, the reduction of expenses since government operation ended has been ..... $782,000 a day.

To sum up: **In a little more than two years of government operation the operating expenses of the railways increased $6,204,000 a day. Since the Transportation Act was passed and the railways were returned to private operation they have been reduced $782,000 a day.**

Why blame the Transportation Act for present rates when the facts show that the main reason why present rates are necessary is that there still remains $5,422,000 a day of the increase in expenses that occurred under government operation. **Why not blame the war—or government operation?**

Another Reason—Taxes!

There is another reason for present rates. This is—taxes! In 1917 the taxes of the railways were $501,000 a day. In February, 1920, the last month of government operation, they were $609,000 a day. In August, 1923, they were $952,000 a day—or $451,000 a day more than in 1917.

While the managements of the railways, operating under the Transportation Act, have been reducing operating expenses $782,000 a day, the federal and state taxing authorities have been increasing railway taxes about $343,000 a day.

These are the things that keep rates up, yet there are still people who want the railways so regulated as to force them back under **government management!**

Reduction of Rates Under the Transportation Act

Rates had to be advanced in 1920 principally because of increases in railway expenses under government operation. Since then, freight rates have been reduced in the entire country an average of 13 per cent or about $700,000,000 on the basis of this year's business. This reduction in western territory alone has averaged 16 per cent, or about $300,000,000 on the basis of this year's business.

Why blame the Transportation Act, and private management of railways, for advances in rates made necessary mainly by increases in railway expenses due to the World War and government operation, and give no credit for reductions of rates that have been made under private management of the railways since the Transportation Act was passed?

What the Transportation Act "Guarantees"

The Transportation Act does not "guarantee" the railways anything. It says the Interstate Commerce Commission must so fix rates as to let the railways earn a "fair return" upon a fair valuation. There is nothing new in that. The Constitution already required it.

But the Transportation Act does give a new "guaranty" **to the public.** It says that the Interstate Commerce Commission, in deciding what will be a "fair return" for the railways to earn, shall "give due consideration among other things to the transportation needs of the country, and the necessity, under honest, efficient and economical management of the existing transportation facilities, of enlarging such facilities **in order to provide the people of the United States with adequate transportation."**

Is it wrong for Congress to instruct the Interstate Commerce Commission in regulating rates to consider **the need of the people of the United States for adequate transportation?**

The only "guaranty" that repeal of the Transportation Act would destroy is this guaranty to **the public** that the railways will be so regulated as to enable them to provide **the public** with enough transportation.

No farmer or business man who realizes the country's need for a great increase of its facilities of transportation wants that guaranty withdrawn.

This is one of a series of advertisements published to give the farmer authentic information about railroad matters. Any questions that you would like to ask will be cheerfully answered. Address:

WESTERN RAILWAYS' COMMITTEE ON PUBLIC RELATIONS

650 Transportation Building, Chicago, Illinois

S. M. FELTON, President, Chicago Great Western Railway,
L. W. BALDWIN, President, Missouri Pacific Railroad Co.
RALPH BUDD, President, Great Northern Railway,
H. E. BYRAM, President, Chicago, Milwaukee & St. Paul Ry.,
W. H. FINLEY, President, Chicago & Northwestern Railway,
CARL R. GRAY, President, Union Pacific System.
J. E. GORMAN, President, Chicago, Rock Island & Pacific Railway,
HALE HOLDEN, President, Chicago, Burlington & Quincy Railway,
C. H. MARKHAM, President, Illinois Central Railway,
C. E. SCHAFF, President, Missouri-Kansas-Texas Lines.

TAKE ADVANTAGE OF GUARANTEE mentioning THE WASHINGTON FARMER when writing to advertisers; you are doubly protected. See the guarantee on the editorial page.—Adv.

POULTRY AND RABBITS

Winter Egg Basket

Fill It by Careful Feeding, Good Management and Housing

By JOHN S. CARVER, Head Poultry Department, Washington State College.

The market reports read "Eggs are going up." Have our pullets reached a 60 per cent lay? November, December and January are our months of highest prices. To make our poultry profitable we must secure high egg production in the winter time. If we wish to fill our winter egg basket we must pay particular attention to the following important factors:

1. Conditioning the pullets for laying.
2. Our winter feeding schedule.
3. Proper house manageemnt.

Conditioning Pullets for Laying.

We depend on the pullets for the bulk of our fall and winter egg production, and if we are to secure results from them they must be well cared for and properly conditioned. This means that before they are ready to go into heavy winter egg production they must have: Good size, for the breed; flesh in good amount, and a generous reserve of body fat.

Pullets must have a certain foundation of flesh, size and fat if they are to stand up under the feeding and management that will result in high winter egg production. Without it they can not possibly become economical producers. These essential characteristics are obtained by continuous and vigorous growth throughout the summer and by conditions as laying maturity approaches.

Pullets should be conditioned when they are about 20 weeks old, or just about the time their combs start to develop. We add 100 pounds of corn meal to the growing mash and feed them three times a day morning, noon and 6 in the evening, all of the conditioning scratch grain they will clean up in half an hour. This scratch grain should be mixed as follows: 200 pounds of cracked corn and 100 pounds of wheat. One hundred pullets should eat about 14 pounds of this scratch grain a day. Feeding this way for about one month or until the pullets are 6 months old will insure a good storage of reserve fat and maximum growth when housed for the winter. They should be housed, if Leghorns, when they weigh three and one-fourth pounds or more. You will notice the conditioning ration is high in carbohydrate, but low in protein; the low protein content retarding the development of the egg-producing organs while the pullets are taking on their weight.

Our Winter Feeding Schedule.

We must now consider our winter feeding plan after having placed our conditioned pullets in their winter laying quarters, which previously have been thoroughly cleaned and disinfected, and the floors covered with five or six inches of fresh wheat straw. The pullets are now ready to go on their laying mash, which is high in protein and egg-building foods.

Washington State college laying mash: Two hundred pounds wheat bran, 100 pounds wheat middlings, 100 pounds corn meal, 75 pounds meat scrap, 25 pounds bone meal, five pounds salt.

This mash is placed before the pullets in self-feeding hoppers, enabling them to obtain it at any time.

Washington State college scratch grain: Two hundred pounds wheat, 100 pounds cracked corn, 50 pounds oats.

This scratch grain is fed three times a day, 7 a. m., 2 p. m. and as the "evening lunch," 9 to 10 p. m., under artificial lights. Three pounds are fed at 7 a. m. in straw litter; four pounds are fed at 2 p. m. in litter and seven pounds are fed in troughs and in litter at 9 or 10 p. m. Our aim is to keep our production in the winter at 55 or 60 per cent and to regulate the production by the amount of scratch grain fed. If our production runs up over 60 per cent we increase the amount of scratch grain fed, which automatically reduces the amount of mash the pullets will consume and lowers the per cent egg production.

Milk is fed at 10 a. m. in the form of skim milk, buttermilk or semi-solid buttermilk. They should have milk before them at least one hour a day. If you feed semi-solid buttermilk, feed one-half pound to 100 pounds of live weight.

Feed at noon green food in the form of cabbage, cut kale or alfalfa, what the birds will clean up in a couple of hours. Keep grit shell, charcoal and plenty of clean fresh water before the birds at all times.

Proper House Management.

It is equally important in securing high winter egg production that our pullets be housed under the best of conditions. The house must have plenty of sunlight, have good ventilation and be dry at all times, with no draughts striking on the birds.

We have found that a straw loft in any poultry house aids in giving us ideal conditions of ventilation and dryness. With the straw loft house it is almost impossible to find the litter wet at any time. This is a most important factor, as there is nothing that lowers the egg production more rapidly in the winter than damp litter. Never permit strong winds to blow through the front of your house directly onto your birds. Shut your curtain on windy days and depend on indirect ventilation, through partially opened windows, shutters, etc.

Keep your litter clean, fresh and dry in the winter if you expect to maintain high production. Never let dirty litter remain in houses, as it is a source of disease; roup, colds and cankers are caused by damp, dirty litter. Keep it clean. Wheat straw is our cheapest litter.

Fill your winter egg basket by careful feeding and better management and housing.

Treatment for Chickenpox

By W. D. BUCHANAN, Extension Poultry Specialist, State College of Washington.

A short time ago one of my young cockerels became blind in one eye and I put him in a separate place to keep the other chickens from bothering him, but in a short time I noticed a pullet had something wrong with her eye. I found small lumps similar to warts all over one side of its face and nostrils. What can this be and what is a cure for it? A. S. Seattle, Wash.

The trouble which you describe is chickenpox. It is an infectious disease and sometimes spreads to the entire flock. The best method of control is through chickenpox vaccine. If the attack is not very severe, you can control it by separating all affected birds from the flock. Thoroughly disinfect the house with a 2 per cent solution of cresol or a 5 per cent solution of zenoleum. Then paint all affected parts of birds showing pox with tincture of iodine. At the same time remove the canker from their throats and mouths and paint the spot with the iodine.

PROVIDING GREEN FEED.

Where hens are penned up it is advisable to have two yards and keep a green crop growing in one of them, such as oats, wheat, rye or dwarf Essex rape. Green crops should be sown very thick, and the following quantities will be found satisfactory for a yard 25 by 30 feet: Wheat, 2 3-4 pounds; oats, 1 1-2 pounds; rye, 3 1-4 pounds; rape, 5 ounces. When the growing stuff reaches a height of two or three inches the hens can be turned upon it and the other yard similarly sown.

AVERAGE SIZE OF FARM.

The average size of farm in the United States was in 1920 148.2 acres, of which improved land averaged 78 acres. The land alone averaged $57.36 in value, but the value of farm property, on the average, including buildings, machinery and live stock, was $81.52 per acre. This average included the unimproved land—nearly half of what is held in farms.

PLANS FOR POULTRY HOUSES!
All style 150 Illustrations: secret of getting winter eggs, and copy of "The Full Egg Basket." Send 25 cents.
INLAND POULTRY JOURNAL Dept. 28 Indianapolis, Ind.

Read what Mr. H. J. Schuette, Box 47, Evansport, Ohio, says: "SMOKE 'EM" is a wonderful roup cure. It certainly does the work. Dealers, we have a good proposition.

THE H. M. SPAHR BREEDING ESTATE
Dept. 57A, Spahr, Frederick Co., Maryland.
Telegraph Address: Thurmont, Maryland.

UNION CARBIDE
ALWAYS HIGHEST GRADE—ALWAYS UNIFORM

UNION CARBIDE
World's Best Quality
Highest Gas Yield
Standard Throughout the World for More Than a Quarter Century
Keeps Indefinitely if Protected From Air and Moisture
Greatest Gas Value
Purest Gas

Artificial Sunlight at small cost
increases egg production in winter months when eggs bring best prices!

Many progressive farmers, with an eye to easily increasing the family income, are installing artificial sunlight—Union Carbide Gas—in their henhouses, lengthening the hens' winter day to 14 hours for added feeding and exercising, securing greatly increased egg production at small cost when more eggs mean much more money.

Union Carbide, discovered 31 years ago, has made artificial sunlight easily and cheaply available everywhere. Today the scores of uses for Union Carbide Gas are responsible for an abundance of comfort, happiness, and economy for millions of people the world over.

More than 398,000 farms were equipped during past years to avail of the full measure of satisfaction which can be realized from Union Carbide Gas lighting and cooking plants. Each year more such plants are being installed than during any preceding year.

It is a simple proposition.

A little Union Carbide, in a simple apparatus that automatically feeds it into common water, makes Union Carbide Gas for lighting and cooking as needed. Concealed without disfiguring walls, floors, or ceilings, small iron pipe conducts the gas to rooms where its cheerfulness and comfort are enjoyed; to the kitchen for cooking, ironing, and heating water; to the barn for light and safety; to the henhouses for increasing egg production in winter.

The more than 398,000 farmers who have installed Union Carbide Gas lighting and cooking plants in past years, can easily have their gas piping systems extended to their poultry buildings, and thus avail of artificial sunlight and increased egg money during winter months.

We supply Union Carbide in generator sizes direct to consumer at factory prices through 150 Union Carbide Warehouses. There is one near you.

UNION CARBIDE SALES COMPANY
30 East 42d Street, Dept. N-60, New York, N. Y.
Please send me, without obligation, information on UNION CARBIDE Lighting and Cooking.
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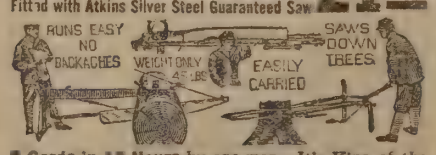
Note: Every owner of a Carbide Gas Lighting and Cooking Plant should write us, so he will be kept advised of our lowest direct-to-consumer prices and nearest Union Carbide Warehouse address, and his name placed on our mailing list for future helpful service.



Cords in Hours by one man. It's King of the woods. Catalog Y64 Free. Established 1890.
Folding Sawing Machine Co., 1005 E. 75th St., Chicago, Illinois

Vita Gland Tablets Start Hens Laying in Twenty-four Hours

Hens have glands just like humans and also require vitamines. Because they directly stimulate the organs involved in egg production the mysterious newly discovered VITA GLAND Tablets, crushed into hens' drinking water, turn winter loafers into busy layers almost over night. Science has discovered how to control egg production with essential vitamines, and gland extract that works directly on the OVARIAN or EGG producing gland of the hen. The wonderful effect of gland stimulation is shown by a simple test. Government experiment stations report that hens properly fed vitamines, etc., lay 300 eggs as against the sixty of the average hen. "Leg weakness of baby chicks due to insufficient Vitamine B," says The Official Bulletin. Also says: "Hens start laying at an average age of 139 days when fed vitamines."

ONE FREE BOX.

EGGS, EGGS, EGGS and fine healthy chicks, prosperous flocks without fuss or bother or drugs or expensive feeds can be had. Just drop these tablets into drinking water. So simple to double your profits. Chickens now full of pep and life. Nests full of eggs. Summer production at winter prices. So confident are the Alexander Laboratories, the manufacturer of the original and genuine VITA GLAND tablets, that you will be amazed at results that they offer to send a free box for your own use. This is how. Send no money, just name. They will mail two boxes, each regular one dollar size, a generous supply. When they arrive deposit only a few cents postage and one dollar with postman. When your neighbor sees the wonderful increase of eggs in your nests let him have one box for a dollar and thus your box has cost you nothing. $5000 in big Kansas City bank guarantees your satisfaction or money back without question, so write today and get dozens of extra eggs this simple easy way. Write ALEXANDER LABORATORIES, 9037 Gateway Station, Kansas City, Mo.

Have you glanced over the farm bargains on the "Want Ad" page?

When answering ads, please don't fail to mention this paper.

ORCHARD AND GARDEN

Surpass 1923 Goal

By B. A. SLOCUM.

A year ago a committee of 25 beekeepers of the various bee counties of the state met and discussed ways and means of developing the beekeeping industry of the state. Statistics bearing upon the industry presented and then goals were set for the year 1923, as well as for a five-year period, 1923-1928.

The goal for 1923 was: To reduce the bee diseases, which, by the way, have no effect upon the human anatomy, 20 per cent; to reduce the number of box hives 25 per cent; to introduce 1362 purebred Italian queens into black colonies; to organize three associations; to take a survey of existing conditions in nine counties; to organize one boys and girls' bee club and promote existing clubs.

Disease was decreased 15.2 per cent during the current year. This represents 53.7 per cent of the colonies that were diseased, consequently the year's goal was passed by 17.3 per cent.

The percentage of box hives was reduced 5.8 per cent. This is 42.3 per cent of the colonies that were in box hives, consequently the goal for the year was pessed by 17.3 per cent.

One beekeepers' association was organized in Skagit county and another, the state association, is in the process of organization. This was the only goal which was not passed. It would have been met if one county, which was considered at the time the goal was made, had been ready for an association. There are 12 associations in the following counties: Grays Harbor, Mason, Pierce, Thurston, Spokane, King, Snohomish, Whatcom, Yakima, Walla Walla and Skagit. The Peninsular association, which comprises six counties, is the largest association in the state.

Three boys and girls' bee clubs were organized this year. Since the goal for the year was one, it will be seen that this goal was passed. The following counties have clubs: Pierce, Thurston, Benton, Grays Harbor, Walla Walla and Stevens.

There were 1922 queens imported this year to replace scrub stock. This passes the goal for the year by 560 queens. Mason county reports that 90 per cent of the colonies within the county were requeened with Italian stock.

The beekeepers are to be greatly commended upon this excellent piece of work. It shows what can be done when beekeepers cooperate and make a united effort toward a specific goal.

Vinegar Making

By O. M. MORRIS,

Head Department of Horticulture, State College of Washington.

Does treacle make a mother for vinegar if put with brown sugar? MRS. J.
Waukon, Wash.

The treacle or any other form of sirup of high sugar content is often used to increase first the alcohol content in the manufacture of vinegar from fruit juices. The higher the alcohol content in the first process of fermentation, the higher will be the acid content of the vinegar when the fermentation is completed.

The first process of fermentation will ordinarily start without any artificial inoculation. Best progress will be made in the fermentation if the material is kept at a temperature not below 80 degrees. At that temperature, with the material in barrels or large receptacles, two to three weeks will be required for the alcohol fermentation to be completed.

After the first fermentation has ceased its most rapid activity, which can be determined by the development of foam on the top of the liquid, mother of vinegar can be placed in the fermented liquid. This will start the actual vinegar-making process. It will be completed in a few weeks if the temperature is kept about as stated above. If the temperature runs low it will require many weeks, sometimes months, to complete the process of fermentation. Barrels of liquid set in a cellar where the temperature will run down as low as 40 degrees will ordinarily make vinegar, but it requires a longer time to accomplish the work.

AGENTS WANTED—A corporation of national reputation and high standing, manufacturing a complete line of standard high grade machinery and supplies very essential to the best success in horticultural production, desires to secure reputable sales agents throughout Oregon, Washington and the western part of Idaho. Only men permanently located, of good character, personal reputation, financial standing and having a working knowledge of local horticultural conditions and practices will be considered. State your case in your letter. How long a resident in present locality? Property owner? Financial standing, knowledge of horticulture, sales experience and equipment, and such other information as you consider pertinent. Address MANUFACTURER, care Washington Farmer, Spokane, Wn.

Mention THE WASHINGTON FARMER when writing advertisers.

Thistle Eradication

By E. G. SCHAEFER,

Department of Farm Crops, W. S. C.

Can you give me a sure and speedy way to get rid of Canadian thistle? T. W. H.
Vancouver, Wash.

The Canadian thistle is a perennial and very difficult to eradicate. It has an extensive root development including horizontal root stalks. They grow for considerable distance in practically every direction. These root stalks when removed from the main plant by tillage implements and carried to other parts of the field may start new plants and new areas of infestation. A small amount of tillage which is insufficient for complete eradication may, therefore, serve only to spread the thistle infested area.

One of the most successful ways of eradicating this pest is that of clean cultivation. If this method is to succeed, however, it will be necessary to cultivate at frequent intervals throughout the season. This method involves the actual starvation of the plant by preventing it from manufacturing food, which process is carried on in the leaves. In its attempt to grow, the energy stored in the roots will finally be expended if no green portion is allowed to appear above the ground.

The cultivation should be at a depth of two or three inches, since cultivation at this depth need not be as frequent as if it were at the very surface of the ground. It must be remembered that even though the weed be allowed to produce leaves for two or three days during the growing season, much of the energy expended during clean cultivation will be restored and the period for final eradication will be increased.

Topping Strawberries

By O. M. Morris, Department of Horticulture, State College of Washington.

I wish you would explain to me how to top strawberries. When is the proper time of year? R. S. R.
Bellingham, Wash.

The process of topping strawberries is often spoken of as mowing them. The most common method is to use a field mowing machine for large patches and a scythe for small ones. The tops are cut the same as a hay crop would be.

The purpose in view ordinarily is to cause the foliage to dry quickly so that it can be burned. This is usually done in midsummer or shortly after, sometimes as soon as the crop is harvested. The purpose of the work is to destroy fungus diseases and insects that are preying on foliage. Sometimes it is used for the purpose of checking growth and causing the plants to ripen and more definitely prepare for winter conditions. Its value for this purpose is generally overestimated, but it is often effective in destroying certain insects and fungus diseases without materially damaging the plants.

RESPONSIBLE FOR EXCESS SPRAY.

Fruit shipping associations in Colorado require growers to sign invoices bearing a guaranty making them responsible for excess spray material left on fruit, according to reports to the bureau of chemistry, United States department of agriculture, which has made investigations of this problem. Such a requirement seems to have a good effect, as an investigation this year in one of the principal fruit-growing centers of that state showed little spray residue on the fruit ready for shipment. Heavy rains helped somewhat in cleaning the residue from the fruit.

FARM MACHINERY.

The value of farm implements and machinery distributed on acre of improved farm lands runs highest in Massachusetts, averaging over $20 per acre for the improved farm lands of the state. Then follow other states of the north Atlantic group and Wisconsin. In Washington, Oregon and Idaho the value per acre of farm machinery runs between $7.50 and $10; in Montana it runs between $5 and $7.50; in North Dakota and some of the southern states under $5 to the improved farm acre.

HOME FRUIT GARDEN.

A more general culture of fruits in gardens and in home orchards would contribute substantially to the health and pleasure of the average family, besides furnishing a supply of valuable food products at a relatively small outlay of money.

ATKINS
SILVER STEEL SEGMENT GROUND
CROSS CUT SAWS

Cut Your Share of $394,000,000

NEARLY four hundred million dollars' worth of timber will be cut on farms this year. Right now YOU should be getting YOUR share of this money.

Genuine ATKINS Cross Cut Saws are **guaranteed** to cut faster and easier and hold their edge longer. They save time, money and labor. Only ATKINS Saws are made of "Silver Steel" and are "Segment Ground," which means fast cutting and easy running. Your hardware dealer should have them in stock with two or four cutting teeth to each raker.

This Saw Book FREE

Get your copy of "Atkins Saws on the Farm," today. It gives valuable facts about cutting timber, how to choose and care for saws, gives measures and tables and tells how to make useful farm appliances, shows and describes ATKINS Saws for wood and metal cutting, circular saws, hand saws, hack saws, buck saws, pruning saws, and better saws for every purpose. Your copy is ready NOW! Just send your name and address, today, to

E. C. ATKINS & CO., Inc.
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INDIANAPOLIS, U. S. A.
Leading Hardware Dealers, Jobbers, Mill Supply Houses and Factory Branches handle ATKINS SAWS all over the world.

ATKINS SAWS on the FARM

Stop! Look! Listen!
Do You Want to Earn From $10 to $20 per day?

In the next issue of this paper five ADCOX graduates tell you how they learned to earn from $10 to $20 per day. DON'T MISS THIS AD—the pictures of these men also will appear in this paper. Don't fail to read the next issue.

If you will send your name and address we will send you free a large 112-page book full of pictures and letters from Adcox graduates that are now **making big money in the auto business**—this book also shows pictures of all departments of our school—gives prices of courses, etc. It's the largest and most explanatory auto school catalog ever published—you'll like it—get your copy at once—write today—ask for book number 2.

Adcox Auto & Aviation School
PORTLAND, OREGON.

MAKE MONEY
Pulling stumps for yourself and others with "Hercules"—the fastest, easiest operating stump puller made. Horse or hand power. Easy terms—$10 Down.

Cheapest Way to Pull Stumps

Write Quick for Agent's Offer
Big profits with easy work for you in my new special agent's offer. Also get my new big catalog—free.
HERCULES MFG. CO.
1114 29th St. Centerville, Iowa

Free Meat Curing Book

To learn the best methods of curing meat, write to E. H. Wright Co., 845 Broadway, Kansas City, Mo., and get absolutely free a new $1 book, "Meat Production on the Farm," which tells all about meat curing. Free to farmers only. Send name today.—Adv.

In writing advertisers, be sure to say you saw their advertisement in The Washington Farmer.

Glance over the bargains on the "Want Ad" page.

Plant and Food Products

(Continued from page six.)

depth, the peak with the potato plant was reached at about 32 inches in depth of water supply.

This average peak of 32 inches is determined by combining all the returns and striking the average of them all. As potatoes are a very important food plant, and it is important to learn all we can about its life and habits as related to the water supply, I have placed upon the diagram the composite line showing the changes that have taken place in the past as compared with the water supply. That is shown by the triple circles and double ruled lines connecting them.

The next set covers the experiments in wheat growing in Utah during the same 10-year period as the alfalfa and potato experiments, and also in Idaho.

In this diagram the circles designated by the figure "1" shows the returns in bushels of wheat, and the circles marked with the figure "2" shows the returns in pounds of straw in Utah, and the circles marked by the figure "3" shows the bushels of grain in Idaho.

In the first two diagrams the food plant and the food products go together; but in this diagram we see the food plant, as represented by the straw, and the food product the plant secures, as represented by the grain.

The fourth diagram shows the returns of oats in plant size, shown by the straw and the food production, shown by the grain, as secured by different quantities of water supply.

The fifth and last diagram shows the same returns of corn in food production as secured by kernels of corn, and the size as measured in terms of the stover.

In each of these three plants is shown the fact that food production and plant size are two separate and distinct items in plant life, and in many ways have no connection with each other.

The interesting thing about these plants is that they never appeared to require change in their methods for securing water as it changed from a liquid to a vapor in the ground until the quantity supplied by precipitation had decreased entirely to the vapor condition.

Then in case of wheat the plant reaches its apex in both size and food production at about 15 inches water supply annually.

With the oat plant, the minimum sized plant was reached with a water supply of 25 inches of water annually, but the food production continued, so that when the plant reached its new increased size at 20 inches the food products had continued to decrease, and reaches its lowest point there, and only increases as the water supply decreases.

With corn the same lack of connection between the plant and the food products it secures is shown. From a 70-inch water supply down to a 45-inch water supply annually there was very great difference in the size of the plant as measured by the stover. Then there was a slight raise in size with a drop of five inches in water supply, followed by a gradual decrease in size down to 30 inches water supply, and after that a very decided decrease in size down to the natural water supply by precipitation of 15.48 inches.

There is, however, a very great difference between the plant size and the food products secured by the plant. The two run along together very closely for some time, but the lowest point in food production before the raise is shown when the water supply is 25 inches in depth. Then, although the plant is decreasing rapidly in size, the food production increases with a water supply of 22 inches.

The fact that these returns are not the result of one year's experiment, but were carried along for a term of years, takes them out of the realm of improbabilities and is proof of the most important thing our farmers should know—that they must recognize there is a great difference between the food plants they raise and the food products those plants secure and store, and for which the plants are cultivated.

Food production does not go along with plant growth at all, but is entirely separate and distinct from it. This can not be seen with alfalfa and potatoes, as the two are woven together in the returns as shown by the potato tubers and the whole plant harvested; but in case of the grains and corn the returns reported prove this to be true.

In irrigating, therefore, the vital thing to keep in mind is not the size of the plants irrigated and cultivated, but the quantity of food products the plant will secure and store for the farmers' benefit.

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Tell Us Your Happiest Christmas

First prize of $5
Second prize of $3
Third prize of $2
Five prizes of $1 each

for the story of your best Christmas.

Think over your past Christmases and pick out the one which you are the happiest to remember. It may or may not have been the most delightful one, but the one which has given you the greatest satisfaction during the years that have passed.

These prize articles must be within 500 words in length.

In order to be judged for a prize all these articles must reach our office on or before December 8.

Mail direct to Prize Editor, The Washington Farmer, Spokane, Wash.

New Grange Master

(Continued from page three.)

grange and its sensible way of considering farm problems and presenting farm needs have given it a position of influence in the nation and have led those in positions of responsibility to listen to the views of the grange with consideration and respect."

Opening his message, President Coolidge extended to the grange his congratulations upon "its success and steady growth," and in closing asked Secretary Wallace to present "my very best wishes to both officers and members wherever they may be."

Secretary Wallace spoke of the scientific and practical work of the department of agriculture, going into some detail as to its efforts to assist in marketing agricultural products, and in aiding the work of cooperative marketing organizations. "The improvement in agricultural conditions," he said, "is apparent, but it is far from sufficient to make up for the unfavorable situation which farmers have been in for the past three years."

Thursday evening the Pennsylvania State grange, and three Pomona granges of that state furnished a program of pageantry, the first depicting the historical events in the growth of the state, the second, the history of the National grange in tableaux form, and the third a study of the work and accomplishments of the grange in its own field of better home making, better education, better schools, better churches and religious life, better agriculture, and better business conditions for farmers.

Friday's entire day was given up to the seventh degree work. All this work is in charge of Charles M. Gardiner of Springfield, high priest of the Court of Demeter, the guardian of the ritualistic work of the grange. Presiding as the Goddess Ceres, the patron of this degree was Mrs. Bertha M. King, of Banner, Oklahoma. Saturday was taken up with a meeting of the priests of Demeter, to which all seventh degree members are admitted, and no others. One change in the officers of this assembly was made when C. E. Spence of Oregon declined re-election as Priest Annalist, and his place was taken by the election of Harry L. Caton of Fresno, Ohio, master of the Ohio state granges.

One of the most difficult positions in the country is that occupied by the press representative of a national organization like the grange, whose meetings are largely held within closed doors. The National grange is certainly to be congratulated in having the services of A. M. Loomis, its regular Washington representative, as press representative. Mr. Loomis knows what is news, how to write it and how to get it out in a manner which finds a welcome by the press at large.

FARMERS' WANT ADS

MONUMENTS F

COMPLETE STOCK. WRITE FOR DESIGNS and prices. Inland Monument Co., N1001 Monroe, Spokane.

HELP WANTED—MALE 3

LEARN A TRADE IN THE LARGEST AND fastest growing industry in the world. High grade automobile mechanics, electricians and trouble shooters are in demand everywhere. Our training has placed scores of men into pleasant, well paid positions. Write for free booklet which gives full details. Y. M. C. A. Automotive School. Fourth and Madison, Seattle, Wash.

ALL MEN, WOMEN, BOYS, GIRLS, 17 TO 65, willing to accept government positions, $117-$250, traveling or stationary. Write Mr. Ozment, 208, St. Louis, Mo., immediately.

RAILWAY POSTAL CLERKS, START $133 month. Railroad pass, expenses paid. Questions free. Columbus Institute, N-5, Columbus, Ohio.

RAILWAY POSTAL CLERKS, CARRIERS AND forest rangers; experience unnecessary. For free details write Mokane, Dept. A11, Denver, Col.

WANTED—EXPERIENCED DAIRYMAN. PERfection Dairy, Pendleton, Ore.

SCHOOLS AND COLLEGES 26

EARN $110 TO $250 MONTHLY; EXPENSES paid as railway traffic inspector; position guaranteed after completion of 3 months' home study course or money refunded. Excellent opportunities. Write for free booklet G-157, Stand. Business Training Inst., Buffalo, N. Y.

EDUCATIONAL 45

DON'T PAY ONE CENT OF YOUR HARDearned money until you have investigated Hemphill's new improved method of teaching auto mechanics. Special low rates on our complete course, which will advance $50. We secure employment for our students while going to school and after they have graduated. Don't fail to send in your $5 deposit today, which will protect you for one year, at our present rate, or apply at our school, 125 N. 5th, near Union depot, Portland, Ore. Hemphill's Auto and Electrical School. Hemphill's are the only schools indorsed by the Automobile Dealers' association of the state of Oregon. Also approved by the state department of Education.

FRESH FOOD PRODUCTS 51-3

FISH—4 LBS. SMOKED SALMON, $1; 4 LBS. Alaska salmon bellies, $1; 4 lbs. black cod, $1; 3 lbs. best codfish, $1; delivered by mail. Coffin Fish Co., Seattle, Wash.

ALMONDS, SOFT SHELL, 7 LBS., ROYAL apricots, 5 lbs., seedless raisins, 4 lbs., all for $3.60, delivered; satisfaction or money back. P. S. Vawter, Arbuckle, Calif.

CHOICEST DRIED FRUITS, DIRECT—Prunes, cherries, loganberries. Send for complete list of prepaid prices. Kingwood Orchards, Salem, Ore.

DRIED OREGON PRUNES, $7 PER 100 pounds. Fred Kubin, Route 2, Salem, Ore.

MERCHANDISE 51-5

YOUR ANNUAL OPPORTUNITY—FOR QUICK disposal we offer salesmen's samples of woolen goods, underwear, hosiery, blankets, sheepliined coats, mackinaws, leather vests, etc., at one-third to one-half less than regular prices. Our price list of sample goods is now ready. Send for it today. Minneapolis Woolen Mills Co., Dept. 23, 612 1st ave. North, Minneapolis.

FARMERS DRY GOODS STORE, 1211 FIRST, Spokane, undersells them all on dry goods, notions, shoes, rubber footwear, bedding, household supplies, etc., because we're out of the high rent district. Mail us your orders.

SPECIAL—ONE-POUND TIN "SATISFACTION tobacco" and pipe for $1. Smoking, chewing tobacco, cigars, cigarettes and complete line of pipes. Wholesale and retail. Peter M. Jacoy, 3 Washington st., Spokane.

HONEY 53

EXTRACTED HONEY—1 60-LB. CAN, $7.50; two, $14.50, collect; 3 10-lb. pails, $5, prepaid, third zone. Wells D. Rose, Sunnyside, Wash.

HONEY—FRESH ALFALFA-SWEET CLOVER honey; one 60-lb. can, $7.50; two cans, $14.50. A. L. Traner, Touchet, Wash.

HONEY (Continued) 53

HONEY COOK BOOK, THREE DIMES, POSTpaid; saves high priced sugar. Finest flavored extracted honey, 120 pounds, $11.95 cash. Prompt acceptance. Clark Company, 245 Arcadia, Jerome, Idaho.

FINEST HONEY, FIVE POUNDS, $1; TEN pounds, $1.95, postpaid; sixty pounds, $7.50; two cans, $14.50; add transportation. Satisfaction guaranteed. Bancroft Apiaries, Hermiston, Ore.

KING CLOVER'S ALFALFA-SWEET CLOVER honey; 60-lb. can, $7.50; two cans, $14.50; 60-lb., prepaid, second zone, $8.29. King Clover, Sunnyside, Wash.

ALFALFA, SWEET CLOVER HONEY, PREpaid second zone, 3 10s, $5; 60 lbs., $8.30; two cans, $14.50, not prepaid. Harry Fisher, Prosser, Wash.

HAPPY HOME HONEY — ALFALFA AND clover; 60-lb. can, $7.50; two cans, $14.50; case six 10-lb. pails, $8.50. H. N. Paul, Mabton, Wash.

ALFALFA-SWEET CLOVER HONEY, 10-LB. pails, $1.45 f. o. b. Rigby, Idaho; quality guaranteed. MacDonald Co.

MISCELLANEOUS—FOR SALE 60

HOMESPUN TOBACCO—FIVE POUNDS chewing, $1.75; ten, $3; twenty, $5.25. Five pounds smoking, $1.25; ten, $2; twenty, $3.50. Send no money, pay when received. Pipe and recipe free. Kentucky Tobacco company, Paducah, Ky.

NATURAL LEAF TOBACCO—CHEWING, 5 lbs., $1.75; 10 lbs., $3; smoking, 5 lbs., $1.25; 10 lbs., $2. Pay when received. Pipe and recipe free. Farmers' Tobacco Union, D19, Paducah, Ky.

CANE FEED MOLASSES. WRITE A. A. LEWis, S151 Lincoln, Spokane.

SASH AND DOORS—O. B. WILLIAMS CO., 1943 First ave. So., Seattle. Chicken house sash, 20" wide by 25" high, 80c; a dozen different sizes in stock for immediate shipment. Skylights for chicken houses, 36"x40"; price, glazed, $2. This is the size recommended by the Western Washington experiment station. We carry them in stock for immediate shipment. Sash and doors for all purposes at lowest prices. All orders receive prompt attention. Our large illustrated catalog No. 35, showing full line of building material and built-in fixtures for the home, free on request. O. B. Williams Co., Established 1899.

PIPE—GET PARTICULARS ON OUR SPEcial flue pipe, 1¼, 1½ and 2 inch. Big saving on it. We also have all sizes second-hand and new standard pipe at low prices. We also save you on roofing, belting, pumps, engines, cables, etc. Alaska Junk Co., S120 Adams, Spokane, Wash.

TOBACCO — SELECT THREE-YEAR-OLD leaf; nature cured; 3 lbs. chewing, $1; 4 lbs. smoking, $1; 7 lbs., No. 2 smoking, $1. Pay for tobacco and postage when received. Farmers' Grange, Hawesville, Ky.

WALL BOARD—WRITE FOR SAMPLE OF Washington plaster wall board; won't warp, won't burn. Manufactured by Washington Building Products company, 6851 E. Marginal Way, Seattle, Wash.

NATURAL LEAF TOBACCO—5 LBS. CHEWing, $1.75; 10 lbs., $3; 5 lbs. smoking, $1.25; 10 lbs., $2. Pay when received; pipe and recipe free. Cooperative Farmers, Paducah, Kentucky.

TOBACCO — KENTUCKY'S PRIDE; EXTRA fine chewing; 10 pounds, $3; smoking, 10 pounds, $2; 20 pounds, $3.50. Farmers' Club, Mayfield, Ky.

ALL WOOL KNITTING YARN FOR SALE from manufacturer, 95c up per lb.; golf and plain socks. Free samples. H. A. Bartlett, Harmony, Maine.

MACHINERY—For Sale. 93

12-HORSE PORTABLE GAS ENGINE FOR sale or trade for cattle. A. E. Warsinske, Daisy, Wash.

AUTOMOBILES—FOR SALE 112

SEE CHEVROLET FIRST—NEW AND USED cars at prices that will surprise you; stop in or write Inland Empire Chevrolet Sales Corp., 916 2d ave., Spokane. Open evenings. Open Sunday.

AUTOS AND TRUCKS—WANTED. 113

TRADE—MARE, COLT, HORSE, BUGGY, FOR auto. F. W. Cobb, Friday Harbor, Wash.

AUTO ACCESSORIES AND PARTS 119

NEW AND USED AUTO PARTS, NEARLY all cars. Our low prices and prompt service will convince you. Money refunded if not satisfied. C. & D. Auto Salvage & Supply Co., 1904 Grand ave., Kansas City, Mo.

STOVE REPAIRING 128

WRITE MYER RUBENS, SPOKANE, ABOUT stove repairs, welding broken parts, nickel plating.

PETS—Dogs, Birds, Etc. 171

FIFTY PAIRS YEARLING ROLLER CANARies, fifteen dollars a pair. Mrs. J. Wellborn, Warren, Ore.

FOX HOUND PUPS, BEST BRED DOGS ON the coast. J. E. Bateman, Gales Creek, Ore.

WHITE COLLIE PUPPIES FOR CHRISTMAS delivery. Urbandale Farm, Oakley, Idaho.

RABBITS and HARES. 173

RABBITS, TOULOUSE GEESE HAVE MADE my living for 10 years. Prize winning blue Flemish Giants, New Zealand Reds, Himalayans, at utility prices. Agnes Brenner, R4, Box 49, Tacoma, Wash.

POULTRY—Baby Chicks 174

CERTIFIED WHITE LEGHORN QUALITY chicks from selected free-range, heavy-laying, utility hens, mated to double pedigree cockerels with authentic trapnest records. Our breeding flocks are inspected and accredited by the Sonoma county farm bureau. Safe arrival and full count of live, vigorous chicks guaranteed. Booking orders now for the spring season of 1924 delivery. Send for catalogue and attractive prices. Must Hatch Incubator Co., Inc., the world's largest electric hatchery, 445 Seventh st., Petaluma, Cal.

"FRESHLAID" WHITE LEGHORN CHICKS for 1924 will produce results. Thirteen years hatching of real chicks. High record males, vigorous, mature females, unlimited free range, a chick producing proposition hard to beat. We send out chicks that will make you a permanent customer. Discount on large orders. World's largest electric incubator. Free catalog. Freshlaid Farm, Colfax, Wash.

ACCREDITED CHICKS — ALL OUR CHICKS for 1924 will be from accredited flocks mated with certified cockerels sired by hens with 225-egg record. A limited number of chicks from cockerel sired by our $1000 champion cockerel and our world's record pen of hens. Write for special prices for those who order early. Queen Hatchery, 1430 1st ave., Seattle, Wash.

"HENACRES" BABY CHICKS FOR 1924—Booking orders now. Early orders get delivery when wanted. We never have enough February, March or April chicks to meet the demand. Strictly high grade chicks at common chick cost. $22 per 100; $200 per 1000. Free catalog. "Henacres," Box A, Prosser, Wash.

BABY CHICKS—YOU GET THE BEST FROM successful breeders, using nothing but eggs from their own trapnested stock. Order them from the Carnation W. Leghorn Farms. My 16 years' experience in breeding enables me to give you entire satsifaction. Ernest W. Raush, Carnation Poultry Farms, Kent, Wash.

WHY DELAY?—PLACE YOUR ORDER FOR 1924 chicks with the White Hatchery, the hatchery with a reputation for good chicks. Safe arrival, full count guaranteed Member Accredited Hatcheries, Sonoma county, "A" and "AA" stock. Price right. Send for catalog. White Hatchery, Petaluma, Calif.

S. C. WHITE LEGHORN CHICKS. 100 PER cent live, delivery guaranteed; 20 per cent books order. 100, $16; 500, $75; 1000, $140, postpaid; hatch only eggs from my own flock; no lights; trap records to 292. Absolutely only one grade. Catalog free. Roy S. Hands, B614, Cottage Grove, Ore.

WHITE LEGHORN BABY CHIX FROM flocks mated to males having sire's dam record of 240 to 297 eggs per year. Full particulars and interesting literature on request. We are accredited by Sonoma county farm bureau. The Pioneer Hatchery, 422 Sixth street, Petaluma, Cal.

TRAPNESTED WHITE LEGHORNS, HOLLYwood and O. A. C. stock. We offer 75,000 chicks, 25,000 hatching eggs, 5000 pullets. 11 years at the business. Satisfaction guaranteed. Booking orders now. Send for price list. Inwood Leghorn Farm, Corvallis, Ore.

BABY CHIX—S. C. W. LEGHORNS; VIGORous, heavy laying hens, mated to exp. station cockerels from 250 to 285 egg dams; all free range stock; $20 per hundred. Member Washington Accredited Hatchery association. L. G. Swinney, Spanaway, Wash.

PREPAID—WHITE LEGHORN CHICKS, OREgon Agricultural college stock; the famous egg producers; $16 per 100; prices on quantities. Only 10 per cent deposit. Safe arrival strong, husky chicks guaranteed. Russell Poultry Yards, Corvallis, Ore.

BEST QUALITY CHICKS AT MONEY-SAVING prices—100 per cent live delivery guaranteed. White Leghorns, Reds, Barred Rocks, White Rocks, Black Minorcas, Anconas. Write today for price list. Salem Chickeries, Salem, Ore.

LARGE, ENGLISH WHITE LEGHORNS, WINter laying strain; bred to lay, and sure do. Chicks, 100, $18; choice cockerels and yearling cocks, $5 each. Mrs. M. L. Russell, Route 3, Meridian, Idaho.

ANCONAS—BACKED BY OFFICIAL CONTEST records and splendid list of winnings in the west's leading shows. Booking chick and egg orders. Oscar Dunlap, Junction City, Ore.

SPECIAL PRICES ON GUARANTEED DAYold pullets; fall and winter delivery. Write for particulars. Eureka Hatchery, Petaluma, Cal.

SUPERIOR WHITE LEGHORN BABY CHICKS at very low prices for 1924 delivery. Write the Rio Linda Hatchery, Rio Linda, Calif.

BABY CHIX FROM TANCRED AND EXPERIment station strain W. Leghorns. Wax's Poultry Farm, Kent, Wash.

Turkeys, Ducks, Geese.

MAMMOTH BRONZE TURKEYS FROM NEW eastern stock from Massachusetts and Missouri. Toms, $10 to $25; pullets, $8 to $10. Mrs. H. D. Moore, R1, Box 21, Hubbard, Ore.

PURE MAMMOTH BRONZE TURKEYS; choice breeding stock. Toms, $10; hens, $6; until December 1st. Pure Toulouse geese. Mrs. F. Crane, Hagerman, Idaho.

MAMMOTH BRONZE TURKEYS—LARGE boned, well marked young hens and toms, $6 and $10 each; May hatched; toms, 24 lbs. Mrs. Henry Hose, Sterling, Idaho.

PRIZE WINNING MAMMOTH BRONZE TURkeys; large boned and beautifully bronzed. Hens, $10 and up; toms, $15 and up. Urton's Farm, Genou, Mont.

(Continued on the following page.)

POULTRY—Turkeys, Ducks, Geese (Cont'd) 174

MAMMOTH BRONZE TURKEY TOMS; PERfection strain; one 18 months old, an extra fine bird, price $10; several young toms of large size, $6 to $8. T. J. Goodenough, Hatton, Wn.

PUREBRED MAMMOTH BRONZE TURKEYS, prize winning stock. Hens, $8 to 10; toms, $10 to $15. Order early. Mrs. K. Tontz, Beaverton, Ore.

GIANT BRONZE TURKEYS FROM PACIFIC International winning strain; circular free. Herbert Stoneberg, Route "B," Eugene, Ore.

MAMMOTH BRONZE TURKEYS—CHOICE OF 500; sires, 45 lbs.; hens, $6 to $8; toms, $10 to $20. Harry Smith, Coupeville, Wash.

MAMMOTH BRONZE TOMS FROM PARENTS with four blue ribbons, $10. John R. Montgomery, Route 4, Bellingham, Wash.

22 YEARS A SPECIALTY BREEDER OF M. B. turkeys; prize-winning stock. Mrs. Frank Browning, R. 1, Nampa, Idaho.

MAMMOTH BRONZE TURKEYS, LARGE, well developed toms and hens. Joseph M. Loomis, Cherry Grove, Ore.

MAMMOTH BRONZE TURKEYS, PRIZE winners; unrelated stock. Mrs. Leo Coffin, Route 1, Eagle, Idaho.

TURKEYS — THOROUGHBRED GIANT Bronze of real merit. J. Lewis Johnson, Box 69, Eugene, Ore.

GIANT STRAIN PUREBRED MAMMOTH Bronze turkeys. Mrs. C. R. Lowery, Route 2, Boise, Idaho.

PUREBRED BRONZE TURKEYS, MAMMOTH Toulouse geese. Emma Moehnke, Beavercreek, Ore.

PUREBRED BOURBON RED TURKEYS; hardy stock. Napton & Napton, Homedale, Idaho.

THOROUGHBRED BRONZE TURKEYS—Toms, $10; hens, $7. Cora Burroughs, Ione, Ore.

MAMMOTH BRONZE TURKEY TOMS, $8. Amanda Erb, Hubbard, Ore., R2, Box 86.

Miscellaneous Poultry.

CAN FURNISH WHITE GUINEA FOWL, $2.50 each, either sex; peafowl, French Houdan chickens and eggs; Bourbon Red and White Holland turkeys. Nothing on premises. Write B. Hocking, 1370 E. Harrison, Portland, Ore.

PUREBRED S. C. RHODE ISLAND REDS, pullets and cockerels; beautiful color; good laying strain, $3, $5 and $10 each. Send your order now. Mrs. L. Wham, Double Diamond Ranch, Omak, Wash.

COCKERELS FROM HENS TRAPPED twelve months; records of 240 to 265 eggs, and mated from dams of 285 to 300 and 300 egg grand dams; elegant birds, $4. Mrs. Chas. Milne, Hubbard, Ore.

PUREBRED S. C. RHODE ISLAND RED cockerels, from an exhibition, winter laying strain; flock averaged 61 per cent through the winter months; dark red in color; $5. Mrs. Earl Day, Colfax, Wash.

PULLETS—CHOICE W. L. PULLETS, APRIL hatch; husky, free range birds of Hollywood strain; heavy laying stock; ready for the laying pens; $1.85 each. Pulletpens, Prosser, Wash.

HUNT'S BARRED ROCKS, UTILITY COCKerels from the best egg producers, Imperial Ringlets, both matings. Prices right, satisfaction guaranteed. W. A. Hunt, Lebanon, Ore.

S. C. RHODE ISLAND RED COCKERELS; fine, large birds; beautiful color; Rainey strain. Special price, $5. Mrs. Archie Hatten, Creston, Wash.

APRIL HATCHED ROSE COMB AND SINGLE Comb Black Minorca cockerels; bred for exhibition and utility. Oakley Durham, Polson, Mont.

PUREBRED S. C. WHITE MINORCA COCKerels, also White Rock cockerels; price $2 each. Mrs. Arthur Schmidt, Charlo, Mont.

FOR SALE—PRIZEWINNING WHITE WYANdotte and White Minorca cockerels. Roy Canary, 2201 Highland, Everett, Wash.

SINGLE COMB REDS, SHOW BIRDS. BREEDers write for prices. Peter Jessen, Harbor Heights, Magnolia Beach, Wash.

USED INCUBATORS AND BROODERS, Queens, Cyphers, St. Helens. Hi-Quality Poultry Ranch, Yelm, Wash.

FINE RINGLET BARRED ROCK COCKERels; sire from E. B. Thompson, N. Y., $4. Mrs. Robert Munsell, Condon, Ore.

S. C. BROWN LEGHORNS, PEDIGREED stock. Write your wants to E. H. Rosenkranz, Colfax, Wash.

VERY FINE YOUNG LIGHT BRAHMAS FOR sale, $5 to $15; some at $1.50. Adam Schafer, Hillyard, Wash.

ROSE COMB BLACK MINORCAS—COCKERels, $2; pullets, $1; hens, $2. Mrs. Carley, Carley, Wash.

TO MAKE ROOM, WILL SACRIFICE ROCK and Leghorn breeders. D. W. Allen, Laconner, Wash.

PRINTING FOR POULTRY MEN. EMPIRE-Pacific Printing Co., Auditorium bldg., Spokane.

PUREBRED BUFF ORPINGTON AND SILVER Wyandotte cockerels. Mrs. Earl Davis, Elk, Wash.

FOR SALE—PUREBRED BROWN LEGHORN cockerels. B. H. Campbell, Freewater, Ore.

FULL BLOOD ROUEN DRAKES, $2.50 EACH. Charles Tipler, Farmington, Wash.

PRIZE WINNING BARRED ROCK COCKERels. C. H. Murrey, Medford, Ore.

WHITE MINORCA COCKERELS FOR SALE. G. W. Baun, Monmouth, Ore.

POULTRY AND LIVE STOCK WANTED 175

WE GUARANTEE TO PAY THE HIGHEST market price for your poultry and live stock. Owing to the constant changes in the market we are unable to quote prices in this paper from week to week. We will furnish tags and prices when you are ready to ship. Write us what you have to sell. Prompt returns. John Lewis & Co., Spokane, Wash.

DOLLARS FOR YOUR EGGS—WE PAY THE top market prices for your eggs and poultry. Daily cash remittances. McClintock-Trunkey Co., produce department, Spokane.

WE PAY TOP PRICES FOR YOUR LIVE OR dressed veal, hogs and poultry. Your check by return mail. Shipping tags on request. M. & J. Packing Co., Spokane.

TOP PRICES PAID FOR CREAM, EGGS, poultry, turkeys, geese, ducks. Inland Products company, Second at Cedar, Dept. E, Spokane, Wash.

LIVE POULTRY WANTED — WE REMIT promptly at market prices. Commercial Creamery Co., 1327½ Railroad, Spokane, Wash.

SHIP YOUR POULTRY AND EGGS TO THE Washington Meat & Poultry, Spokane, Wash.

FARMERS' WANT ADS

This is the farmers' "want," "sale" and "exchange" department for small advertisements of farmers, including live stock and poultry.

Advertising rates for ads running 1 to 3 times, 10c per word per insertion, with a special rate to Farmer subscribers, as follows: Ads running 4 to 12 times, 9c per word per insertion; ads running 13 times or more, 8c per word per insertion.

All commercial and land advertising, 10 cents per word per insertion. Open also to nonsubscribers.

In using these columns advertisers must observe (1) No advertisement will be accepted for less than $1.00 per insertion. (2) Every word, number and initial, including name and address, must be paid for. (3) New advertisements, changes of copy or cancellations must reach general office, Spokane, Wash., 10 days in advance of publication date. (4) Cash must accompany order.

Above rates include insertion in The Washington Farmer, The Idaho Farmer and The Oregon Farmer, which constitute the Pacific Northwest Farm Trio, 46 Review building, Spokane, Wash.

LIVE STOCK 177

FOR SALE—ALL REGISTERED STOCK; twenty Shorthorn bred cows and heifers, four Shorthorn bulls; Poland China boars and gilts, Chester White sows, to farrow soon; O. I. C. boars of serviceable age. A few gilts, all at farmers' prices, to sell quick. Elton Webb, Halfway, Ore.

CALVES, CALVES—HEIFER CALVES AT $6.50 from the famous Tillamook dairy herds. Jersey, Guernsey, Holstein, Durham. Don't delay. Supply limited. Order now. Smith, "The Calf Man," Tillamook, Ore.

REGISTERED SHORTHORN BULLS OF quality and breeding; red, white or roan; polled or horned; of serviceable age or younger; priced to sell. Wm. Mulhall, Buena, Yakima county, Wash.

FOR SALE—FIVE HEAD REGISTERED Guernsey bull calves, nicely marked, from high producing cows. Priced at $50 each for quick sale. Kineth Farms, Coupeville, Wash.

DUROC PIGS, $15 EACH; REGISTERED Great Orion Sensation breeding, either sex. Order now, they won't last. Marella Farm, Hagerman, Idaho.

MAY ROSE PUREBRED GUERNSEYS, BOTH sexes; calves and bred heifers, at prices farmers can pay. Nobles Bros., Bow, Wash.

SPOTTED POLANDS—HOGS ARE AT THE bottom, now is the time to buy purebreds. Howard Tucker, Route 1, Boise, Idaho.

FOR SALE — CHESTER WHITE BOARS. Write for prices. Booking orders for bred gilts. H. S. Curtis, Palouse, Wash.

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BRED HAMPSHIRE EWES AT BARGAIN prices, also twenty ewe lambs. J. G. S. Hubbard & Sons, Monroe, Ore.

CHOICE DUROC JERSEY SERVICE BOARS, open and bred gilts; priced to sell. Geo. De Bok, Oregon City, Ore.

MILK GOATS—REGISTERED SAANENS AT prices that will please you. Ferd. H. Dietzel, Portland, Ore.

WANTED—25 TO 50 GRADE HOLSTEINS, soon to freshen; good cows. F. C. Holibaugh, Clatskanie, Ore.

DUROC JERSEY PIGS, $5 EACH. MAMMOTH Toulouse geese, $6 each. W. D. Good, Mt. Vernon, Wash.

FOR SALE—9 REGISTERED GUERNSEYS; 2 bulls and 7 females. Robert McClay, R8, Salem, Ore.

REG. SHROPSHIRE AND HAMPSHIRE rams. Write McK, Edwards, Valley, Wash.

PUREBRED CHESTER WHITE SHOATS FOR sale, $15 each. Meryl Davis, Elberton, Wash.

HEREFORD BULLS FOR SALE OR EXchange. Frank Roberts, Westport, Wash.

MILK GOATS, BRED DOES, $10 TO $25. Fannie Branson, Dallas, Ore.

HAY FOR SALE 200

ALFALFA, GRAIN HAY. TIMOTHY AND straw; guaranteed quality; prompt shipment. Prices upon application. Richard Nyman, Walla Walla, Wash.

HARNESS and SADDLERY 189

SEND FOR FREE HARNESS AND SADDLE catalog today; cut out the middleman, buy direct from the manufacturer. Lowest prices in the west; satisfaction guaranteed. Established 1881. Write Pierce Harness Co., Dept. T, Spokane, Wash.

HOTELS 306

WHITE'S HOTEL AND RESTAURANT, ROOMS $1 and up; special weekly rates. Stevens and Sprague. Right on the corner; 5 minutes from all depots. In the heart of the business district, Spokane.

JOB PRINTING 372

CHRISTMAS AND NEW YEAR'S CARDS, LETter heads, business cards, wedding announcements and invitations, circulars, sales bills and other kinds of printing. Peterson & Ross Printers, 815 Main ave., Spokane, Wash.

WEDDING ANNOUNCEMENTS AND INVItations, catalogs, booklets, high school annuals, letter heads, envelopes, cards, butter wrappers, etc. Union Printing Co., 412 First ave., Spokane, Wash.

CLEANING, DYEING, Etc. 420

FRENCH DRY CLEANING BY PARCEL post. Ladies' and gents' suits, furs, hats, etc., prompt service. Address City Dye Works (Dept. A), E422 Sprague ave., Spokane, Wash.

TANNING 425

WE WILL TAN YOUR COW OR HORSE HIDE for robes or coats, and guarantee our work. We are custom tanners, manufacturers and taxidermists. Write for prices. Spokane Fur Tanning Co., 7 Pine st., Spokane.

ANY KIND OF HIDE TANNED WITH HAIR on, or for leather. Fur and taxidermy work done to order. M. R. Mohr Co., 321 Sprague, Spokane, Wash.

TAXIDERMISTS 426

DEER HEADS AND BIRDS MOUNTED, HIDES tanned and made into rugs and robes. Withers Bros., 913 Sprague ave., Spokane.

KODAK FILM DEVELOPING 472

FREE ENLARGEMENT WITH 75C ORDER high gloss print. Spokane Film Co.

FILMS DEVELOPED FREE—KODO, THE PIcture King, S15 Stevens, Spokane.

MATERNITY HOMES 497

MATERNITY HOSPITAL; STRICTLY PRIvate; doctor in attendance; prices reasonable. Mrs. Elizabeth Peel, matron, W1324 Broadway, Spokane.

BUILDING MATERIAL 588

TACOMA SASH & DOOR CO., 15TH AND Dock, Tacoma, Wash. Direct selling means direct saving. These prices demonstrate: Chicken house sash, 20"x23," 75c; other sizes in stock. Chicken house skylights, 36"x40," glazed, $1.95; western Washington experiment station recommends this size. Sash and doors correspondingly low priced. Prompt delivery, careful filling of orders guaranteed. Catalog No. 1 is yours for the asking.

TURNS PLASTERING INTO PLAY—PERFECtion plaster wall board can be nailed on just like lumber, and makes a perfect plaster job. Western Wallboard Co., Seattle, Wash.

SEEDS 620

RECLEANED TIMOTHY-ALSIKE, GROWN mixed, for wet lands, 11c; No. one alsike-clover, 23c; strong germination. Meador, Norwood, Idaho.

HUNGARIAN ..ND PURPLE VETCH SEED, 6c pound. Farm Bureau Cooperative Exchange, Roseburg, Ore.

NURSERY STOCK 621

RELIABLE TREES AND PLANTS—PRUNES, apples, pear, cherry, peach, apricot, grafted walnut and filbert trees, gooseberries, currants, etc., at attractive prices for early orders. Send your want list today for quotations. Benedict Nursery Co., 185 E. 87th st. N., Portland, Ore.

NURSERY STOCK, ALL KINDS—GRAFTED walnuts, filberts, prunes, peach, apple, pear, cherry, etc. Berries, etc. We sell direct—we save you money—we supply the best. Send right now for catalog. 34 years in business. Carlton Nursery Co., Carlton, Ore.

IMPROVED FRENCH PRUNES, ITALIAN prunes, apple, cherry, pear, peach, franquette grafted walnut and filbert trees. Order direct and save agents' profit. Fruitland Nursery, 161 South 14th st., Salem, Ore.

TREES—NOW BOOKING MAIL ORDERS AT reduced prices for limited time only. Apples, pears, peaches, nut trees, prunes, cherry, small fruits, etc. Live agents wanted. Lafayette Nursery Co., Lafayette, Ore.

PLANT ISLAND BELLE GRAPES, THE BEST commercial grapes of the northwest. Write for prices and directions how to grow them profitably. E. H. Urban, Box 777, Bremerton, Wash.

ITALIAN PRUNE TREES, 4 TO 6 FEET, ONE year old, $12.50 per 100; 3 to 4 feet, $7 per 100. All kinds of fruit trees at reduced prices. Powell Valley Nursery, R. 1, Portland, Ore.

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TREES—CHERRY, PEAR, PRUNE, APPLE, walnut, filbert. Mazzard cherry seedlings. Prices based on production costs only. Homer R. Brixey, McMinnville, Ore.

NURSERY STOCK SOLD DIRECT TO PLANTers; apple trees a specialty; no agents employed; can save you money. Write for prices. Lawson Nursery, Gates, Ore.

FILBERT AND WALNUT TREES, THE BEST paying crops for the northwest. Write for prices on the different grades. Villa Nurseries, Route 1, Portland, Ore.

STRAWBERRY PLANTS—SIXTEEN VARIEties. Asparagus and Munger black caps. Prices low. Brigg's Fruit Ranch, Olympia, Wn.

FARM LANDS FOR SALE 651

PROFITABLE FARMING — FERTILE SOIL, ample moisture, favorable crop growing climate, convenient market, low priced land are conditions that make profitable farming possible. These conditions are found in the Lethbridge northern irrigation district in Sunny Southern Alberta, Canada, where the bringing of 105,000 acres of rich land under irrigation in a well settled district is providing opportunities for double the number of people now there to own paying farms. Water available this year, low prices and favorable terms make starting easy. Investigate this first. Write for descriptive booklet to the Irrigation Council of Alberta, 12 Provincial building, Lethbridge, Alberta, Canada.

5000 ACRES, SMALL TRACTS; NEWAUKUM river valley lands; easy terms; employment. Big mill and timber companies are selling their large holdings in this well known and fertile valley, at Chehalis, Washington, on most advantageous terms and conditions, where settlers are assured steady employment, good wages and live at home. Positively all high type agricultural land; level bench and valley. No gravel. No mountains. No irrigation required. Already well settled community; good schools and markets. 20 acres or more, $15 to $50. Terms to suit purchaser. Graham Land Company, 1008 American Bank bldg., Seattle.

WILL SACRIFICE FINE 600-ACRE RANCH at Yelm, Washington; 280 under irrigation; land adjoining selling up to $100 per acre; all stock, machinery and equipment included; house, barn, goat shed, 2 large chicken houses and other outbuildings; worth at least $36,000; will take $20,000; retiring, reason for selling; don't fail to at least investigate. C. W. Boost, owner, 606 Grand ave., Portland.

20 ACRES CULTIVATED VALLEY LAND; 3½ acres berries, small house, large chicken house, all outbuildings; a real berry and poultry ranch; $1600; terms. 80 acres fine land; 45 cultivated, balance pastured; 8-room modern house, all outbuildings; plenty fruit; 8 cows, some young stock; fine team, all machinery. A real farm; $7800; terms. Chas. D. Edwards Co., Centralia, Wash.

WE HAVE 160 ACRES IN THE YAKIMA valley; 60 acres in alfalfa; a fine stock and dairy ranch. Price $150 per acre; a small payment down will handle. This land is under the government ditch and very productive. Water rent $1 per acre per year. Lincoln Trust Company, Spokane, Wash.

BIG LUMBER COMPANY LAND SALE—IN Skagit county; 40-acre tracts, $1400; $200 cash, balance easy. Lots work for the settler. Splendid district, roads, schools, towns. Information free. H. C. Peters, 726 3d ave., Seattle.

FARM LANDS FOR SALE (Continued) 651

CUTOVER LANDS, EASY TO CLEAR; $8 TO $20 per acre; 25 miles north of Spokane; on hard surfaced highway; Great Northern and Milwaukee railways; excellent opportunity for dairying and stock raising with Spokane markets and creamery near at hand. Will help the man who will live upon the land and agree to clear a part each year by giving lumber to help start his buildings, and a purebred Jersey bull to groups of farmers. Interest and payments low. Write Milan Farms Development company, Dept. T, Old National Bank bldg., Spokane, Wash.

CLEARED MEADOW LAND; FINE FOR POtatoes, poultry, berries; few feet to paved highway; near several thriving towns; half mile to railroad, store, sawmill, schools; $100 per acre in 5, 10 and 20 acre tracts. Easy down payment, balance long time, 6 per cent. The finest land in Western Washington at the price. Full information from Carter, MacDonald & Miller, 208 Columbia st., Seattle, Wash.

HARRINGTON DISTRICT — 540 ACRES good wheat land; 100 acres pasture; creek; good buildings; macadamized road; two miles from Harrington; main line Great Northern; good schools, churches, stores; small payment will handle, balance easy terms; bargain; no trades. Owner, W. E. Shrader, Harrington, Wn.

319-ACRE WHEAT RANCH FOR SALE—ALL in cultivation; one-half summer fallow; in winter wheat; fenced and cross-fenced; hog-tight; good seven-room plastered house and good outbuildings. This is a real farm. Price $90 per acre; best of terms. Albert Reiha, Reardan, Wash., owner.

FOR SALE—9 1-3 ACRES, INCLUDING 7 acres raspberries, family orchard, 6-room house, barn, chicken house, garage, city water, gas, telephone; ½ mile to graded school; located 1 mile east of Portland city limits. J. F. Jaeger, Route 1, Box 70, Portland, Ore., owner.

BIG OPENING SALE OF YAKIMA VALLEY farm land, under an assessed state and government approved irrigation project; best, deep soil; close to town and good roads. Price $25 per acre and up. Very easy terms. Western Lands, Inc., owners, 918 Green bldg., Seattle.

WE HAVE 204 ACRES, 3½ MILES N. E. OF Cheney; very fine land; we will sell on small payment down, long time on balance. The price is $75 per acre. It is convenient to town, good schools, good roads and a good place to live. Lincoln Trust Co., Spokane, Wash.

ROGUE RIVER VALLEY PEARS WIN OUT again this year; fine return. We have some good orchards. Write for data. Rogue River Land Company, Medford, Ore.

SELL YOUR PROPERTY QUICKLY FOR cash; no matter where located. Particulars free. Real Estate Salesman company, 501 Brownell, Lincoln, Neb.

1280 ACRES WHEAT LAND; GOOD BUILDings; ample water; for $58,000; good terms; write for particulars. Bessie Gross, Rural 6, Walla Walla, Wash.

LINCOLN CO. WHEAT LANDS, $20 ACRE; 1-10 cash, long time on balance; will consider crop payments. Chas. V. Wadham, W2404 2d ave., Spokane.

FAILING HEALTH COMPELS ME TO SELL 5-acre poultry ranch; fully equipped; modern improvements. C. Dimmick, Gig Harbor, Wash.

BARGAINS IN YAKIMA VALLEY LANDS. A. B. Capps, Grandview, Wash.

FARM LANDS—Wanted 654

NO COMMISSION — SELL YOUR FARM through Washington Farm Bureau Exchange, represented in 45 states. Lists of farms for sale by owners mailed free. 312 Lindelle bldg., Spokane, Wash.

HAVE INQUIRIES FOR NORTHWESTERN farms, spring delivery. Describe fully, state lowest price. R. A. McNown, 310 Wilkinson bldg., Omaha, Neb.

IDAHO, WASHINGTON AND OREGON LANDS bought, sold and exchanged. Describe fully, stating price. David P. Weir, Spirit Lake, Idaho.

WANT TO HEAR FROM OWNERS HAVING farm for sale; give particulars and lowest price. John J. Black, Chippewa Falls, Wis.

WE HAVE BUYERS FOR SEVERAL FAIR priced farms and ranches. Central Land Bureau, New Franklin, Mo.

FARM WANTED FROM OWNER ONLY—SEND full particulars. Ray Smith, Maplewood, Mo.

FARM LANDS—Wanted to Rent 660

WANTED—TO RENT, LEASE OR WORK ON a salary, a farm with implements and horses and seed; term of year. L. M. Boyer, Crabtree, Ore.

IRRIGATED LANDS—For Sale 663

OPENING OF THE NEW WHITESTONE IRrigation district—8000 acres of irrigable land. This project was constructed under the direction of the Department of Observation and Development of the State of Washington. Adapted for diversified farming, livestock, dairying, poultry and fruit growing. A picturesque location in the foothills of the Cascade range, Okanogan county, Washington. Write for free picture folder, giving full details. E. C. Leedy, general agricultural development agent, Great Northern railway, Dept. 109, St. Paul, Minn.

FARMERS AND STOCK MEN—THE COLUMbia irrigation district has several tracts of irrigated lands of various sizes, in the famous Kennewick valley, with plentiful water supply. The district wishes to get these tracts into the hands of good farmers who will put them to work, and will make very low prices and long terms to such men. No speculators need apply. One tract 580 acres, especialy suitable for stock or dairy ranch. Write the secretary, Columbia Irrigation District, Kennewick, Wash.

THIS FARM IS SHOWING A GOOD PROFIT—$7000 income this year; 131 acres; close to Yakima; good water rights; excellent buildings; well equipped; good dairy herd. Good terms. Western Lands, Inc., Owners, 918 Green building, Seattle.

72-ACRE IRRIGATED FARM; YAKIMA VALley; ½ mile from Outlook; paved highway, schools, churches; thirty acres alfalfa, rest general farming; fine fruit land; $175 acre; terms. W. C. Wright, Outlook, Wash.

FIVE ACRES, UNDER IRRIGATION; JUST outside city limits; equipped for poultry; fine for alfalfa, clover or berries; on main road; daily mail. Geo. A. Barden, Grants Pass, Ore.

FOR SALE OR EXCHANGE 702

OKLAHOMA, GARVIN COUNTY, 220-A. FARM; improvements, 7-room house, two large barns, cribs, double garage, two wells, two large ponds; crops, alfalfa, corn, cotton; 4 mi. nearest town; good roads, schools, neighbors; rural mail, phone; value $16,000, will sell or trade for equal value, Washington or Oregon. Frank Darst, Wynnewood, Okla.

DANDY LITTLE FRUIT, DAIRY AND CHICKen farm; 9 miles from Spokane; equipped and making money. Poor health compels me to sell or trade Berrydale Farm, Marshall Wn.

Arms and the Floweret--*By Julia M. Martin*

TWICE, at bidding of mighty Canonicus, a Narragansett Indian runner had sped northward and, fleet and noiseless, had crept close to the tiny Pilgrim settlement at Patuxet. That was the Indian name for the spot we now call Plymouth.

Once he had been sent there when, through an excited Pocasset, the red men around Narragansett bay first learned that another ship was lying off Patuxet.

"These children of other skies, O brave Canonicus," had said the Pocasset warrior, "come not like those who have been there in ships before. These, when they go upon the land, wear not coverings of fur, but somber garments and strange, tall hats. They worship the life-giving soil, for I have seen them bow knee to the ground and murmur in unison. They linger strangely long upon the coast. And, yet more wondrous, O chief, they are not all males, as were the race who came before, but bring with them women and little ones. On the tall trees at Patuxet they have cut down more than the previous men cut, who stood one upright on their ship. Several of these latter men have stayed all night on the shore. Our people think, O chief, they mean not soon to depart."

"You will see," said grim Canonicus, smiling. "These pale men we have seen ere now. They are not children of the land, but dwell in their great, winged ships, and linger never long in any spot."

Nevertheless, Canonicus had straightway sent his runner to the shores on the eastward. And the Indian had returned with a strange tale.

"It is even as the Pocasset said, O chief. They who have come by the sea will remain, for out of the ship they have brought their goods, which are strange and wonderful; and, while I watched, the ship unfolded its great wings and departed. On the shore, methought, remained more than 50 of the pale people. Also I marked that none of the women departed. There were those among them who wept as the ship too wings. I counted nine dwellings, cunningly contrived, which they who remain have built for themselves. Surely, O chief, the Pocasset spoke truth. These men will bide in the land."

"The pale-faced people," replied Canonicus, "are of a flitting nature. If, as the Pocasset said, there was pestilence on the ship, 'tis likely they take refuge but for a season on shore. The spring will see them embark and sail away."

But, late in the colony's first spring at Plymouth, Narragansett braves had encountered another Pocasset, bursting with news. The pale people still lingered at Patuxet. And Canonicus again had sent his runner.

The man returned next day. "They have planted corn, O Canonicus, and yet other seeds that we know not of, for sprouting green I saw that was like none other. Also they have taken among themselves the one surviving Patuxet, the man Squanto, that once voyaged over the big east waters with such white men as these; and Squanto shows them the arts of our race, as where the game is to be had, and when to plant, and how to enrich the soil with herring fish. The white men are of a strange nature, truly, for they busy themselves not only at planting time, or when there is game or fish to be had, but at all seasons. And—I had need to laugh mightily, O chief, for not the women, but men, toiled in the corn field."

Greatly Canonicus marveled over these things, but more when, at the coming of winter, a Wampanoag told him, "There came yet another ship there, and departed; yet they went not away." The Narragansett's brow blackened at that, and grew darker still as the Wampanoag continued, "Ninety of our chiefest men have met with them around the board and feasted." And when, in the spring, Canonicus' warriors began to believe the white strangers men of the land indeed, he felt they must be frightened off the coast, lest Narragansett men should say, "Our chieftain prophecies foolishly."

And so, once more calling the runner, he bade him take from his lodgepole a rattlesnake skin that hung there. This, when the man had brought it, Canonicus filled with quivers and returned to him.

"Take that," he said, "to the sojourning folk at Patuxet and leave it before their chief."

And again the runner sped. This time he carried back to the Narragansets a sign from the pale chief. They saw it in his hand, as he returned. What would it be? A token of anxious, peaceable men? For how beside could a handful of pale-faced men, clumsy in woodland travel, answer the Narragansett and his 2000 warriors?

But, when the token lay before Canonicus, he saw that it was the rattlesnake skin, returned to him. Curious, though, were its new contents. From a respectful distance, Canonicus examined the black pebbles it held, pebbles that were round with the perfection of things magic.

"What saw you the pale-faces doing with such as these?" he demanded.

"Sire, they are the food of the loud-speaking firestick."

Blanching, Canonicus backed away from the bullet-crammed snakeskin. From the Pocassets, from the Wampanoags, he had heard tales of the firestick, at whose very speaking things of the wild fell dead.

"Let it not stay here, then—it is thing of evil. Hasten and bear it back to the lord of the firestick!"

For a time the Narragansett chief had little more to say concerning the men at Patuxet. Then came word that the pale-faces were building around their field, their houses and even the hill behind the field, a good, strong stockade. That news affected very differently Canonicus and his warriors. "They are men of deep counsels," said the braves. "It is best we live at peace with them." But Canonicus heard with a grim satisfaction of that stockade. "They fear us, then," he said. Also it waked in him a strong impulse to defy them. And, though he said naught then to his awed warriors, he laid deep plans within himself, resolving he would make true his prediction, and white men should not dwell on the Massachusetts shore.

"Let them trade with our brothers by the eastern shore, if they will," he said, "but let them not wall any lands about, as if they would say, 'These are ours.' Let them beware!"

And he resolved to closely watch the white men on the east. Also, day by day, thoughts of carnage grew more vivid in his savage mind. Steadily he advanced his tribe in warlike arts, looking toward extinction of the white man.

It was early in the second September of the Pilgrim folk on the Massachusetts coast that Canonicus had his next report of progress at Patuxet. No vital change had been, it appeared, in the settlers' condition. "I marked," said the fleet Narragansett, "that many were lean, and toiled as if they were feeble, both men and women."

The eyes of Canonicus gleamed.

"Stranger and stranger appear the ways of these people," went on the runner. "As the sunshine wanes, the women go often into the woods to harvest herbs, even as do our own. There they take of the sassafras bark, but also of roots, and many that have no virtue, either as food or in healing. I could not but laugh, that they should pass by so many herbs that are food and pause to gather those that are neither food nor balm. They stooped often to dig for the arbutus, the violet and for roots of climbing vines that bear no fruits for man, but spend themselves in sterile bloom. I met Squanto, their Patuxet man—for from their clearing—and he told me the white women search for the roots of these things, to plant them about their dwellings. I asked of him what powers lurk in such herbs, but he made reply, 'I know not. Solely they do it because they love such herbs.' I said nothing, yet thought, 'Ha, Squanto, a Narragansett looks deeper than you!' And when he had gone his way I returned to their tall stockade, even before the sun rose. By the stream—so there would be no tracks—I crept upon their walled-in lands at the side where stand their dwellings. Boldly, O chief, did I peep over the stout, high fences that hem their houses about, each in little space. And there I saw after what manner they toil, these pale-faced women."

He laughed.

"Some had taken many of such flowering herbs and had set them around their houses in cunning device. I marked the tall-growing honeysuckle, begininng to run upon thongs by their doorways; the purple thistle, the goldenrod and the yellow-eyed white daisy were full in bloom. Even the trailing arbutus they had brought, to grow reluctant within their palings; and violet leaves I saw in tidy rows beneath their eaves, newly planted. 'Surely,' I said, 'there are virtues in these herbs that white man knows of, and by knowledge more than ours he is strong. I will wait and see what I shall see.'"

The runner paused for a deliberate drink from the stream, and the warriors waited, thinking a tale would follow.

"As the sun came up, and smoke began to ascend from the cunning smoke-vents over their houses, I dropped behind the palings and watched at a knothole. Presently came forth the lord of the dwelling where I lurked, and began to cleave firewood. Three children came also and sprang about at mysterious games, and one stooped and plucked of the late-flowered daisy. And now I thought I should see whereunto they use these herbs.

"But the child only held it beneath the eyes of the other, till he smiled, and then tossed it away. Ere long came the woman to the doorway, and she, too, when they held up the small white flower, smiled—made laughter with the face only, not with the voice—and spake with them. At that the eldest child went within, and returned with a fair, bright bowl, strange in design. Then the woman and her young filled it with blossoms, both purple and white. This the woman bore before her lord. And lo! he ceased to cleave the wood and made, with the rest, the laughter of the face. Then they bore the bowl within. But whereunto they use the flowers I know not, nor why they plant the violet, the arbutus, the honeysuckle."

Canonicus called his newly-taken squaw, and she came to him with eager eyes. He stooped and plucked a white daisy and placed it in her hand. What he would have asked her then the tall chieftain nearly forgot, for before he spoke his lovely Daugher of Daybreak also smiled.

No, she knew of no subtle virtue in the common weed, she told him—"save that when my husband breaks a flower and places it in my hand he makes me happy."

Her voice was low, and his warriors had not heard. Canonicus turned to them, standing proudly with the young girl at his side.

"The woman teaches me that there is a virtue in the weed," he said, his voice ringing vibrant. "It may be this white people have a wisdom it is good to seek. Let us suffer them to abide in peace on the eastern shore, my people."

Bits of Fun for Everyone

The Best Ever.

Walker—He made the best after-dinner speech I ever heard.

Wilkinson—What did he say?

Walker—Waiter, give me the check.—Exchange.

Accident to a Shirt.

Husband (looking up from the paper which he has been reading): "I see Thompson's shirt store has been burned out."

Wife (slightly deaf): "Whose?"

Husband: "Thompson's shirt store."

Wife: "Dear me, who tore it?"—Blighty (London).

Perfectly Reproduced.

Up at our boarding house there are two children, a boy and a girl. The boy is the living photograph of his father, and the girl is the very phonograph of her mother. —Ohio Sun Dial.

The Other Fellow.

Pat arrived home looking the worse for wear. One eye closed, nose broken, face bruised and several other decorations.

"May the blessed Saints preserve us!" said Bridget, his wife.

"Thot Dutchman Schwartzheimer," said Pat; "'Twas him that did it."

"Shame on you," said Bridget. "A big spalpheen loike you to let a little Dutchman the size of him to bate you up! Why——"

"Whist, Bridget," said Pat. "And don't you be speakin' disrespectfully of the dead."—Selected.

As Usual.

Two very pretty girls met on the street and kissed each other rapturously. Two young men watched the meeting. "There's another of those things that are so unfair," said one.

"What is that?" said his friend.

He pointed to the scene: "Women doing men's work!"—Selected.

Just Like Sister's Feller.

"What time shall I come over to the house, Mary?"

"Oh, I don't know, come after dinner."

"Well, that's what I was comin' after."—Brown Jug.

Plying His Trade.

Cop: "What is your business?"

Prisoner: "I am a locksmith."

Cop: "Well, what were you doing in that gambling house we just raided?"

Prisoner: "When you came in I was making a bolt for the door."—Punch Bowl.

Purple.

Miss Graham: "I'm worried about my complexion, doctor. Look at my face."

Doctor Pills: "My dear young lady, you'll have to diet."

Miss Graham: "Oh! I never thought of that! What color do you think yould suit me best?"—Exchange.

It Was.

She: "Do you remember when you were first struck by my beauty?"

He: "I think so. Wasn't it at the masked ball?"—Boll Weevil.

A Straight Face.

Father—I never smoked when I was your age. Will you be able to say that to your son when you grow up?"

Willie—Not with such a straight face as you do, father. You beat me there.—Good Hardware.

Your Health

By Royal S. Copeland, M. D., F. A. C. S.

To my mind one of the most important individuals in America is the school teacher. She stands in place of the parent. She represents the state. She visualizes the spirit of America.

Dr. Copeland.

For the parent she guards the health, drills the mind, instructs in manners, and has much to do with inculcating high ideals. For the state she teaches knowledge of and respect for law. For our country she teaches loyalty and love.

All in all, outside the home itself, the teacher is the most powerful factor in all the molding influences of our lives. She is the ally and exemplar of the teachings of the church. For the sake of home and church and state we must pray that the teacher may live up to the tremendous responsibilities resting upon her. I have firm faith that she will not disappoint us. It is the teacher who first discovers the nervous and mental defects of her pupil. It is important that she should be observant of the actions and disposition of the child, especially if these are different from the usual conduct.

There are many things to be observed. Nervousness may be indicated by twitching of the face, sudden and spasmodic movements of the limbs, hands, feet and fingers. The child has difficulty in buttoning his clothing. Writing and drawing may be increasingly difficult. He may drop his books and spill the ink. Extreme restlessness, weeping, irritable temper and loss of attention are the symptoms of nervousness.

Whenever a child who has been attentive, studious and intelligent, becomes listless, dull and stupid, there should be an immediate report to the parent. In schools where medical inspection is practiced, the school doctor will advise. If there is no school doctor, the family doctor should be consulted at once.

A change of this sort in the demeanor of the child is a sign of some physical disturbance. It may be a trifling and easily removed trouble, but, no matter what its nature may be, it is a condition which should be removed at once. Any nervous or mental trouble, founded on a removable cause, should be dealt with at once or permanent loss of efficiency will be suffered.

There are simple causes for much backwardness and nervousness. Poor vision, or eyestrain unassociated with lowered sight, may be productive of all sorts of unpleasant nervous and mental disturbances.

Unhappiness or mistreatment at home may affect the mind and health of the child. The tactful teacher may be helpful in these rare but miserable cases.

The lack of parental oversight as regards sleep, proper food and ventilation may have much to do with the nervousness and mental lagging of the child.

I am sure the teacher will do her duty and make note of all the things having to do with the welfare of the pupil. She is the eye of society. She stands on the watch-tower. The social and physical well-being of these children is in her hands.

MANUFACTURE OF CORN STARCH.

The manufacture of corn starch has grown to such proportions in the United States that the industry now consumes about 50,000,000 bushels of America's great crop each year. From each bushel of corn the average manufacturer makes 33 pounds of corn starch, and in 1921 the 10 largest concerns made nearly 1,650,000,000 pounds of this product, which was more than 90 per cent of the total produced that year. This industry, which began in the United States in 1844, has been increasing greatly in recent years. By 1880 the factories had reached a productive capacity of 230,000,000 pounds and practically all of it was consumed here. By 1921 there were nearly 50 plants and $6,000,000 worth of the output was exported. These figures are from a report recently made by the department of agriculture as a result of an investigation.

SEED GROWING.

Seed growing is an industry in itself.

FAMILY CIRCLE

ALICE W. BARLAND
EDITORIAL CONTRIBUTOR

Experience Letters

Dear Family Circle: It seems fitting that I should send you a Thanksgiving message this year of 1923. It is the time of year "When the frost is on the pumpkin and the fodder's in the shock," and as the evenings grow longer you will gather with your families around the evening lamp. There will be time to exercise the imagination and direct the mind back to that first Thanksgiving day celebrated in November 304 years ago.

It requires a good bit of imagination to picture the landing of those Pilgrims in Plymouth harbor on the 16th of November, 1620. Mrs. Hemans pictures the scene quite clearly as she tells of the landing in her poem long ago. Here are a few verses:

The breaking waves dashed high
On a stern and rock-bound coast,
And the woods against a stormy sky
Their giant branches tossed.

And the heavy night hung dark
The hills and waters o'er,
When a band of exiles moored their bark,
On the wild New England shore.

Amidst the storm they sang,
And the stars heard, and the sea;
And the sounding aisles of the dim woods rang
To the anthem of the free.

Ay, call it holy ground,
The soil where first they trod;
They left unstained what there they found—
Freedom to worship God.

They were accustomed to the mild climate of England and Holland and were unprepared for the bleak New England winter.

It is hard to imagine such a condition as they faced. They had no shelter of any sort on shore and they all must live on the crowded Mayflower until some sort of place could be built. For over two months they had been sailing on rough seas, 103 of them on that small ship of only 189 tons burden.

Many of the men who made up the party knew nothing of woodcraft, but within a week after they landed every one who was physically able took his ax and began to cut down the trees with which to make houses.

In order that as few houses need to be built as possible the company were divided into 19 families. Some of the men were unmarried.

It was very poor houses they were able to build with few tools and unskilled hands and they really were little more than shelters.

Edwin Markham, in his fascinating story of "The Real American," says: "Although they had the untaxed wilderness to draw from for fuel, yet were the Pilgrims cold, because their houses furnished such poor shelter. Terrible illness followed and almost daily death visited their little settlement; at one time there were but seven men who could move about for the care of the sick; the stricken died miserably, unwatched and unattended. Four families, comprising 12 persons, were wiped out absolutely. Of 18 wives who came over but four remained."

But notwithstanding all this, when the Mayflower returned to England in the spring, after that terrible winter, not a man, woman or child would return with it.

The year that followed was also full of privation and it was a great struggle to raise enough to take them through the second winter. It seemed at times as if the crops would fail, but when the harvest was finally in they were so grateful that things were as well as they found them, that their governor, William Bradford, appointed a day for Thanksgiving and praise and he has the distinction of making the first Thanksgiving proclamation of the day we have celebrated ever since.

We take everything that we enjoy so easily in this wonderful country; we slip along with a sort of feeling that because we are so great nothing very desperate can possibly happen to us; we have a sort of unexpressed conviction that God will look out for us, come what may, and we needn't take much of anything that happens so very seriously.

I wonder if we are not somewhat too indifferent concerning questions of vital importance to the welfare of our country?

A week or two ago I head a lecture by a man prominent on the lecture platform and he spoke for an hour at the State Federation of Women's Clubs of Wisconsin on the importance of respect for the laws of this or any country. The central thought of the lecture was the indifference of a part of the citizens of the United States to the 18th amendment to our Constitution. He quoted from one of the notable speeches of the great Lincoln as follows:

"I believe this government can not endure permanently half slave and half free. 'A house divided against itself can not stand.' I do not expect the Union to be dissolved—I do not expect the house to fall—but I do expect it will cease to be divided. It will become all one thing or all the other." Then the speaker went on to say that "no government can endure permanently where part of the people are law-abiding and part are not law-abiding. When the time comes in the life of any government when some of the citizens rise up and say "we will not obey the law as it is laid down in the Constitution," and continue to act unrestrained according to this declaration, it is proof that the government is weakening and its death knell has sounded."

He continued: "I have no quarrel with those who do not like the Constitution as it now stands; each one has a perfect right to his opinion, but if he wants a law changed there is a perfectly legitimate way to have it changed. This is a democracy and every adult now has a voice in making the laws. If a change is desired let those desiring such a change go about it in the proper way.

"But so long as a law is written into our Constitution it is the duty of every loyal American not only to obey the laws, but also to lend his influence to comple every other one to obey them."

The question of this indifference to our laws and the riding with a high and mighty style over the 18th amendment is occupying the attention of all the great magazines. They are sending their own correspondents here and there to settle down and live in places where the law breakers are the boldest, till they can make sure beyond any doubt of the true condition of things.

I know there are those among our readers who do believe that we should have light wine and beer because they have written and so expressed themselves. The question is being handled without gloves by so many of the magazines whose circulation is in the millions that if people continue to remain ignorant it isn't the fault of the press.

Thanksgiving is a good time to take account of our blessings and to examine our conduct to discover if we are living day by day as true Americans should. As we sit down on Thanksgiving day in our comfortable homes, and at our dinner tables loaded with every sort of good thing to eat, let us not forget through what danders and hardships this land of plenty was secured for us. Surely it is the business and the duty of every one of us to maintain the standards of honor and righteousness that were the very foundation stones of this republic.

I wish for you all a happy day. Your friend,

ALICE W. BARLAND.

BRIGHTEN IT UP.

Any one who realizes how largely dark and gloomy walls are responsible for dark and gloomy thoughts will be very careful to make the kitchen workshop as bright and cheerful as possible.

On This Day of Thanksgiving

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High Points in News of the Week

When congress convenes early next month it will receive from President Coolidge what is expected to be one of the shortest presidential messages ever delivered by a new president at the opening of a new session of congress. The president has been working on this message for several weeks, but has given no definite information as to its recommendations.

The new congress will face a large number of important problems when it convenes, notable among which is that of tax reduction. Foreign relations, including the matter of participation in the world court as recommended by the late President Harding, is a matter involving numerous difficulties. Prohibition enforcement, tariff legislation, the soldiers' bonus, agricultural legislation, the proposed constitutional amendment for equal rights for women and so on are other matters that will demand attention.

* * *

A statement from Washington says that President Coolidge feels that the Muscle Shoals nitrate project should be developed either by the government or by private enterprise as a means of guaranteeing the supply of nitrates in time of war and of fertilizer in time of peace. He is reported to have said that rather than permit the plants to lie idle the government should operate them even at a loss unless congress sees fit to lease them to a private concern. He has made no public recommendation with reference to congressional acceptance of Henry Ford's offer to lease the project.

* * *

Chairman Campbell of the special advisory committee of the department of the interior, in reviewing the investigation of the reclamation service, declares that in his opinion the government must adopt a new policy in its reclamation program and grant a new start to probably one-third of the settlers on reclamation projects. He bases this conclusion on the ground that too short a time has been granted settlers for the making of their payments, that in some cases worthless land has been included in projects and that on some projects the construction costs have been excessive.

* * *

The federal farm loan board has announced the sale of $10,000,000 worth of bonds of the international credit banks, the object being to raise that much money to complete the financing of this year's crops. This makes a total of $30,000,000 obtained by the credit banks through the sale of its securities. The bonds bear 4 1-2 per cent interest and mature in six months. The agricultural credits act appropriated $60,000,000 as the bank's original capital. So far loans to farmers through farm organizations or otherwise have totaled about $32,000,000.

* * *

Dr. Heinreich F. Albert, who was minister of the treasury under Chancellor Cuno, has accepted President Ebert's invitation to form a new cabinet.

Dr. Heinreich F. Albert, the new German chancellor, gained notoriety in the United States in the early part of the World war. In 1915 he was commercial attache of the German embassy in Washington and during that period and later was charged with engaging in extensive propaganda in behalf of Germany. Among his assistants were Captain Von Pappen and Captain Boy-ed.

* * *

Former Governor Walton was indicted last week by the Oklahoma grand jury on seven counts charging diversion of public funds, intimidating an officer and preventing the assembling of the lower house of the legislature. Six of these alleged acts constitute felony if Walton is found guilty. Governor Walton was recently impeached by the Oklahoma senate and removed from office.

* * *

A delegation of Filipinos has arrived in this country for the purpose of presenting to President Coolidge an appeal for the independence of the Philippine Islands and the setting up of a separate government. The delegation urges the removal of Governor General Leonard Wood, the main ground of the application being that Governor Wood represents the militarist element.

* * *

The German cabinet, headed by Dr. Stresemann, resigned last week following the failure of the reichstag to give it a vote of confidence. President Ebert nas accepted the resignation and will ask another leader to form a new cabinet.

* * *

Senator Gooding of Idaho announces that when congress convenes he will reintroduce his bill for a government price guarantee of $1.75 a bushel for wheat.

* * *

Former Premiers Lloyd George and Herbert Asquith of Great Britain, who have been political enemies though both members of the liberal party, have settled their differences and are working together in the preelection campaign now being waged in England between the liberals and the party supporting Premier Baldwin in his foreign policy.

* * *

After several weeks' negotiations officers of the mine owners' organization in the Ruhr district of Germany have signed an agreement with the French authorities occupying that region under which the Germans will resume mining and delivering coal to France, as provided in the treaty of peace. This is considered one of the most important acts since the government authorized cessation of the program of passive resistance to the French.

* * *

The tension between Great Britain and France has been greatly increased of late owing to the absolute refusal of the French government, headed by Premier Poincare, to alter its policy in compelling Germany to meet its reparation payments. England has maintained its attitude that the French policy is too severe and is leading to the utter collapse of Germany and her total inability to meet her obligations. France, on the other hand, insists that nothing but physical compulsion will secure results from Germany. For a time recently it seemed almost certain that the alliance between England, France and Italy would be terminated, leaving France standing alone, with the other nations giving moral support to Germany in her fight for more liberal terms of settlement. At a meeting of the council of ambassadors, however, an agreement was reached by means of which the break has been averted. Nevertheless, Great Britain and France are as far apart on the policies toward Germany as ever. That Premier Poincare is not standing alone in his attitude is indicated by the fact that the French chamber of deputies last week voted confidence in him and his policy by a vote of 505 to 70.

Recently the ex-crown prince of Germany, Frederick William, returned from his exile in Holland to Berlin. It was reported that the former emperor was also contemplating a return and this led to the belief that a definite movement was on foot to restore the Germany monarcny with the Hohenzollerns again on the throne. International agreements, however, are reported to have been reached making the return of the former kaiser quite improbable. A report also says that the former crown prince has issued a public statement renouncing his right to the German throne, and upon the basis of that renunciation the allied governments have agreed to permit him to remain in Germany.

SMALLER FARMS IN NEVADA.

The most striking decrease in average size of farm in the United States between 1910 and 1920 took place in Nevada, where farms decreased from an average size of over 1000 acres to about 750 acres in size. Strange to say, in near-by Arizona and New Mexico occurred a still more striking counter-trend toward larger farm units the size of the average New Mexico farm jumping from slightly over 300 to slightly over 800 acres and Arizona from less than 150 to nearly 600 acres. Nevada's farms had averaged in 1910 the largest acreages held in the United States. In 1920 the average improved acreage per farm in that state was much greater, explaining the trend there toward breaking up of the large farm holdings.

Farm Business and Markets Outlook

(Continued from page five.)

Seed and Feed.

The clover seed market has been irregular, the principal influence being large purchases of foreign seed, which are already beginning to arrive. Since foreign seed does not thrive so well as domestic, the latter should command a big premium. Growers of clover seed are selling more slowly than last year.

Wheat feeds were weak in eastern markets, but western points are not pressing offerings, so that quotations have held.

Hay Markets Higher.

The better grades of hay are in good demand, while receipts are light and prices advanced last week. Lower grades are moving sluggishly. The alfalfa hay crop was further reduced by wet weather and frosts during the final cutting in the southwest.

Prices per ton in carlots: Chicago—No. 1 timothy, $27@28; No. 2, $24@26; No. 1 light clover mixed, $25@27; No. 1 clover, $23@25; No. 2 clover, $18@20; No. 1 alfalfa, $20@30; upland prairie, $18@21; rye straw, $14@15; oat and wheat straw, $12@13.

Fresh Eggs Higher.

Receipts of fresh eggs are steadily declining, as is usual during November and December, the low months in production, and prices advanced last week. Consumption has been sustained, although higher prices may curtail it to some extent, and the market appears in a firm position. With fresh eggs higher up the price ladder, storage eggs are proving more desirable and are moving into distributive channels at a more rapid rate. During the first half of the month the movement out of storage at the four leading cities was greater than during the same period last year, which shows a decided improvement.

Poultry prices are lower, as receipts are in excess of consumptive demand, with the flush season of receipts still to be encountered. Storage holdings for the entire United States on November 1 were more than 20 per cent heavier than at the same time last year.

Latest quotations: Chicago—Eggs—miscellaneous, 45@50c; dirties, 24@26c; checks, 20@23c; fresh firsts, 48@52c; ordinary firsts, 35@42c; live poultry—Hens, 18c; springers, 17 1-2c; roosters, 13c; ducks, 19c; geese, 17c; turkeys, 28c.

Butter and Cheese.

Butter prices were practically unchanged last week, with top scores slightly higher, receipts of the better scores were light and the tone of the market was firm.

Trading in cheese was quiet last week, with few buyers willing to take on additional stocks in spite of unchanged to lower prices and the willingness of many dealers to make concessions.

Fruits and Vegetables.

Receipts of potatoes at the leading consuming markets remain liberal and shipments from producing sections increased slightly last week. Prices declined, especially on northern round whites, which are quoted at range of 85 cents to $1.10 per 100 pounds for sacked and bulk United States No. 1 at Chicago. Idaho Russets are quoted at $1.85@1.95.

Apple markets were practically steady last week, with middle western A 2 1-4-inch Jonathans and Northern Spies quoted at $5.50 to $6 per barrel in consuming markets. Washington medium to large extra fancy Jonathans are quoted at $2 to $2.25 a box at Chicago, fancy at $1.75 to $2, extra fancy Delicious at $2.85 to $3.15, fancy $2.50 to $2.75, extra fancy Romes at $2.25 to $2.50 and fancy at $2 to $2.25. Shipments of apples from producing sections are falling off rapidly.

Stocks of apples in storage on November 1 comprised 4,121,000 barrels, 5,358,000 boxes and 1,101,000 bushel baskets, compared with 4,138,000 barrels and 4,164,000 boxes last year. Holdings in the Pacific coast states are 64 per cent greater than a year ago. Most of the increase is said to be in the Yakima district.

LATEST QUOTATIONS

The Live Stock Market.

PORTLAND, Ore., Nov. 24.—Cattle—Beef steers, good grade, $6.75@7.50; medium grade, $5.75@6.75; common, $4.50@5.75; beef cows and heifers, good grade, $4.75@5.25; medium, $3.75@4.75; common, $3.25@3.75; canners and cutters, $1.50@3.25; bologna and butcher bulls, $3@4; feeder steers, $5@5.50.

Calves—Medium to choice 190 pounds down, $9.50@10; 190 to 260 pounds, $6.50@9.50; 260 pounds up, $4.50@6.50; cull and common, $3.50@4.50.

Hogs—160@200 pounds, medium, good and choice, $7.25@7.50; 200@250 pounds, $6.50@7.25; 250 pounds up, $6@6.50; packing hogs, smooth, $5@6.50; packing hogs, rough, $4@5; slaughter pigs, $6.25@7; feeder pigs, $6@6.75.

Sheep and Lambs—Lambs, 84 pounds down, medium, good and choice, $10@11.25; cull and common, $7.50@10; yearling wethers, medium to choice, all weights, $6@9; wethers, $5.50@7.50; ewes, medium to choice, $3.50@6.50.

SPOKANE, Nov. 24.—Cattle—Prime steers, $6.75@7.25; good to choice steers, $6.25@6.75; medium to good steers, $5.50@6.25; fair to medium steers, $5@5.50; common to fair steers, $4.25@5; choice cows and heifers, $4.75@5.25; good to choice cows, heifers, $4@4.75; medium to good cows, heifers, $3.50@4; fair to medium cows, heifers, $3@3.50; canners, $1.50@2.25; bulls, $3.25@4; light veal calves, $8@9; heavy veal calves, $6.50@8; stockers and feeders, $4@5.25.

Hogs—Prime mixed, $7@7.25; medium, $6.75@7; heavies, $4@6; fat pigs, $6.25@6.50; stockers and feeders, $6@6.25.

Sheep—Prime lambs, $9.25@10; fair to medium, $8.50@9.25; yearlings, $6.50@7.50; wethers, $5.50@6.50; mutton ewes, $3@5.

SEATTLE, Nov. 24.—Cattle—Choice steers, $6.75@7.50; medium to good, $6.25@6.75; fair to medium, $5@6.25; feeders, $4.25@5; bulls, $3@4; choice cows and heifers, $4@5; medium to good, $3.75@4.25; fair to medium, $3.25@3.75; canners, $1.50@3.25; calves, $4@9.50.

Hogs—Prime hogs, $7.50@7.65; smooth heavies, $5.65@6.65; rough heavies, $4.65@6.65; pigs, $6.65@7.

Sheep—Choice lambs, $9.50@11.50; culls to choice, $7.50@9.50; yearlings, $7.50@9.25; wethers, $6@7.25; ewes, $4.50@6.75.

Hay and Feed Grain.

SPOKANE, Nov. 24.—Wheat—Feed wheat, $36 ton.

Oats—$38 per ton; rolled, $40.

Corn—$45 per ton; cracked corn, $47 per ton.

Barley—$38 per ton; rolled, $40.

Bran—$27 per ton.

Bran and Shorts—$28 per ton.

Shorts—$32 per ton.

Hay—Alfalfa, $20 per ton in ton lots; $22 in ton lots delivered.

The Grain Market.

PORTLAND, Ore., Nov. 24.—Wheat—Hard white, bluestem, bart, $1.02; soft white, western white, $1.01; hard winter, northern spring, western red, 98c.

SEATTLE, Nov. 24.—Wheat—Bid quotations same as yesterday.

Yesterday's car receipts: Wheat, 59; hay, 13; flour, 10; oats, 1; barley, 1.

RITZVILLE, Wash., Nov. 24.—Bart, 82c; red, 80c; fife, 80c.

COLFAX, Wash., Nov. 24.—White, 81c; red, 79c; oats, $28 a ton; barley, $27.

LEWISTON, Idaho, Nov. 24.—Red, 79c; white, No. 1, 81c.

WALLA WALLA, Nov. 24.—Bluestem, 83c; club, 86c; turkey red, 84c.

PULLMAN, Wash., Nov. 24.—Red, 80c; white 83c.

DAYTON, Wash., Nov. 24.—Club, 86c; red, 83c.

General Produce.

PORTLAND, Nov. 24.—Butter—Cubes extra, 45c lb.; prints parchment wrapped, box lots, 49c; cartons, 50c. Butterfat, 51c, delivered, Portland.

Eggs—Buying prices, white hennery standards, 47@48c; mixed color standards, 40c.

Cheese—Price to jobbers, f. o. b. Tillamook; triplets, 30c; longhorns, 31c; loaf, 30c per lb.

Poultry—Hens, 16@23c; spring, 20@21c; ducks, Pekin, 20c; geese, young, 15@16c; turkeys, live, young, 25c; dressed, No. 1 31@32c; off grade 20@25c.

Dressed Meats—Veal, fancy, 14c; pork, fancy, 11c per pound.

SEATTLE, Nov. 24.—Eggs—Select local ranch, white shells, cases included, 47c per doz. f. o. b. Seattle; mixed colors, 45c; cases returned to shippers, 1c less; do. to country stores, f. o. b., 45c per doz., loss off; eastern Washington and Idaho, subject to candling, 45c per doz.

Butter fat—F. o. b. Seattle: A grade, 52c per lb.; raw milk, $2.30 per cwt.

Poultry—Hens, 4½ lbs. and up, 24c per lb. do. over 3½ and under 4½ lbs., 19c lb.; springs, 2 lbs. and heavier, 22c per lb.; geese, fat, live, 16c per lb.; do. dressed, 20c per lb.; ducks, old, over 3 lbs., 15c per lb.; do. fancy dressed, 20c per lb.; turkeys, fat, dry picked, 12 lbs. and heavier, 32c per lb.; do. 6 to 15 lbs. 30c per lb.

Beef—Steers, fancy, 7c per lb.; cows, fat, 7c per lb.

Mutton—Fat, 7c per lb.; spring lambs, fat, 15c per lb.

Hogs—Good block, 90 to 150 lbs., 10@11c per lb.; do. heavy, 5@10c per lb.

Veal—Fat, fancy, 75 to 100 lbs., 14@15c per lb.; do. heavy, 150 to 200 lbs., 7@13c per lb.; medium, 10@12c per lb.

SPOKANE, Nov. 24.—Poultry, Live Weight—Hens, 4 lbs. and over, 18c; light hens, under 4 lbs., 12c; springs, 16@20c; old roosters, 8c; young geese, 15c lb.; spring ducks, 16c lb.

Fresh Ranch Eggs—$11@13; fancy poultry farm, $15; pullet eggs, $10.50@13.50.

Butterfat, 49c.

Hides, Pelts, Wool.

PORTLAND, Nov. 24.—Hides—Salted hides, all weights, 4c; green hides, all weights, 3½c; salted bulls, 4c; green bulls, 3c; salted or green calf, 10c; salted or green kip, 7c.

Pelts—Flint dry sheep pelts, long, 20c; flint dry sheep pelts, short, 10c.

Mohair—Long staple, 30c per lb.; short staple, 20c lb.; burry, 15c lb.

Wool—Valley wool, fine, 28@30c; medium, 28@30c; coarse, 25@27c; Cotswold and braid, 20c; matted, 15c; Eastern Oregon, good average, 32c.

Range of Live Stock Prices for Week Ending November 21

	Chicago.	Spokane.	Portland.	N. Salt Lake.
CATTLE.				
Choice and prime heavy steers (1100 lb. up)	11.00@12.65			
Good heavy steers	9.50@11.50			
Medium heavy steers	7.75@10.25			
Common heavy steers	5.50@ 8.10			
Choice and prime light steers (1100 lbs. down)	11.25@12.65			
Good light steers	10.00@11.50			
Medium light steers	7.75@10.25	6.50@ 7.25	6.75@ 7.50	6.75@ 7.25
Common light steers	5.25@ 8.10	4.25@ 6.50	4.25@ 6.75	4.00@ 6.75
Common to choice butcher heifers	4.00@10.75	3.00@ 5.25	3.00@ 5.25	2.85@ 4.50
Common to choice butcher cows	3.00@ 8.25	2.75@ 4.75	3.00@ 5.00	2.00@ 4.25
Bologna and beef bulls	2.50@ 6.50	3.25@ 4.00	3.00@ 4.00	2.00@ 3.75
Canners and cutters, cows and heifers	2.15@ 3.10	1.50@ 2.25	1.50@ 3.00	1.00@ 2.50
Canner steers	3.25@ 5.25			
Medium to choice light veals	6.75@ 9.50	8.00@ 9.00	6.50@10.00	6.00@ 7.25
Common to choice heavy veals	4.50@ 6.75	6.50@ 8.00	3.50@ 6.50	4.00@ 6.00
Common to choice feeders (750 lb. up)	5.15@ 7.65	4.00@ 5.25	5.00@ 5.50	4.00@ 6.25
Common to choice feeders (750 lb. down)	4.35@ 7.65			
Common to choice stocker cows and heifers	2.60@ 4.75			2.50@ 4.00
HOGS.				
Top of market	7.50	7.35	8.50	7.00
Bulk of sales	6.20@ 7.20	6.35@ 7.35		
Heavy (250 lb. up)	6.60@ 7.40	6.25@ 7.35	6.50@ 7.25	5.50@ 6.50
Medium (200-250 lb.)	6.60@ 7.40	7.00@ 7.35	7.25@ 8.00	5.50@ 6.50
Light (150-200 lb.)	6.20@ 7.10	6.50@ 7.35	8.00@ 8.50	6.40@ 7.00
Light lights (130-150 lb.)	5.00@ 6.85	6.25@ 7.35		
Smooth packing sows (250 lb. up)	6.25@ 6.90	5.25@ 6.50	6.00@ 7.25	5.50@ 6.00
Rough packing sows (200 lb. up)	6.00@ 6.60	4.25@ 5.50	4.50@ 6.00	
Medium to choice pigs (130 lb. down)	4.50@ 6.35	6.50@ 6.75	7.00@ 8.00	
Stock pigs		6.00@ 6.25	6.50@ 7.00	6.00@ 7.00
SHEEP AND LAMBS.				
Medium to prime lambs (84 lb. down)	10.25@13.50	9.50@ 9.75	10.00@11.25	10.00@11.00
Culls and common lambs	8.50@11.00		7.50@10.00	
Medium to prime yearling wethers	7.75@11.50	6.50@ 7.50	6.00@ 9.00	
Medium to prime wethers	5.00@ 9.50	5.50@ 6.50	5.50@ 7.50	6.50@ 7.25
Common to choice ewes	4.00@ 7.00	3.00@ 5.00	3.50@ 6.50	4.00@ 5.00
Culls and common ewes	1.00@ 4.00			
Feeder lambs	11.00@12.75			10.00@12.00

GOOD BULLS, COWS, CALVES, SWINE, SHEEP, GOATS, DOGS, POULTRY

bought and sold in great numbers by those who read and also use our "Want Ad" service.

Just Folks

The chief obstacles to successful co-operative farming are human ignorance and human selfishness. So said a man to me who has had wide opportunities for observation and is a pretty shrewd observer of current farming conditions.

One might say that this man's conclusions are equally applicable to every line of progress among men. That does not, however, prevent its immediate and particular application to cooperative marketing. Of course, human selfishness is partly due to ignorance,

It is a far cry to the old precept, "And whosoever will be chief among you, let him be your servant"; and yet it might be interesting to search out to what extent the sentiments of this old precept are blended into all successful cooperative marketing enterprises.

Cooperative discussion among us is making strangely familiar certain fundamentals which have been more or less in the discard. We have neglected and largely forgotten the fundamental that there is more happiness in common weal than in individual distinction; that the welfare of the many is better than riches and honor and preferment for the individual.

Family life has been amiss in this respect. The precocious child has been pampered. Premature brillancy in one has caused the undue neglect of the other children. If Johnny shows signs that he may one day be president of the United States he must be given opportunities in education which will deprive his brothers and sisters of a fair share of the family attention.

So far as the individual ambition is directed to community welfare, so far as he who would be chief makes himself the servant of all, so will the cooperative idea become permanently engrafted upon our marketing methods. E A S

Latest High Class Patterns for the Home

Please order the patterns you desire at least two or three weeks before you wish to use them. Desiring to obtain the latest high-class patterns for its readers, THE FARMER has made arrangements to have them sent direct from the east, and under present mailing conditions it takes about that time for them to reach you.

4326. Boy's Coat. Cut in 5 sizes: 8, 10, 12, 14 and 16 years. A 12 year size requires 3 1-8 yards of 44-inch material. Price 10c.

4551. Lady's Dress. Cut in 7 sizes: 36, 38, 40, 42, 44, 46 and 48 inches bust measure. A 38-inch size requires 5 3-4 yards of 40-inch material. The width at the foot is 2 yards. For panel of contrasting material 1 5-8 yards 27 inches wide is required. Price 10c.

4559. Girl's Dress. Cut in 4 sizes: 6, 8, 10 and 12 years. A 10 year size requires 3 yards of 32-inch material. For collar, cuffs and facing on the skirt portion of contrasting material 1 yard is required. Price 10c.

4526-4571. A Smart Costume. Blouse 4526 cut in 6 sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. Skirt 4571 cut in 6 sizes: 25, 27, 29, 31, 33 and 35 inches waist measure. To make the dress for a medium size will require 5 1-2 yards of 40-inch material. The width at the foot is 2 1-4 yards. Two separate patterns 10c for each pattern.

4366. Lady's Apron and Sleeve Protectors. Cut in 4 sizes: Small, medium, large and extra large. A medium size requires 3 7-8 yards of 36-inch material. One pair of sleeve protectors requires 3-8 yard. Price 10c.

4561. Child's Dress. Cut in 4 sizes: 4, 6, 8 and 10 years. A 10 year size requires 3 1-4 yards of 27-inch material. Price 10c.

4032. Child's Dress. Cut in 5 sizes: 1, 2, 3, 4 and 5 years. A 4 year size requires 2 3-8 yards of 36-inch material. Price 10c.

4403. Lady's House Dress. Cut in 7 sizes: 36, 38, 40, 42, 44, 46 and 48 inches bust measure. A 38-inch size requires 5 yards of 32-inch material. The width at the foot is 2 yards. Price 10c.

4578. "Bunny Rabbit" and his New Rompers. Cut in 3 sizes: Small, 12 inches; medium, 16 inches, and large, 20 inches in length. To make the doll for a medium size requires 5-8 yard of material. for the rompers 7-8 yard is required. 36 inches wide. For collar of contrasting material 1-8 yard is required. Price 10c.

4045. Lady's Negligee and Cap. Cut in 4 sizes: Small, 34-36; medium, 38-40; large, 42-44; extra large, 46-48 inches bust measure. A medium size requires 2 5-8 yards of 32-inch material. The cap alone requires 1-2 yard. Price 10c.

4199. Lady's Jacket. Cut in 7 sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. A 38-inch size requires 3 1-8 yards of 40-inch material. Price 10c.

4547. Lady's Combination. Cut in 4 sizes: Small, 34-36; medium, 38-40; large, 42-44 and extra large, 46-48 inches bust measure. A medium size requires 2 5-8 yards of 36-inch material. Price 10c.

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Glance over the bargains on the "Want Ad" page.

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"Dandelion Butter Color" Gives That Golden June Shade and Costs Really Nothing. Read!

Before churning add one-half teaspoonful to each gallon of cream and out of your churn comes butter of Golden June shade to bring you top prices. "Dandelion Butter Color" costs nothing because each ounce used adds ounce of weight to butter. Large bottles cost only 35 cents at drug or grocery stores. Purely vegetable, harmless, meets all state and national food laws. Used for 50 years by all large creameries. Doesn't color buttermilk. Absolutely tasteless.
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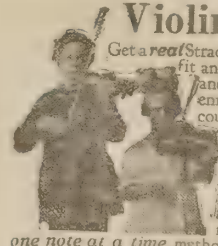

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APPLIANCE CO., 391 State St., Marshall, Mich.

When you write to advertisers be sure to state that you saw their ad-

Aunt Nellie received a nice letter from another Washington girl. Her name is Ellen Olson. Ellen says that for some time she has been going to write to the Corner. Welcome to the Corner, Ellen. This new cousin is in the seventh grade. She has two sisters. They have rabbits, cats, goats and a dog for pets.

Dear Aunt Nellie: I received The Junior Farmer about a week ago and I thank you very much. I certainly do enjoy it. I am in the sixth grade and am 11 years old. My birthday is June 18.—Audell Wilson, King county, Wash.

Aunt Nellie was glad to hear from Hilda Wagner, a little cousin who lives in Adams county, Wash. Hilda has a dog called Bowser for a pet.

Birthday Greetings

THURSDAY, November 29—Aline Owings, 11 years old; Anna Rainbolt, 10.

FRIDAY, November 30—Cora E. Brown, 9 years old; Thelma Miller, 9; Virginia Vollmer, 11.

SATURDAY, December 1—Josie Peretti, 10 years old.

SUNDAY, December 2—Mildred Meyers, 9 years old; Frances Worth, 11.

MONDAY, December 3—Louise Ross, 10 years old.

TUESDAY, December 4—Marjorie Fike, 11 years old; Paul Reed.

WEDNESDAY, December 5—Viola Johnson, 10 years old; Saddie Mize, 11; Rosemary Van Amburg, 9; Jessie Mikkelson, 8.

LETTERS WELCOMED BY AUNT NELLIE.

Among recent letters received by Aunt Nellie are those from cousins whose names follow. A few of these will be published each week in the regular edition of THE FARMER and others will appear from time to time in The Junior Farmer.

Edla Kynsi, Terence Redd, Hulda E. Giese, Harriet Cook, Mary Neiland, Leonard Cook, Valma Stevens, Alvin Stevens, Angeline Peplinski, Luella Eaton, Helen Cyran, Margaret Moe, Arthur Moe, Mary Rench, Florence Geiger, Alice Alberta Hammond, Mary Louise Roser, Lois Owens, Florence Stenson, Aili Kynsi.

BEDTIME STORIES

By THORNTON W. BURGESS.

PETER DOES A LITTLE BOASTING.

Pray never boast; it doesn't pay.
You're bound to come to grief some day.

Peter Rabbit ought to have known that. Peter has lived long enough and has seen enough of the great world to have learned that boasting is a most foolish habit. But Peter is just like a lot of people who never learn by experience. Boasting is a habit, and, like most bad habits, is very apt to stick. The funny thing is that most boasters have no real reason for boasting. They do something fairly well, and then they boast about it. Sooner or later they find that some one can do that thing much

"Who can jump better?" demanded Peter again.

better and that their boasting has only made them look foolish in the eyes of their neighbors. The people who can do things best never boast. There is Jimmy Skunk. Jimmy isn't afraid of anybody, but he never boasts that he isn't afraid. He can make great big Buster Bear step out of his path, something that none of the other little people of the green forest can do, but Jimmy never brags about it. And there is Flitter the Bat, who is the only animal who can fly, but he never boasts of that.

It is quite right to feel an honest pride in what you can do, but it is best to keep that pride to yourself. Old Mr. Toad can sing beautifully, but it was a long, long time before his neighbors found it out. You see, he never mentioned it himself. When his neighbors did find it out they thought a great deal more of him than they would have if he had gone about bragging of what he could do. But Peter Rabbit hadn't learned this important lesson. I don't know that he has yet. You know Peter is a very good jumper. His long hind legs were given him for jumping. One day he was practicing jumping just to see how far he could jump. Jimmy Skunk happened along and stopped to watch him. Peter made the longest jump he had yet made, and Jimmy cried, "Good jump, Peter!"

"Yes," said Peter, "that was a very fair jump. Let's see you beat it."

"Me beat you jumping? Stop your joking Peter," laughed Jimmy. "Jumping doesn't run in my family the way it does in yours. I believe all the rabbit family are good jumpers."

"The best in the world!" replied Peter proudly.

Jimmy chuckled. "Peter, you're bragging and you ought to know better. Yes, sir, you ought to know better," he declared.

"Who is there can jump any better than my cousin, Jumper the hare?" demanded Peter hotly. "It is because he can jump so well that he got his name."

Jimmy chuckled again. It was a good-natured chuckle, but it provoked Peter. He felt that he was being laughed at, and no one likes to be laughed at.

"He's a good jumper," admitted Jimmy, "but I wouldn't call him the best jumper in the world if I were you, Peter, because you are likely to be laughed at."

"Who can jump any better?" demanded Peter again.

"Think a minute, Peter. Think a minute," replied Jimmy.

"There isn't anybody," declared Peter, who was too excited to think. "My cousin Jumper is the greatest jumper in all the green forest or on the green meadows. I know it!"

"I tell you what," said Jimmy, "you have Jumper the hare over by the tall pine tree on the edge of the green forest at sundown tonight and we'll have a jumping match there. You can be the judge, and then you can not complain of unfairness."

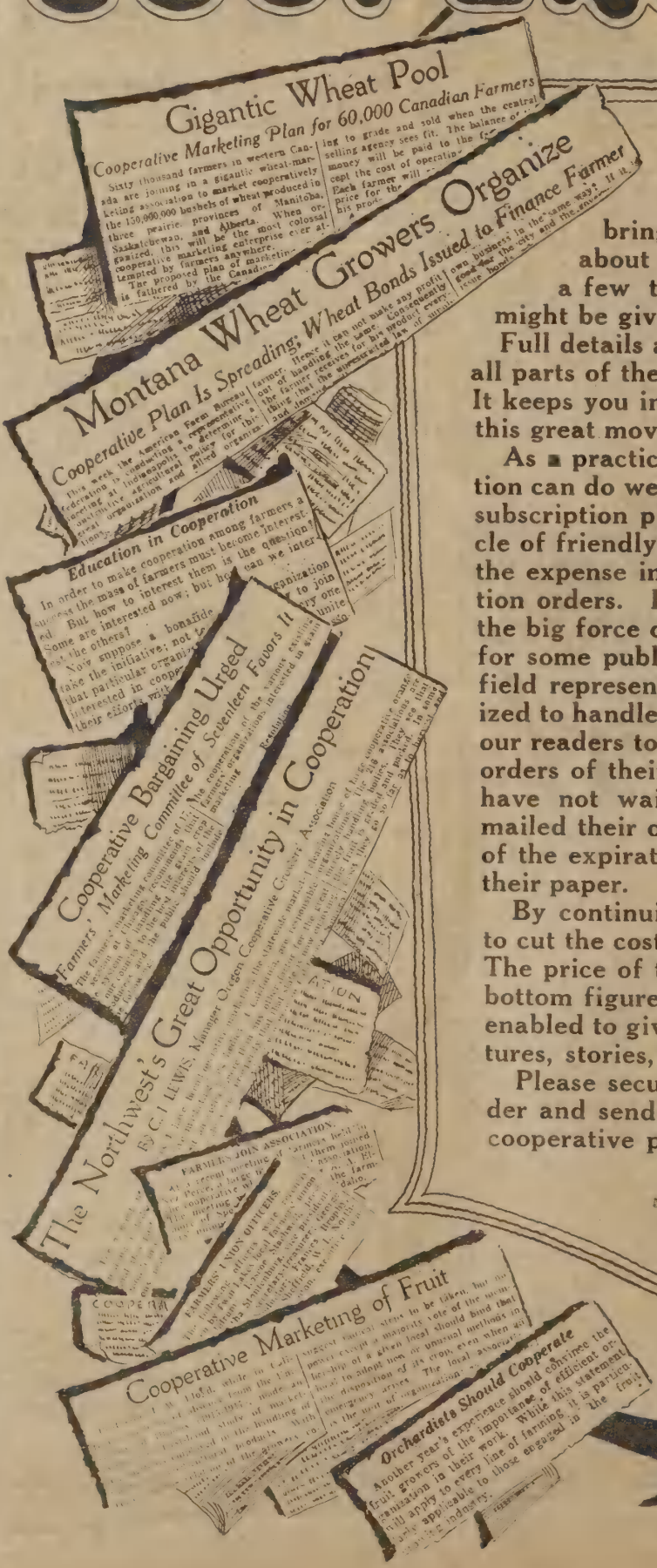
"Who are you going to invite to jump?" asked Peter suspiciously.

"Never mind, Peter, never mind. I'll have some jumpers there," retorted Jimmy. "Of course, it doesn't make any difference to you as long as you are sure that Jumper the hare is the best jumper in the world."

Of course, Peter couldn't say a word after that and so he agreed to get his cousin, Jumper the hare, and be on hand at the tall pine as soon as jolly, round Mr. Sun should go to bed behind the purple hills.

(Copyright.)

ALL ABOUT COOPERATION



One of the highly important services which The Washington Farmer renders to its readers is bringing you the latest news each week about COOPERATION. As examples, a few typical headlines from scores that might be given are reproduced herewith.

Full details about Cooperative plans adopted in all parts of the state are given in this magazine. It keeps you in complete and accurate touch with this great movement.

As a practical demonstration of what cooperation can do we point with pride to our cooperative subscription plan. With the help of our big circle of friendly readers we have cut away much of the expense in securing and renewing subscription orders. For example, we have eliminated the big force of subscription agents which travel for some publications, only retaining the regular field representatives, who are, of course, authorized to handle subscription orders. We depend on our readers to send in their own renewals and the orders of their neighbors with their own. Many have not waited for a notification, but have mailed their orders at least sixty days in advance of the expiration date on the address label of their paper.

By continuing such cooperation you enable us to cut the cost of subscription-getting to the bone. The price of this magazine is kept at the rock-bottom figure of $1 for five years; and we are enabled to give you big value in news, special features, stories, illustrations and departments.

Please secure at least one new subscription order and send it to us as your contribution to our cooperative plan.

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News for Breeders

NEW HERD SIRE.

Matador Segis Walker Gerben, Carnation stock farms' herd sire that takes the place of the head Segis Walker Matador, is a 5-year-old son of Matador Segis Walker, senior sire, out of Gerben Colantha Parthenea, the higher yearly record daughter of Dutchland Governor Sir Colantha. The latter, a bull that was once in service at Carnation and that is now in the herd of R. H. Tuttle of Walla Walla, Wash., is by Colantha Johanna Lad and out of a daughter of Hengerveld De Kol, she in turn out of a daughter of Sir Skylark Ormsby Hengerveld. Breeding daughters of "Dutch" to Matador Segis Walker has produced some of the finest animals in the Carnation herd, hence the same cross was selected with which to carry on this line.

BUYS JUNIOR BULL CALF.

During the week of the Pacific International show Otto Hoyer of Castle Rock, Wash., bought from O P. Dosland of Grays River, Wash., the Jersey junior bull calf, Pauline's Fern Lad, that stood ninth in a class of 28, paying $225 for him. The calf is by Pilot's Model Fern Lad, for which Mr. Dosland paid $100. The dam is a daughter of Pauline's Peer, the bull that has brought both type and production to the Grays River region, and she has a record of 508 pounds of fat in 308 days, with ordinary herd care, and is a beautiful cow. Mr. Hoyer saw the dam as well as the calf at the Pacific International and that was enough to close the bargain.

SELECT HERD NAME.

"Dondairy" is the herd name by which Holsteins bred on the farm of E. A. Donaldson of Chehalis, Wash., will be known, this prefix having been reserved for the Lewis county breeder by the national association. "River Park" has been reserved for James L. Bruce of Gold Bar, Wash., and "Alderdale" for U. F. Neiderhiser of Salem, Ore.

CURTIS' EXHIBITS AT CHICAGO.

F. M. Curtis of Fruitland, Wash., has shipped his purebred Berkshire boar Rivals Ideal to Chicago for exhibition at the International Live Stock show next month. Rivals Ideal was the grand junior champion boar at the Spokane Interstate fair this year.

A Thousand Eyes!

"A man strolling carelessly through the woods would be surprised to know how many eyes are on him, how many creatures screech in the covers and wait for him to pass. He might even imagine from the silence that he is alone. The tree woodsman knows that he is never alone, that his slightest move is watched by a thousand eyes. The stillness does not deceive him.

"But let something happen—a stick snap, or some creature break cover in sudden panic—and instantly all is commotion. The still woods wake to the call of voices, the beat of wings, the clatter of scampering feet."

(From chapter 15 of our new story, "The Red Lock," which begins next week, December 6.)

Potato Show

(Continued from page nine.)

easily recognized in its symptoms but fatal to yield.

The awards in the potato exhibit were as follows:

First prize, to Idaho, for both commercial and certified seed, went to Netted Gems Idaho Rurals and Bliss Triumphs, as did first in miscellaneous commercial varieties. Burbanks drew the first award in the Oregon display. Irish Cobblers in Montana's, early Ohios in Washington. Miscellaneous varieties, in British Columbia's exhibit, won in certified stock classes. The commercial classes won as follows:

Class B (Commercial).

Netted Gem—First, Charles O. Fisher, Dudley, Idaho; second, Isaac T. Beal, Parkdale, Ore.; third, C. R. Geiger, Bend, Ore., and fourth, Robert W. Beal, Parkdale, Ore.

Idaho Rural—First, Rudolph Horsch, Aberdeen, Idaho; second, L. G. Partner, Aberdeen, Idaho; third, Graham Park, Ontario, Ore., and fourth, Cannon's Potato Farm, Buckeye, Wash.

Burbank—First, Roland Schedeen, Gresham, Ore.; second, Portland Seed Co., Portland, Ore.; third, C. R. Geiger, Bend, Ore., and fourth, R. A. Baer, Ferndale, Wash.

Bliss Triumph—First, L. E. Harris, Craigmont, Idaho; second, E. M. Linn, Great Falls, Mont.; third, Robert N. Bauman, Kingston, Idaho and fourth, Cannon's Potato Farm, Buckeye, Wash.

Irish Cobbler—First, Gerard DeWitt, Malta, Mont.; second, John Backman, Waverly, Wash.; third, A. O. Larsen, Waverly, and fourth, Cannon's Potato Farm, Buckeye, Wash.

Early Ohio—First, Fred Pohlman, R. No. 7, Spokane; second, Carl Zastel, R. No. 4, Spokane; third, C. E. Geiger, Bend, Ore., and fourth, J. W. Morland, Windermere, B. C.

Miscellaneous—First, Robert N. Bauman, Kingston, Idaho; second, A. J. T. Walker, Invermere, B. C.; third, C. E. Whitney Griffiths, Victoria, B. C., and fourth, A. McLaughlin, Hillyard, Wash.

In the class A (certified seed) lots, first prize was $40; second, $20; third, $10, and fourth, $5. Class A winners in the various varieties are as follows:

Class A (Certified Seed).

Netted Gem—First, Charles O. Fisher, Dudley, Idaho; second, J. J. Stutz, Dudley, Idaho; third, Lloyd L. Gilger, Dudley, Idaho, and fourth, Thomas Herrin, Helena, Mont.

Idaho Rural—First, Rudolph Horsch, Aberdeen, Idaho; second, L. G. Partner, Aberdeen, Idaho; third, Cannon's Potato Farm, Buckeye, Wash., and fourth, Perry R. Trout, Burley, Idaho.

Burbank—First, Portland Seed Co., Portland, Ore.; and second, Charles W. Greeley, Ridgefield, Wash.

Bliss Triumph—First L. T. Harris, Craigmont, Idaho; second, Preston Farrington, Craigmont; third, E. M. Linn, Great Falls, Mont., and fourth, P. C. Shemwell, Walla Walla.

Irish Cobbler—First, Gerard DeWitt, Malta, Mont.; second, A. O. Larson, Waverly; third, John Bachman, Waverly, and fourth, Albert Larsen, Fairfield.

Early Ohio—First, Fred Pohlman, R. No. 4, Spokane; second, Cannon's Potato Farm, Buckeye, and third, Carl Zastel, R. No. 4, Spokane.

Miscellaneous—First, G. A. Vantreight, R. F. D. No. 4, Victoria, B. C.; second, A. M. Bowman, Sidney, B. C.; third, C. E. Whitney Griffiths, Victoria, B. C., and fourth, G. M. Bernard, Parksville, B. C.

Breeders' Department

FOR SALE

A choice lot of Holstein calves, both sexes. Finest Hollywood breeding, excellent individuals. Several are out of yearly record dams. Have no room for them and they must be sold. Breeding and individuality considered, they are the very best bargain on the market. Write for prices and descriptions. Excellent heifers for calf clubs, fine bulls for bull associations.

A CALF OR A CARLOAD.

HOLLYWOOD FARM, Hollywood, Wash.

Royally Bred Jersey Bull
Pilot's Model's Fern Lad

PROVEN SIRE, DROPPED AUG. 15, 1919.

Sire, the grand champion bull, Count's Foxy Lad of Waikiki, sire of this year's grand champion bull, Pacific International Stock show, and of 12 register of merit daughters, one a silver medal winner.

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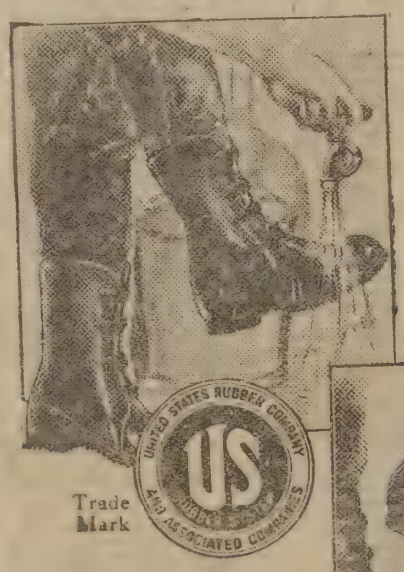

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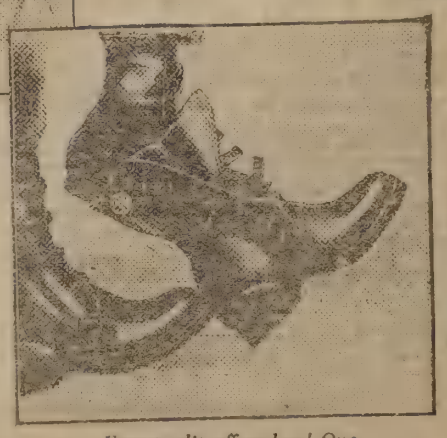

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Every single one is backed by 75 years of skilled experience. It will pay you to look for the "U. S." trade mark—the honor mark of the largest rubber organization in the world.

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THE WASHINGTON FARMER
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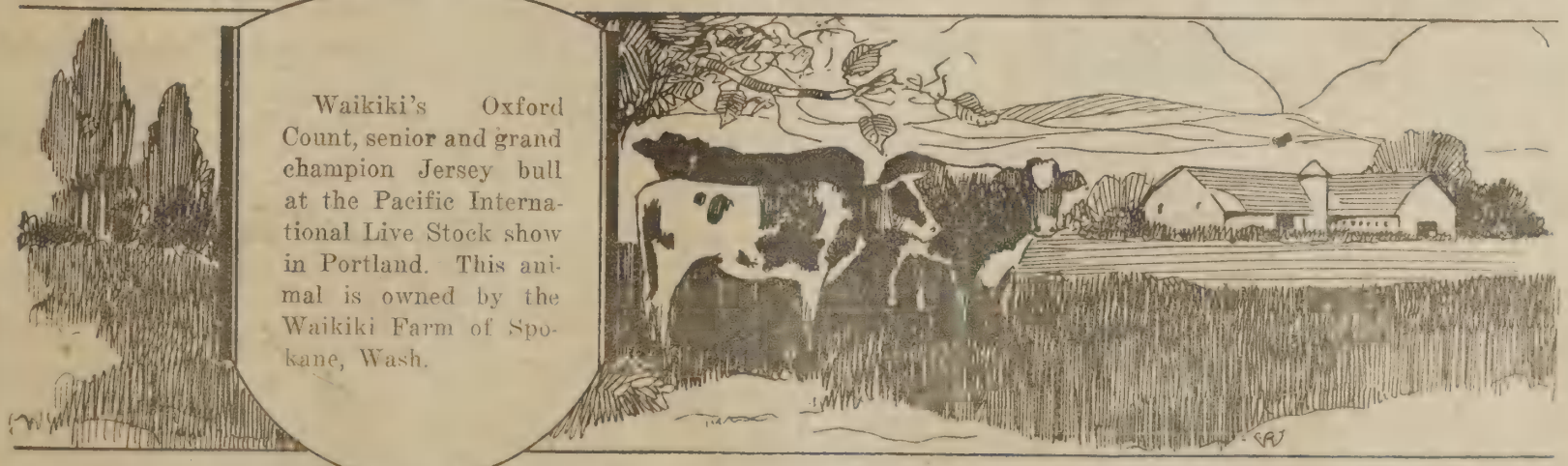
Waikiki's Oxford Count, senior and grand champion Jersey bull at the Pacific International Live Stock show in Portland. This animal is owned by the Waikiki Farm of Spokane, Wash.



The Red Lock, a New Serial Story by David Anderson---Page 3

Let "Personal Service" Do Your Toy Shopping in "The Christmas Tree Store"

Personal Service

is eager to help you with any of your Christmas shopping. They have at their fingers' tips hundreds of interesting, new, inexpensive gifts, and you may be assured of expert advice—with that understanding touch—and of quick, efficient attention when you write to The Personal Service Bureau of The Bon Marche.

THE BON MARCHE'S TOY SHOP is a veritable Fairyland of toys—collected from all over the world. Hundreds and hundreds of new and old friends, from the jolly Noah's arks to the roguish new French dolls, who bob their hair and wear sophisticated frocks.

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And if you want to choose your toys early while stocks are still full, and haven't time to come in, write to "Personal Service," and they will shop for you gladly.

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With black hoops and white cords—assorted designs. Hardwood drumsticks.

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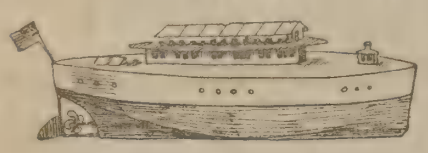

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"Junior" Drawing Master Half Price, $2.50

Contains eraser, 1 box paints, 1 box crayons and chalk and 1 sheet of drawing paper. Entertaining and instructive. Teaches children to draw. Size 16½x16½.

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Cunning little bears, with drums slung about their necks, and drum sticks in their paws. Standing 10 in.

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With 4 travelers, one spinner and score card.

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With moving head and jointed neck—are 15 in. high, 24 inches in circumference. Happy Hooligan, Policemen and Clowns in various comical postures.

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Included are Authors, Lotto, Tiddledy Winks, Old Maid, Peter Cuddle's Trip to New York, Swing Cards, Snap, Fish Pond, Lost Heir, Pitch-Em-Winks.

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Included are Paper Dolls, Magic Dots, Dominoes, Checkers, Fortune Teller Cards, Picture Puzzles, Number Frame, Bubble Outfits, Kindergarten Beads, Stencil Sets, Crayon Sets.

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1x2-inch ebony finished, square corners, counter-sunk white dots, embossed back. In leatherette box.

Tracing and Stencil Outfit $1.00

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Dressed Dolls $1.95

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Well made, finished in white, pink and blue, upholstered with juvenile pattern cretonne. 18 inches long.

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Mamma dolls with painted hair and painted eyes—dressed in filmy little organdie frock, trimmed with lace. Stands 15 inches high.

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16 inches high—have real hair wig, painted eyes, dressed in figured frock, shoes and stockings.

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Six cups, saucers and plates, sugar and creamer, and tea pot with nursery pictures.

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A most demure little doll in a white enameled rocking chair. Nicely dressed. Rocks for a long time, easily wound up.

Nested Blocks $1.00

The largest block is 5 inches square with eight nested inside boxes, decorated with pictures. Made of wood and covered with lithographed pictures.

"Parcheesi" Boards $1.00

Size 18½ inches square, a heavy binders board, with 4 bone dice, colored discs and 4 leatherette cups. An interesting game for both children and adults.

American Flyer Trains 95c

The "Hummer" engine, tender and one car, with four pieces of curved track.

The Bon Marché

The Christmas Tree Store

PIKE STREET---SECOND AVENUE---UNION STREET---SEATTLE

A Tale of the Flatwoods

THE RED LOCK

Copyright, 1922, by the Bobbs-Merrill Co.

By DAVID ANDERSON
Author of *The Blue Moon*

CHAPTER I
The Bound Boy

A GIRL came out of the back yard of a red-roofed cottage at the upstream edge of Buckeye, passed around a rather tastefully built barn, with its flanking cribs and pens, crossed the fallow pasture lot in a corner of which it stood, climbed the fence and picked her way up the face of the cliffs that roughly walled the village on three sides, until she stood at last among the jagged and broken pinnacles at the top of Black Rock, a lighter speck against the gray-green background of the Flatwoods.

Away beyond the bend where the placid Wabash lost itself among the hills the sun crawled toward the rim of the west. Pendent above the distant timber line its round splendor, burnished bright by the wonder of May, turned a lingering glance back at the serene world. The bronze glory of that glance streaked across a broad curve of the river and found the girl upon the rock—scintillated up from a dancing riffle, glanced off the face of an upstanding pinnacle of sandstone at her side and tried to match the brown of her eyes; kindled little spots of flame in her hair, glossing alive in the breeze that evening always awakes at the top of Black Rock, the bold headland at the corner of the seamed and craggy wall where Eagle Run had gnawed its narrow side valley through into the main valley of the Wabash.

But the girl was not watching the sunset. The splendor of the wide-spread landscape at her feet was lost on her. The river, slipping along at the far edge of the level bottoms and winking across at her through every chance opening between its fringe of willows and cottonwoods, hardly received a glance. She forgot to imagine that the foothills notching the horizon away across on the plains to the south, as they receded in the waning day, were gallant knights faring forth on dangerous quests. She failed to watch the mouth of Eagle Hollow, as the shadows gathered between its huge jaws, transform itself into the cave of the dragon.

Crawling out from under the sunset, halving the village and winding away up the river between cliff and bottom, ran the River Road, the one slim artery that connected Buckeye with the great world outside the Flatwoods.

The girl's eyes were on the road. Far up the river—20 miles of gravel and gray sand—it led to the city. On clear days she had sometimes made out the hazy whiteness of its roofs and spires—the gateway of another world—a world that the errant fancies of girlhood peopled with many a wonder.

She traced out every turn of the brown ribbon of track until it blurred into the shadows lurking under the edge of the east. Seven years ago to a day she had stood there and watched the Milford stage carry her brother away to the end of that road—through the dim spired gateway and out into the great world beyond. The east—it swallows up many a man of the west. It had swallowed her brother up. It never gave him back.

The eyes, grown pensive, turned slowly to the upstanding pinnacle of sandstone, polished smooth by a thousand winds, alive in the bronze glow that struck up from the distant riffle. Three names had been rudely carved there, one above the other, so long ago that storm and frost had begun to obliterate them. Lichens, the humble plodders that hide earth's scars, were already creeping into the creases.

The girl picked up a piece of ragged shale and with a sharp corner scraped clean each knife stroke, till the three names stood out clear as the day they were first carved there:

KEN
TEXIE
JACK

She dropped the piece of shale; thoughtfully passed her fingers over the names and glanced down at the foot of the upstanding pinnacle. In a sheltered pocket of the great rock, where only the tempered rays of the sun could strike it, lay a tiny bed of leaf mold set with clumps of yellow orchids not yet abloom—"lady slippers," in the quaint and expressive vernacular of the Wabash country—that had doubtless been transplanted from the deep woods.

A strange wild place for an orchid—yet a place ideal in its appointments of soil and shade, that could have been selected only by one well acquainted with the habits and habitat of that modest and self-sequestering flower.

The girl stooped above the tiny flower bed—a friendly spot in its setting of stern rocks; plucked away an obstrusive weed or two; let her sobered eyes stray back to the red-roofed cottage, across a [illegible] that lay spread at her feet, and out over the rather pretentious farmstead to which the orchard belonged.

Pretentious—just that; a promise of comfort and affluence never fulfilled. There was every evidence that the farmstead had been laid out on a scale much more elaborate than was usual in the Flatwoods, but nothing had been finished—an attempt that failed; a dream that never came true.

Outlined among the weeds and encroaching brambles lay the extensive foundation of the farmhouse, but it had been carried little beyond the foundation. A few sills—huge squarred logs, cut and hewed in the upland woods—had been laid. Of the few timbers of the superstructure, some had fallen entirely, others had fallen at one end and hung straining, while even the firmest canted far out of plumb.

Back of this creaking skeleton of time-blackened timbers, and nearer the cliff, stood a mite of a log cabin, rudely constructed, where doubtless a man had housed while dreaming his unfinished dream of house and barns and happy homestead. Rooted beside the door and almost completely covering the cabin, a crimson rambler of many years' growth—a far wanderer that no surroundings can degrade—offered a fragrant suggestion that a woman had shared the dreams of the man.

A space cleared of weeds about the door gave evidence that the cabin had at least an occasional tenant. From this open space a path led past the corner of the unfinished farmhouse and crossed the orchard to the red-roofed cottage; another led to the barn lot; another led back under the cliff where a spring gushed out from beneath the outcropping ledges, fretted down the sulphur-stained gutter it had worn in the gravel and shale, crossed the corner of the fallow yard and zigzagged away through the barn lot.

Three horses grazed in the barn lot down near a big elm that stood at the road gate; some geese squatted along the diminutive rivulet leading from the spring; out in the feed lot lolled a bunch of cattle, fine and thrifty as could have been seen the length of the Wabash.

The eyes of the girl suddenly waked from brooding; darted to a point a short distance up the cliff; livened. The slouch hat and drab corduroy hunting blouse of a tall, young woodsman with an immense spread of shoulder had flitted past a break in the bushes as he sprang down the steep and rugged path that picked its way among the rocks from the uplands. She was just in time to see him reach up, put his hand on the top rail of the fence and vault over into the barn lot. The girl missed a breath. Few men in the Flatwoods could have made that leap.

Down by the big elm at the road gate one of the horses, a powerful gelding, glossy back save for one white lock in his foretop, raised his head; came trotting up the lot. The big woodsman put his arm about the arched neck; laid his face against the glossy mane and stroked the soft nose.

"Good ol' Graylock!" he muttered—"bound 'r free, t' you a man's a man——"

A shadow subdued the bold frankness of his face, as a chance cloud draws across a fair field; he gazed hard at the wind-staggered skeleton of the unfinished farmhouse.

The soft nose of the horse, fumbling the pocket of the man's blouse, roused him. He took off his hat; knocked back a mop of tousled yellow hair with his hand and gazed about him.

His roving eye, following the glow of approaching sunset, found the girl upon the rock, her pliant body softly outlined against the silver-green background of the woods.

"Texie—w'y—!"

In another moment he was racing up the cliff. The girl was waiting for him by the upstanding pinnacle of sandstone, a half sadness in her eyes that gradually subdued the eagerness in his. He laid his big hand on her shoulder; slid it down her arm and gathered her fingers in his great palm. There was not even a twitch of response. He dropped the fingers, backed away a step and stood studying her.

"Jack—? Do y'u know what day this is?"

He puzzled to find the answer she doubtless had in mind; finally ventured the only one he could think of.

"Tuesday, May 10, 1849."

She flared around at him. "You know that ain't what I mean."

He had taken off his hat. He crumpled it between his hands and looked down at the tops of the orchard trees.

He gathered her fingers in his great palm.

The girl pointed to the carved names on the monolith of sandstone. He followed the motion; stepped past her and ran his hand over the three names, lingering an instant over the middle one.

"Pore Ken," he muttered, "he could 'a' be'n anything he wanted to, a'most."

The girl's eyes flinched and turned back to the dim, frayed end of the road; the man stood silent.

"Seven years ago t'day," she mused, "you and me stood up here on Black rock and watched the Milford stage haul 'im away off yonder to the city and out in the big world t' college, and then we—cut them names——"

She paused. He seemed to feel that an answer was expected of him, but made none.

"Two years we got letters—wonderful ones at first. I 'low you ain't f'rgot how we use' t' come up here—you and me—and read 'em." She spoke more to herself than to him. "Then the letters got fewer and farther b'tween, till fin'ly they got s' triflin' ther' wasn't no satisfaction in gittin' 'em.

"Then, y'u know, that terrible one come from the president of the college, tellin' how awful Ken was carryin' on, and advisin' father t' take 'im home. But he never come, and a little while afterwards the president writ another letter tellin' how—Ken had—killed a man and run away from school, leavin' all them debts. That was five years ago—and the last we ever hear'd——"

CHAPTER II
Curse of Colin

IT is curious and interesting how some of the greatest names of the Anglo-Saxon race have lodged, like river drift, along the byways and waterways of what was once the great American woods.

Ken, Texie, Jack—the first two Colins; the third a Warhope—names that have been spread wide on English history. And of the two ancient families, probably no purer strain existed than the far-flung thread that had found lodgement here in this out-of-the-way corner of the earth—the great Flatwoods that 70 years ago stretched for many an unbroken mile along the north bank of the upper Wabash.

The man swept a hand toward the distant end of the road. The girl glanced at him.

"Ten more days"—there was a strained firmness in his voice, as if what he was about to say came hard to him—"and I'm ridin' out yonder m'self."

"Jack!"

He felt her eyes upon him.

"Ten more," he went on. "This is the 10th of May. When it's the 20th I'll be 21—and free. Ten more—I be'n countin' 'em."

A deep seriousness clouded his face; he stared down at the warped skeleton of the unfinished farmhouse. The girl fumbled the bit of ribbon at her waist.

"My father dreamed that dream," he went on. "B'fore it could come true, the Seminoles bolted their reservation and he dropped everything and rushed away to the head of the rangers. You know how he—fell at Okeechobee." He paused a moment; gripped his hat and went on. "Mother never saw a well day no more. You know how she lingered along down there under the rose vine till I was 12. When she—died, it was found out Pap Simon had a mor'gage on everything. He foreclosed; had me—bound out to 'im: and——"

The girl stole a look at his face. It was so hard and bitter that she dared not venture a word. And what word could alter the stern fact that he was a bound boy bound out to her own father.

She glanced away along the distant windings of the road.

"When men of the woods ride out—yonder, they don't come back. Ken—didn't."

The man's eyes searched her face for some hidden meaning in her words; apparently did not find it.

"I ain't aimin' t' let the big world out yonder swaller me up like it did—Ken. Some flatboatmen told me yesterd'y there's a wagon train makin' up in the city for the gold diggin's in California. Y'u know, when a bound boy's time's out, the man he's bound to most gener'ly starts 'im off with a hoss and saddle and bridle. Pap Simon said he fig'r'd on givin' me Graylock."

He tossed his hand toward the barnlot where the splendid black horse with the one lock of white in his foretop grazed near the foot of the cliff.

"I 'low we'll jine that wagon train Graylock and me. And when we find gold we're—comin' back."

He stole a shy look at her. She dropped her eyes.

"You'll f'get the Flatwoods when you've found—gold."

He seemed to search her words again for some meaning that he wished much to find. But her face was very thoughful and turned aside.

"F'get the Flatwoods! Where else in the world is there a sight like that? The minute I've got money enough I'm comin' back. I'll buy the homestead back f'rom Pap Simon; finish the house; and then—"

An arm unconsciously reached toward her. The movement brought the red-roofed cottage into his line of vision—the red-roofed cottage, where lay a paper that bound him to servitude. He drew his arm back; crushed his hat rim in his powerful fingers.

A wisp of snipe flashed white as they skimmed the plowed ground over in the bottom; a solitary wild duck fanned his way down the river into the red west; a robin among the top twigs of the big elm flung out an occasional random note of his vesper song.

Down by the rivulet in the barn lot the geese honked and clapped their wings. The sound aroused the man from the half bitter mood and he glanced at his companion, to find her eyes upon him.

"Jack——" she hesitated; "do y'u s'pose it could be the red lock that made Ken act like 'e did?"

The question was so at variance with the man's trend of thought that he was a long time considering it.

"It ain't the red lock," he finally answered in his slow way, "it's the drop of

(Continued on page eight.)

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Successor to
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Skagit Fertilizer Tests

Skagit county has been trying out fertilizer demonstrations. Plots were established through the county agent's office. Checking these up it is reported that an increased yield of from five to 10 sacks of oats were secured. As a result a carload of superphosphate has been ordered by a group of farmers.

Cooperative Progress

Here is another cooperative venture that has proved a success through a series of years.

Organized 15 years ago and with a record of steady growth during all that time, the Winlock Cooperative creamery is now occupying a new concrete building 50x90 feet in size and a model of manufacturing efficiency. With its modern equipment, the plant is valued at $20,000 and is capable of turning out 100,000 pounds of butter monthly. The present output, directed by Manager Frank Mahncke, is about 35,000 pounds.

Poultry Interest in Thurston

The organization of the Accredited Hatchery association has served to stimulate interest in poultry raising throughout Thurston county. Scores of pedigreed White Leghorn cockerels have been taken into Thurston county for members of the hatchery association. These birds are from around 300-egg dams, some of them as high as 310-egg dams. A total of 1450 hens have been signed up for the accredited hatchery, which will begin active operations in the spring. At present Miss Ruth Huggett of Olympia is the only accredited trapnester in the county.

The Governor Is Pleased

If efficiency means getting there, Governor Louis Hart's pet herd of Holstein cows at the Western Washington hospital at Fort Steilacoom is making good. A late official statement says that Steilacoom Inka Posch, a four-year-old Holstein cow, has the highest milk record ever made by a cow after 10 months' calving for the one-week test. The seven-day record is 646.1 pounds of milk, 26.22 pounds of butter. This cow's yearly production record is 30,310.9 pounds of milk, 1133.60 pounds of butter. She ranks very close to the leader in this class of milk production.

It goes without saying that the governor is pleased.

Can Not Guarantee Against Change

It is more often than not thrown in your face that a wheat farmer will never deign to milk cows. However prevalent may be the sentiment, the notorious wheat producing county of Adams is increasing the number of cows on its farms.

A few years ago not a can of milk was shipped from Ritzville, the county seat, and every farmer leaving town for home was stocked up with canned goods including canned milk, butter, eggs, vegetables and so on.

Now it is recorded that farmers can be seen bringing their milk to the railway station at Ritzville daily. Moreover, a rancher in Crab Creek is delivering chopped alfalfa to farmers for feed. He has the first chopper of the kind in the county. By this means the cattle eat the entire cutting and it makes a cheap feed.

What folks say is not always what they do. The wheat farmer can not be guaranteed against change any more than the banker or the merchant.

Balancing Rations Important

Balancing rations is an important step in reduction of dairying costs, and as a result of doing so many Washington dairymen are producing the maximum amount of butterfat from their herds.

Considerable work along this line is being done in Whatcom county, County Agent H. B. Carroll Jr. having assisted 50 dairymen in one month.

Pacific County Agent E. C. Durdle reports considerable interest in the problem in that county also.

Five farmers began the use of balanced rations on a total of 63 cows. A new testing circle has been started in Pacific county with 77 cows enrolled, and it is expected that fully 100 will be on test within another month.

Bringing Up the Standard

Often an owner of a grade herd who keeps a registered bull finds that he is getting outstanding results in the breeding up of the herd. This is partly due, of course, to the fact that the grade cows will produce calves that are better than they are due to the high producing blood lines of the sire.

The same rate of improvement will not always be seen in a purebred herd and in some cases the bull is blamed for not being prepotent enough to build up the production of the heifers. When buying a new herd bull it should be remembered that the improvement of the young stock will depend on how much better the bull's breeding is than that of the average of the herd. In other words, the better the herd the more need for a still higher class bull to bring the standard above what it is at the present time.

This is why the dairyman is advised to purchase the best bull he can obtain and not pay too much attention to the price asked.

Picking and Storing for Quality

In connection with recent berry growing experiments at the Western Washington experiment station at Puyallup, H. D. Locklin, the horticulturist, tried out a test as to the value of picking the fruit at its proper stage of ripeness. When the ripe fruit was picked and delivered to the cannery within four or five hours it was given the highest grade when put into the cans. The second grade was given to the slightly overripe fruit, which was held 24 hours before delivering. Fruit that was picked after a rain and was slightly soft when delivered to the cannery after 48 hours scored the lowest grade and was marked for the lowest price by the receiving department. The fruit which was picked immediately had a brighter color, the berries were all firm and the mouths open even after being processed and sealed. The second class berries had a poor color, and 10 per cent of them were mushed and a few mouths open. The third class had a very poor color and the fruit was all broken up or mushed.

A further test indicated that the kind of storage had much to do with the quality of the fruit when canned. The best quality of berry is where no storage is used, but the fruit delivered immediately to the cannery. Cold storage was considered second best since the color was next to that delivered immediately, and the berries were in a fair condition. The poorest class of storage, which was considered undesirable in almost all cases, was where the berries were kept in open sheds, or a basement which had no cold storage facilities.

All of these factors have a direct bearing on the price of the fruit as paid by the cannery, and it is worth while for every grower to take them into consideration.

Washington State Gleanings

Walter Gibbons sold his horses, mules and farm implements yesterday at a public sale eight miles north of Ephrata, where he has been operating leased land four years. He will move with his family to Wenatchee.

STRAWBERRIES IN NOVEMBER.

Charles Hail of Wind river valley late in November delivered several crates of strawberries that he picked from his field to his customers in Stevenson. The berries were about the size of 50-cent pieces and no different from those that were marketed in the early fall. He received $2.50 a crate. The berries are the Marshall variety.

PURCHASES CHICKEN FARM.

J. N. Livingston, Yakima retired capitalist, has purchased the Carl Mathews chicken ranch six miles southeast of Kennewick, for $5500.

The ranch consists of 10 acres well improved, with a modern five-room cottage, good outbuildings and modern chicken house for 2000 chickens. It has its own electric light and water system. The deal included 1000 laying hens, producing nearly two cases daily.

TO JUDGE POTATO SHOW.

George J. Cannon, the well-known potato grower of Spokane county, has accepted an invitation to judge the potato show in connection with the Nebraska Potato Improvement association, which will be held at Chadron, Neb., December 5, 6 and 7. Hitherto this association, which is one of the most prominent potato organizations in the country, has had an eastern college man to judge its potatoes.

BUILDING UP HOLSTEIN HERD.

One of the men much interested in following the judging of Holstein bulls at the Pacific International was Robert Prior of Benton City, Wash., who owns Model De Kol Abbekerk Pontiac, dam of the first prize senior yearling and junior champion, a son of Matador Segis Walker. Prior is better known as a sheep breeder, but he is getting together a small herd of purebred Holsteins on his lower Yakima valley ranch. Among them are several cows with good production records and a bull closely related to Segis Pietertje Prospect.

SELTICE FARM BUREAU.

The Seltice farm bureau, near Farmington, was organized recently and will work along the line of live stock and diversified farming in cooperation with the farm bureau office at Colfax. Several school districts are going together and meetings will be held monthly, the schools putting on the next program and the farm bureau, in connection with the Washington State college, taking charge of the program at the following meeting. Mrs. H. E. Riggins and Mrs. Mary Gallagher were elected to head a committee to furnish food. W. E. Thompson, former county commissioner, is president of the Seltice farm bureau.

SELLS SEEDS FOR FORESTS.

Clark Westover and W. H. McCord of Wauconda are conducting an infant industry that gives promise of considerable development in Okanogan county. They are buying pine and fir cones, extracting the seeds and selling them for reforestation. Many of the seeds are sold to rehabilitate the forests destroyed in the war in France and Belgium.

Settlers in the Wauconda district are paid $1 a sack for pine cones and $2 a sack for the smaller fir cones. The cones are thoroughly dried and Westover and McCord have perfected a method of threshing or separating the seed from the cones.

RED CLOVER AT CHEHALIS.

H. Walter, whose farm adjoins Chehalis to the northwest, is another red clover seed grower who is pleased with the outlook for that line of farm crop. This season Mr. Walter had eight acres of red clover from which he harvested 98 bushels of seed at 60 pounds to the bushel. From his first crop he got three tons of fine hay to the acre. Mr. Walter will probably sow an additional 40 acres of red clover the coming spring.

In addition to his venture in the growing of red clover for feed and seed purposes, Mr. Walter has also experimented successfully with alfalfa with highly satisfactory results. He will probably also increase his acreage of this crop, which he finds does well on his place.

WILL PASTURE PACK HORSES.

Colfax citizens witnessed an unusual scene recently when a long pack train of forest service animals from the St. Joe and Coeur d'Alene National forests passed through, going to winter pasture grounds in the Snake River district in southern Idaho. There were 122 horses in the train. The horses were in prime condition after a season of packing supplies to the fire fighters in the national forests.

Ranger J. Z. Williams, in charge of the train, said that several thousand trees had been planted in the fire-burned district of Clear creek, a tributary of the St. Joe. Tree planting was under the direct supervision of Ranger Parker, a regularly employed forest service man.

The long line of horses recalled to the pioneer of Whitman county the days when the prairie schooner, the freight wagon and the pack animal were the only means of transportation into this region.

PLAN DAIRY SCHOOL.

The Whatcom county dairy school is announced by County Agent H. B. Carroll Jr., to be held January 21 to February 2, 1924, inclusive, at the G. A. R. hall, Lynden.

The purpose of the school is to give the dairymen of Whatcom county an opportunity of getting first-hand information relative to every phase of the dairy industry without expense. In fact, says Mr. Carroll, it offers them an opportunity of going to a school for two weeks without interfering with their dairy work on the farm.

The school will open each day at 10 a. m. and close at 3 p. m. The location was chosen because of its nearness to every dairy center, Mr. Carroll said.

The program offers subjects of interest to every dairyman in the county. Subjects pertaining to breeding, feeding, management and disease problems will be taken up at the school. Each day's program will be different, so that the dairyman may select the days he wishes to attend the school. It is desired to have as many attend every day as is possible.

There are only five such schools to be carried on in western Washington. Mr. Carroll says the county is fortunate in being allotted one of this number.

Bad for Dairy Industry

Particularly Bad for Children and Bad for General Business

If the American people would quit eating inferior dairy substitutes they would be better in mind and body, millions of children would be better nurtured, and the dairy industry would grow, not only to the prosperity of the dairyman, but to the benefit of all other classes.

The people of the United States are consuming yearly hundreds of millions of pounds of butter substitutes. The yearly consumption of oleomargarine alone is more than 200,000,000 pounds, and that is a comparatively small item as against the greater consumption of vegetable fats from Asia and the islands of the Pacific.

E. V. Ellington, head of the department of dairy husbandry of Washington State college, discussed this menace in a frank address before the Kiwanis club of Pullman last week. "The interests of dairy farmers of Washington," said Professor Ellington, "representing an investment of about $100,000,000, are jeopardized through the activities of South Sea islanders whose only equipment is a strap for gathering coconuts."

The National City bank of New York, an excellent statistical authority, estimates the value of the coconuts and coconut products imported into the United States since the beginning of the World war at $300,000,000. Coconut and coconut products, used extensively in the manufacture of substitute dairy products, come to the United States in four distinct forms—the nut in its natural form; the shredded meat of the nut; as copra, the broken and dried meat of the nut in convenient form for manufacture into oil, and as the oil itself, which forms 70 per cent of the meat of the coconut and which is turned out in enormous quantities in factories in the Philippine islands. Importations of copra in 1921 totaled 190,000,000 pounds. Shredded coconut imported that year totaled 35,000,000 pounds, most of which came from the Dutch East Indies.

Heavy importations of soya beans from China and Manchuria also helped to displace American dairy products, all of which is bad for the dairy industry, bad for the people, particularly the children, and bad for general business conditions.

Sells $275,000 Live Stock in Month

H. Stanley Coffin of Yakima, one of the biggest factors in the live stock industry of that valley, who, with his son, H. Stanley Jr., attended the Pacific International at Portland, reported sales of live stock by his firm totaling $275,000 in one month recently. Nearly half of this amount came from sales of 13,000 lambs at an average of $9 per head. Six thousand yearling ewes obtained in eastern Oregon were sold to replenish Yakima bands at an average of $13.50 for a total of $81,000; aged ewes brought a total of $20,000, and 500 bucks at $35 each brought the total for sheep almost to the quarter million mark. The remainder was realized from the sale of 400 head of fat cattle to a Seattle packer.

H. Stanley Coffin.

Farm Ownership and Tenancy

In Washington, Idaho, Oregon and Montana statistics reveal that the acreage improved on the tenant-operated farm is both actually and relatively larger, on the average, than that on farms operated either by the owner or through a manager.

No doubt the tenant-operated farm represents an average of more years of development, belonging, as it often does, to a retired farmer.

In Idaho and Montana the average total acreage, improved and unimproved, that is in the hands of owner-operators is larger than that under tenancy; in Oregon and Washington the tenant farmer is in charge, on the average, of the larger total farm area.

BETTER DAIRY HERDS AT LOW COST.

Cooperative bull associations are helping hundreds of farmers to improve the production of their dairy cows at a low cost, according to the United States department of agriculture. Last year these associations in the country increased 15 per cent in number, showing that they are making steady progress. In Idaho the number increased from 9 in 1922 to 29 in 1923.

Power or Impotence?

Shall Courage or Hopelessness Rule Our Daily Lives?

A merry heart doeth good like a medicine, but a broken spirit drieth the bones.—Proverbs 17:22.

The familiar saying, "Laugh, and the world laughs with you; weep, and you weep alone," is only half true. The former half is true; the latter is false. Rejoice, and the world rejoices with you. Mourn, and the world mourns with you—not necessarily in sympathy with you, but in self-pity and commiseration.

Like always begets like. Melancholy is just as contagious as good cheer, though we would that it were not. Have you never listened to the rantings of a pessimist, a destructionist, an obstructionist? Have you not, as he drew the word picture of failure and wrong and misery, felt your own courage go down, felt your own happiness desert you, felt your own power for doing constructive things diminish?

On the other hand, have you not, in an hour when your courage, happiness and power were at a low ebb, listened to the words of hope, cheer and courage of an optimist and gone away with increased enthusiasm and increased power to be a man, to do something worthwhile, to do that which is right and profitable in the sight of God and your fellowman, as well as measuring up to the standards of your own better self?

Optimism opens the windows of one's own soul and reveals to him his own possibilities and his own virtues. Pessimism closes the windows and pulls down the blinds, concealing the things that are good in one's nature.

Optimism fires the engine of life; pessimism pours water upon the fuel.

Optimism says a thing can be done; pessimism says it can not. Which shall we believe? It is vitally important, for belief in the possibility or the impossibility of accomplishment largely determines what one attempts and what one accomplishes.

The merry heart is the child of optimism. A broken spirit is of pessimistic parentage. The world needs today more courage, more good cheer, more hopefulness, more confidence, more merry hearts.

FARM BUSINESS AND MARKETS OUTLOOK

CATTLE arrivals have diminished progressively since the middle of October and were the smallest last week for the corresponding period with one exception since 1915. A smart recovery in prices has been the result. One sale at $13 was made at Chicago, but as a sort from show steers and did not furnish a criterion of the general market. Butcher cows and heifers were not quite so numerous as they have been and moved at slightly higher prices, while cutters and canners were steady in spite of another drop in the hide market. A sluggish dressed beef trade was explained by the record quantity of pork available at low prices and by the largest supply of poultry ever known. Otherwise the cattle market has responded even more briskly.

Conditions appear to be shaping up for a better cattle market. The western range season is about over, although straggling shipments will continue up to the middle of December.

Stocker and feeder values advanced strongly last week. The lower trend of corn prices has stimulated demand for thin steers and the lighter supply of westerns and thin natives makes orders harder to fill. Values on such cattle appear to be on a reasonably safe basis for the buyer and are below the cost of production in most cases.

Another Avalanche of Hogs.

After a week of light receipts of hogs and a sharp advance in prices, the country cut loose with the heaviest supply of the year, breaking values back practically to the low point of the season. The market has already had a strong comeback, showing that prices are down close to bed rock, receipts usually do not increase much in December and January over the November level and as the belief spreads that prices are around the low point for the fall and winter, more gradual marketing and less sacrificing of light hogs will be encouraged.

Domestic consumption of hog meats and lard in the first nine months of 1923 was 23.5 per cent greater than the corresponding period of 1922, while exports were 37 per cent greater. According to official reports, retail prices of porkchops in the principal cities of the United States have averaged about 7 per cent lower this year than last, ham about 7 per cent lower, lard about 4 per cent higher and bacon about the same as in 1922.

Lamb Market Stronger.

The supply of lambs contracted again in the last few days and prices are about $1 higher than a week ago. Dressed trade has not responded to the lighter supply during the last few weeks, indicating that lamb is suffering from competition from other meats and with poultry. It still remains on a high price level, however. Strength in wool is reflected in big discounts on sheared lambs.

Few western feeder lambs are available, come-backs from corn fields furnishing most of the supply of thin lambs. Demand is light, however. Shipments of feeder lambs and sheep from 12 leading markets have dropped perpendicularly to 80,416 head in the week ending November 16, compared with 231,188 head two weeks previously.

After a month of growing activity, in which prices gained about 10 per cent, the wool market at seaboard has slackened, with manufacturers resisting the advance. The activity, however, has been transferred to the southwest, where fall shorn wools are on sale. Foreign markets also are strong and the advances abroad have kept values above an importing basis, although the difference is smaller than a few weeks ago and American buying is becoming fairly active in Australia. That world consumption has been outrunning production is indicated by the fact that the final holdings of the British Australian Wool Realization association, which amounted to about 2,708,554 bales of 330 pounds on August 31, 1920, will be cleaned up in the coming January.

Wheat Shows Resistance.

While the future of the wheat market during the rest of the crop year remains much in doubt, it continues to resist what appears to be a rather formidable battery of bearish forces. Domestic conditions, including declining rate of movement from farms, the amount of wheat in sight at terminal markets, and a shrinking balance available for export should gradually contribute strength. These changes may be the cue to the action of the market in the next six months.

Already our prices are ruling enough higher than Canada to bring in more or less wheat from Canada, some of it wheat "moonshiners" or smugglers. European buyers are taking mostly Manitoba wheats. But our exports from week to week are large enough to dispose of our surplus, with clearances especially satisfactory from Pacific ports, where the bulk of our exportable surplus is believed to be located. Flour exports are large also, although the belief persists that these include much Canadian wheat milled in bond.

The world market is governed more by the big supply in Canada yet to be exported and the huge surpluses in Argentina and Australia, where the crops have passed the point of greatest danger.

During the last few days, the domestic milling demand for wheat has improved at a number of markets, but in general mills are believed to be fairly well stocked up and flour trade is rather slow. Deliveries of wheat on December contracts promise to be smaller than expected during recent weeks, as elevators wish to obtain carrying charges.

Corn Market More Stable.

Primary receipts of corn have continued to expand, so that slight accumulation at the terminals has taken place during the last three weeks. Demand from feeders, from shippers to the eastern dairy districts or to the southeast and from corn industries has fallen off. As a result of these influences, prices have declined around 40 cents a bushel in the last five or six weeks. It is evident, however, that the market is near bottom and prices have become relatively stable during the last few days.

The visible supply of oats has declined about 10 per cent during the last month. Primary receipts are light and demand is gaining in strength. Partial closing of the wide gap between corn and oat prices seems likely to take place during the next six or eight months.

Cash Grain Prices.

The range of cash grain prices for the week ending November 28 was as follows:

CHICAGO—Wheat—No. 1 hard, $1.06 1-2@1.07 1-2; No. 2 hard, $1.05@1.05 3-4; No. 3 hard, $1.02 1-2@1.03 1-2. Corn—No. 2 mixed, 74 1-2@76c; No. 3 mixed, 69@72 1-2c; No. 4 mixed, 68@71 1-2c; No. 5 mixed, 65 1-2@69 1-2c; No. 2 yellow, 82@85c; No. 3 yellow, 74@81c; No. 4 yellow, 68@72c; No. 5 yellow, 65 1-2@70c; No. 2 white, 79c; No. 3 yellow, 71@72 1-2c; No. 4 yellow, 69@70 1-2c; No. 5 yellow, 67@69c. Oats—No. 2 white, 44 3-4@46c; No. 3 white, 43@45 1-4c; No. 4 white, 41@44c. Rye—70@73c. Barley—58@73c.

Foreign Clover Seed Arriving.

During the first half of November 182,600 pounds of red clover seed, representing the first important shipment of what is reported to be a rather large quantity bought for import, arrived in this country. France and Italy are the chief sources, with some shipments from Ireland and Chile. The recent weakness in French exchange stimulated further sales to this country.

Feed markets are quiet, with consuming demand rather light and distributors not pressing offerings on declines. Flour mill operations have fallen off, but the output of wheat feeds remains fairly high because of the large percentage of low grade wheat being milled. Shipments of wheat feeds from milling centers have been maintained at a fairly high rate and stocks on hand are less burdensome than a month ago.

Prices per ton (100-pound bags) in carlots: Chicago—Bran, $28; standard middlings, $28; flour middlings, $32; cottonseed meal, 36 per cent, $49; 43 per cent, $55; hominy feed, 42; glutten feed, $44; old process oil meal, $51; tankage, $65.

Hay Markets Firm.

Hay markets continue firm under a good demand for the better grades and rather light receipts. Alfalfa is finding an excellent outlet at central western markets.

Prices per ton in carlots: Chicago—No. 1 timothy, $27@28; No. 2, $24@26; No. 1 light clover mixed, $25@27; No. 1 clover, $23@@25; No. 2 clover, $18@20; No. 1 to choice alfalfa, 20@@30; upland prairie, $18@21; rye straw, $13@14; oat and wheat straw, $11@12.

Eggs, Butter and Cheese.

Egg prices remained steady last week, as receipts were light, but an unsettled undertone is apparent. Higher prices have caused a slowing up in consumption, efforts to start a boycott have been partially successful in Chicago, and the recent mild weather, which is favorable to egg production, is expected to result in increased shipments, so that moderate price declines are not improbable in the next month. Storage eggs are moving at a better rate, although holdings will still show a large surplus on December 1, as compared with a year ago.

Poultry prices were the lowest of the season last week, due to heavy receipts, the majority of which were of poor quality. The supplies of turkeys for the holiday demand were large and prices the lowest they have been for several years

After a moderate decline the butter market has steadied itself, but the undertone is unsettled. Consumption showed an apparent easing up under the high level of prices, which has prevailed during the last few weeks, production reports indicate that the low point, which usually occurs sometime in late November or early December, had been reached, and the movement of storage butter at the four leading markets showed up materially. Heavy imports of 250 casks of Holland butter, 612 boxes of Irish, 1311 boxes Siberian, 5567 casks Danish and 312,867 pounds of Canadian butter arriving during the week were an additional weakening factor in the domestic market.

Although cheese prices in distributing markets were unchanged last week and trading continued dull and unsatisfactory on the whole, some dealers believe that the end of the downward price trend, which began early in October, is not far off. Receipts show a slight falling off and country markets were higher last week.

Fruits and Vegetables.

Potato markets declined slightly last week. Receipts at the leading markets are rather heavy and carlot sho

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Water vs. Food Plants and Food Production

By E. C. McCLELLAN

WHEAT.

In a previous article I showed the relation between a plant and the food products the plant secured and stored as not being in proportion to each other.

This is due to the fact that the plant itself (its structural growth) is composed of nearly 90 per cent water, while the food products are composed of only about 10 per cent water.

In that article I showed the relation of water supply to plant growth and the law of nature, providing that in application of water by irrigation the plant went back upon the same line of evolution on which it had come down.

I also outlined the law that food values decrease as the water supply increases.

There is another law I now want to prove, and that is that:

The production of food by plants is not in proportion to the quantity of water supplied for the plants' uses, but in proportion to the area of land irrigated.

Then remember the other law, that:

The food value of the food secured is in inverse ratio to the quantity of water supplied.

Wheat is called the staff of life, as it has been for many ages the principal food of man. It is, therefore, entitled to be first considered, although just as this time there seems to be a little too much staff in this country.

In the accompanying diagram is shown positively the amount of proteins that are secured by the wheat plant, growing upon one acre of land, when several different quantities of water were supplied, commencing with five inches in depth and increasing up to a depth of 50 inches; or from four acre-inches per acre of land up to 50 acre-inches per acre of land.

The first column shows the number of acre-inches of water that were used in irrigating.

The next column shows the acres of land irrigated and the number of acres of land that could be irrigated by that water when used at rate of five acre-inches of water per acre.

To the right of each subdivision is shown in the upper horizontal column the number of pounds of proteins actually secured by the wheat plants raised upon one acre of land and irrigated by the number of acre-inches of water stated in the first perpendicular column, and in the lower column the number of pounds of proteins that would have been secured if that number of acre-inches of water had been used to irrigate land at rate of five acre-inches of water per acre.

Now look at the number of pounds actually secured upon each acre of land as it was irrigated by the different quantities of water used.

In the first is shown the double return at 399 pounds of proteins received by irrigating with five acre-inches of water per acre.

In the next, by irrigating one acre of land with 10 acre-inches of water there were secured 412 pounds of proteins; BUT if that 10 acre-inches of water had been used to irrigate two acres of land there would have been secured 798 pounds of proteins.

In the third, by irrigating one acre of land with 15 acre-inches of water there were secured 422 pounds of proteins; BUT if that 15 acre-inches of water had been used in irrigating three acres of land there would have been secured 1197 pounds of proteins.

In the fourth, by irrigating one acre of land with 20 acre-inches of water there were secured 420 pounds of proteins; BUT, by using that 20 acre-inches of water in irrigating four acres of land, there would be a return of 1596 pounds of proteins.

In the fifth column is shown a return of 418 pounds of proteins from irrigation of one acre of land with 25 acre-inches of water; BUT if that 25 acre-inches of water were used in irrigating five acres of land the return would have been 1995 pounds of proteins.

In the sixth column the return from use of 35 acre-inches of water in irrigating one acre of land was 431 pounds of proteins; BUT if that quantity of water had been used in irrigating seven acres of land there would have been secured 2793 pounds of proteins.

In the last column 50 acre-inches of water were used in irrigating one acre of land, and the return was 420 pounds of proteins; BUT if that quantity of water had been used in irrigating 10 acres of land there would have been secured 3990 pounds of proteins.

Now, just glance along the columns and see what was obtained by use of the different quantities of water upon one acre of land.

In the five acre-inch irrigation 399 pounds of proteins were obtained.

In the 10 acre-inch irrigation 13 pounds more were secured.

In the 15-inch irrigation the number of pounds of proteins increased to 422 pounds—an increase of 23 pounds.

In the 20 acre-inch irrigation the return decreased two pounds, being only 420 pounds.

In the 25 acre-inch irrigation there was another decrease of two pounds from the 20 acre-inch irrigation, and only 418 pounds secured.

In the 35 acre-inch irrigation the amount increased again to 431 pounds—a maximum food return of 32 pounds more than at the five acre-inch irrigation.

REMEMBER—That these figures are compiled from a mass of data of chemical analysis of the actual amounts of proteins that were found in wheat grown and harvested when irrigated with the different quantities of water stated, and the work carried on for a long term of years, and are not the result of one, or two, or three years' work.

With the five acre-inch irrigation the returns in bushels of wheat were 37.81, and from the 50 acre-inch irrigation they were 49.38 bushels. That is, the 45 acre-inches of water increase gave a return of 11.57 bushels of wheat more than with the five acre-inch irrigation, but only 31 pounds more of proteins.

Is not this showing proof of the law I have laid down: That the food production is in proportion to the area of land the plant is grown upon, and not in proportion to the quantity of water used in irrigation?

Now, regarding the other law: That the value of proteins is in inverse ratio to the quantity of water used in irrigation.

All we are after in cultivating plants is to secure the different kinds of food those plants secure and store away in the cells they create for that purpose.

The principal food products they secure are called proteins; but there are a number of different kinds of proteins, that are all manufactured in nature's laboratory in the ground, and are combinations of several kinds of original elements out of the total 10 kinds that are used. I have never heard of all 10 of those elements being used in manufacture of any one kind of protein, but as one of the elements is found in every one, the proteins are often called nitrogenous substances from the fact that nitrogen is always found in every protein.

There are a vast number of these proteins, or rather a vast number of changes in any one kind, depending upon the different volume of each element found in touch with each other when the protein is being manufactured, or brought together.

Each plant has a standard protein, combining the certain elements it wants and in a certain proportion with each other. When that proportionate amount of each element is close enough together to make this standard protein, then that plant is able to secure and store such standard protein—or food product.

If, however, there is a bad ratio or proportion between the several elements in the ground the plant is growing in, there will be a kind of protein manufactured, but it will not be the standard kind, and its value for food will be inferior to that standard.

This is very positively shown with wheat. The best kind of wheat, having the proteins of the highest food value, are grown on what is called the "dry farm lands," where the water supply is the smallest.

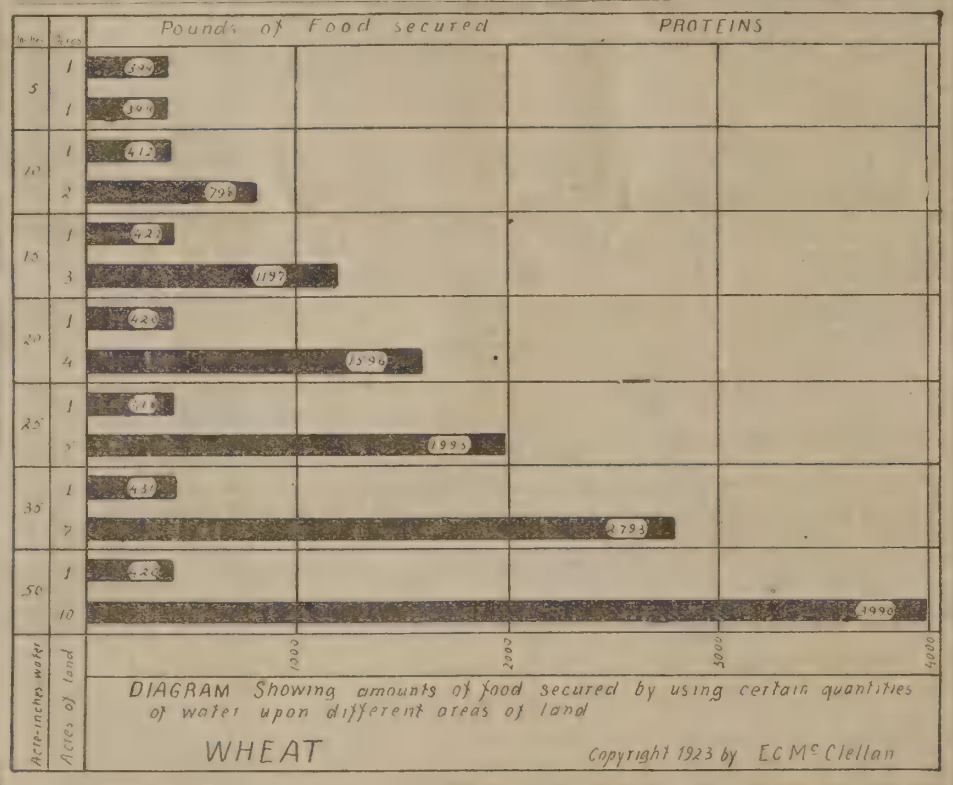
Then as the water supply is increased, either by precipitation or irrigation, that standard protein decreases in food values, until a point is reached where the protein has a very low food value.

Mr. Irrigation Farmer, what are you doing? Are you piling into your land and raising a large number of bushels of wheat that contains very little more actual food in quantity than a far less number of bushels produce, and receiving for your waste of water an inferior quality of water, that you can not sell, or has very little food value when fed to your stock?

Now look again at the diagram and see what you can do with your water supply if you use it for the actual purpose that you are cultivating your farm—the food you are after. I do not know what your water supply is, but whatever it may be, a study of this diagram and use of it when you go ahead next year will repay you well.

Remember, you will get a greater bulk crop of any kind of food plant by piling a lot of water into the ground, for the plant is composed mainly of water, but that means that your plant will secure for you an inferior kind of protein, that will have a very poor food value.

You can take the same number of acres of land you are cultivating and irrigating for wheat, and use far less water and secure a return of nearly the same amount of actual food products, and a kind that you will either be able to sell at a good price, or that in feeding your stock will be far more valuable than the inferior products you have been raising. (Copyright, 1923, by E. C. McClellan.)



Favor Export Commission

This and Other Solutions to Farm Problem Are Considered

As The Washington Farmer goes to press the committee authorized by the conference of wheat growers, bankers and business men at Colfax, Whitman county, several weeks ago is meeting in Spokane in an effort to work out a plan for the improved marketing of wheat. This committee was selected by State Senator F. J. Wilmer of Rosalia, a banker and a wheat grower. It includes 19 persons, representing growers, bankers, business men, farm organizations and the state college and state department of agriculture.

The committee will consider every plan which any one has to suggest, including the fixing of a price by the government, increased tariff, cooperative marketing, control of the exportable surplus, limitation of production, etc. It is evident that sentiment is increasing in favor of the creation of a government export commission to market not only the exportable surplus of wheat, but that of other staple crops. The theory back of this proposal is that the government should market the exportable surplus in foreign countries at foreign market prices and that the commission or other agency should then tax all wheat a sufficient amount to make up any loss incurred in marketing the surplus.

Johnson Favors Commission.

One of the latest converts to this plan is Dean E. C. Johnson of the college of agriculture of the state college. In a letter to Chairman Wilmer of the committee that is now in session in Spokane Dean Johnson says:

"The more I have thought of the agricultural situation and the need for marketing surpluses on world markets, not only of wheat, but of pork products, beef and cotton, the more I have veered over to the point of view of the plan for a federal export commission to handle surpluses on world markets, coupled with tariffs sufficiently high to restore the purchasing power of farm products recommended to the administration by the Ninth federal reserve district.

"This would not throw agriculture out of balance, as the fact that each agricultural commodity would be taxed for any losses in export markets would act as a natural check against overexpansion of any one crop or product.

"The plan, too, is eminently fair to the farmer, and no more in the nature of class legislation than our present tariff. The chief objection, it seems to me, is that the government would be active in this business, but as this activity would decrease from year to year as our surpluses would decrease and the purchasing power approach normal, this objection is in part removed."

As Robinson Sees It.

Manager Walter J. Robinson of the Washington Wheat Growers' association is among those who have been vigorously advocating this plan for some time, declaring that even cooperative marketing of anything short of an amount that would fully control the American price could not hope to solve the problem without some such agency to handle the surplus.

In a letter to Chairman Wilmer, Mr. Robinson says that an adjustment of production to domestic requirements would be the surest and most logical relief measure, but intimates his belief that such adjustment is impractical in time to prevent wholesale bankruptcy among wheat farmers. Reduction in the cost of production and improved methods of distribution are two other points which Mr. Robinson emphasizes. In his letter to Mr. Wilmer, he says in part:

"Should you find costs can not be materially reduced and control of production impracticable, you will of course center your efforts on the third problem—methods of distribution. You will, no doubt, investigate the relative merits of competitive selling on a speculative market and orderly marketing under cooperatively controlled distribution. You may find that neither system can bring back the purchasing power of wheat so long as uncontrolled exporting is necessary.

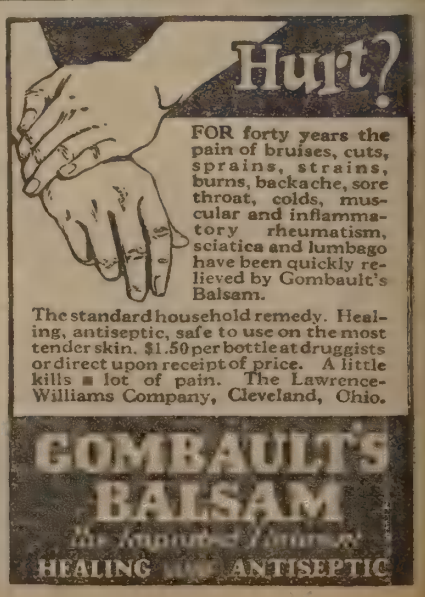
"It may develop that the necessary relief can not be had unless the surplus is taken care of in such a way that the price for wheat that goes into domestic consumption will no longer be controlled by the foreign price on the surplus.

"If you find it is possible to raise the price of wheat to a level with other commodities, you might investigate and make known the probable result of such a move on general business conditions and incidentally on the price of a loaf of bread.

"You also owe to our Pacific northwest wheat growers a thorough investigation of the arbitrary schedule of discounts under which their wheat is being sold, and you should also investigate the application of federal grades to our wheats."

FROM APPLES TO ALFALFA.

S. G. Blackburn(orchardist of the Pleasant Hill district in Yakima, has cleared 10 acres of bearing Jonathan and Spitzenburg trees this fall and expects to grow alfalfa hay there instead. It is his opinion that too many Jonathans are produced in the northwest; at least, they have not proved profitable with him.



Fordson

"To put the farmer on a par with the city manufacturer. To put his produce factory—for that is what a farm is—on an efficient production basis."

Spurred by this ideal, Henry Ford brought the Fordson Tractor into being.

Himself a farm boy, who had followed the plow for many a weary mile, no one knew better the need for quicker and easier farm power.

Producers in other fields were harnessing steam, gas and water power to drive wonderful machines which multiplied many fold the day's work of the individual.

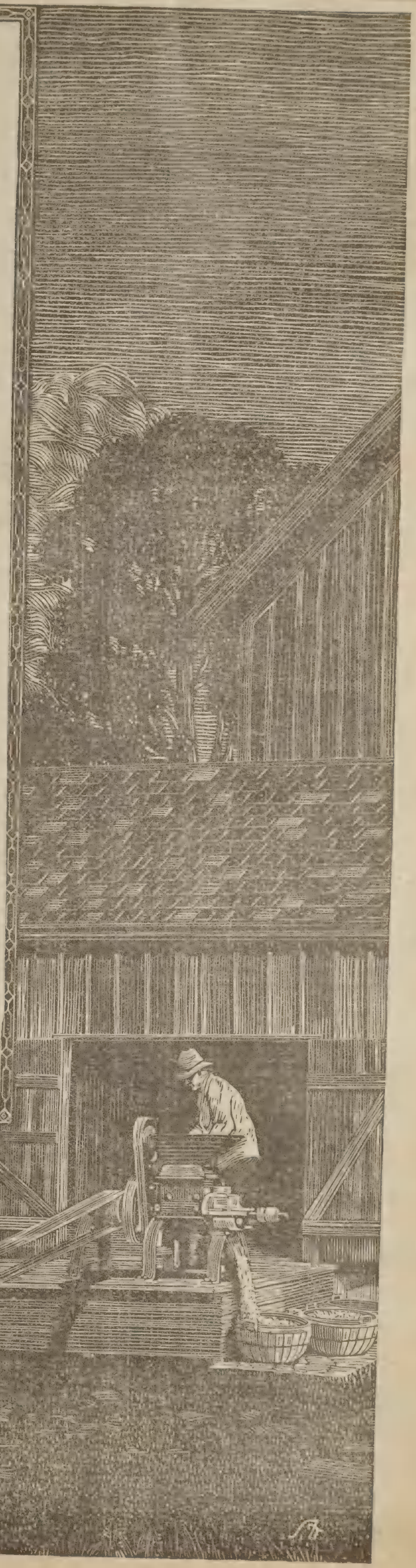
But the farm was at a disadvantage. This power machinery which brought such rewards in the form of bigger profits and better working conditions in the cities was lacking. A smaller income was returned in proportion to the work done.

That the Fordson should never falter in making possible a better day on the farm, a score of years of patient work preceded it. Today on hundreds of thousands of farms it increases the daily work done, adds to the farm income and allows a more pleasant farm life.

Ford Motor Company

CARS · TRUCKS · TRACTORS

Ask Any Ford Dealer



The Red Lock—*The New Serial*

(Continued from page three.)

blood that come along with it. F'r that matter, though, every man gits a bad drop 'r two out of the past. But them bad drops can be overcome, if a man bucks ag'in 'em. The trouble with Ken was it didn't 'pear like he wanted t' buck ag'in' his."

"The 'curse of Colin,'" was the girl's musing comment. "F'r hundreds of years—ever sence the days of 'Red Colin,' the old sea pirate—it's be'n breakin' out in the family every few generations. It alw'ys worried Ken that it broke out on him. I've sometimes thought it would 'a' be'n better if he'd never 'a' found out the meanin' of that red lock—that it was the 'curse of Colin'——"

"That's it," he commented. "I 'low Ken fig'r'd the curse had 'im anyhow, and so it wasn't wo'th while t' buck ag'in' it."

"Mother kep' the lock cut off, y'u know, till Ken was big enough t' notice it himself. After that he alw'ys kep' it combed under so's it didn't show. I don't reckon anybody in the Flatwoods but you and me and father know'd 'e had it."

"Yes," the woodsman interrupted, "ol' Uncle Nick Wiffles knows. But that's as good as sayin' it's dead and buried. Nothin' ever gits a-past Uncle Nick's jaw."

He grinned, pushed up the mop of tousled hair that fell over his brow and pointed to a scar.

"That's where Ken struck me with 'is whip han'le the day I found out 'e had it."

The girl ran her slim fingers over the scar.

"And he cut me with the whip b'cause I flew at 'im when 'e done it."

"And then I hit 'im with a rock b'cause 'e cut you."

The girl shivered.

"I thought he'd kill y'u that day," she said. "His hat fell off, his hair was mussed, and y'u know how awful it made 'im look when that red lock worked out and fell down over 'is eyes—wild and savage and terrible; like ol' 'Red Colin' must 'a' looked. He jerked y'u up and drawed the butt of 'is whip—mercy! It makes me shiver t' think about it. But he only laughed—hard and wild—and let y'u go."

A smile crawled across the bold features of the woodsman, narrowed his eyes and pinched out two queer little wisps of friendly frankness.

"Them was the good days," he said, "with him big brother to us both! That is," he added, as an afterthought, "when he was 'imself. I don't reckon there's one tree down there in the orch'id we ain't clubbed 'r clum, you and him and me, less'n it might be that ol' sour apple tree yonder in the fur corner."

"And I use t' git mad be'cause y'u wouldn't lift me."

The smile broadened on the man's face. "I would—now."

The girl threw up her head and laughed—a laugh like distant music across still water.

"I don't need to be lifted now."

The man studied her quizzically out of the puckered corners of his eyes.

"This ain't Fourth o' July, n'r Christmas, n'r nobody's weddin'. How come the scenery?" He reached out his big hand and touched the smart bow of ribbon at her waist.

"W'y, didn't y'u know, the new preacher's a-comin' on the Milford stage this evenin', and we're all goin' t' meet 'im—you, too."

The twinkle at the corners of the man's eyes deepened.

"Am I?"

The sly note in his voice did not escape her. She flashed around at him a queer little twist of her face.

"Wasn't it lucky—father got a letter from 'im the very next week after ol' preacher Mason died. He answered it right off, and yesterd'y got another from 'im sayin' he'd be here this evenin'. It's the head trusfee's place t' 'ten' t' things like that, you know."

It did not occur to the woodsman that this explanation implied that he didn't know much about church matters. As a matter of fact, he didn't.

"Father's already fixed it f'r 'im t' have the use ol' preacher Mason's study at the parsonage—Mis' Mason's terrible lonesome sence the ol' preacher died, and he'll be company. He'll do 'is writin' and makin' up 'is sermons there. He'll board with us—he ain't married, y'u know."

She paused and laid a hand on the man's arm. He covered it with his great palm; looked hard at her, with suddenly sobered eyes.

"He was a classmate of—Ken's," she went on, "and he's now one of the teachers and preachers in the very college where Ken went."

The man's eyes widened. She drew her hand from under his palm.

"I 'low that's why father was s' quick t' hire 'im; and mebbe that's why he was s' willin' t' come. He ain't none too well, his letter said, bein' nigh broke down with teachin' and preachin', and he 'lowed this would be a good place t' rest up in."

Her eyes swept the serene landscape; the man watched the sunset play upon her hair.

Suddenly she raised an arm and pointed to the blurred end of the road. His eyes followed the direction of her rigid finger. The Milford stage was just crawling out of the bronze shadows and coming into view. The next moment she had seized his hand and was dragging him, half unwilling, down the cliff.

CHAPTER III

East Meets West

OF the four stages that passed through Buckeye each day—the evening stage from up the river—from the city 20 miles above—was by far the most important. Its arrival was the one big event of the day. Half the village was usually gathered about the broken porch of Zeke Polick's general store to see it come in.

The Buckeye postoffice shifted back and forth across the River Road about as often as the nation changed presidents. Zeke Polick was a whig, and the man in the White House in far-off Washington happened to be a whig. That's why the postoffice was in a store on the north side

(Cintinued on page eighteen.)

$7.50 After 30 Days Free Trial

The Belgium Melotte Separator—with the wonderful Self-Balancing Bowl. No other like it.

10 days' free trial—then, if satisfied, only $7.50 and a few easy payments — AND — the wonderful Belgium Melotte Separator is YOURS.

No Money Down!

Catalog tells all—*write.*

Caution! U. S. Bulletin 201 shows that vibration of the bowl causes *cream waste!* The Melotte bowl is *self-balancing.* Positively cannot get out of balance therefore cannot vibrate. Can't remix cream with milk. *The Melotte has won 25 Grand and International Prizes.*

Catalog FREE

Write for new Melotte catalog containing full description of this wonderful cream separator and the story of M. Jules Melotte, its inventor. Don't buy *any* separator until you have found out all you can about the Melotte and details of our 15-year guarantee which is infinitely stronger than any separator guarantee. Write TODAY. How many cows do you milk?

Runs so easily, bowl spins *25 minutes* after you stop cranking unless you apply brake. No other separator has or needs a brake. Bowl chamber *porcelain lined.*

The Melotte Separator, *H. B. Babson, U.S.Mgr.*
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2445 Prince St., Berkeley, Cal.

In writing advertisers, be sure to say you saw their advertisement in The Washington Farmer.

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AUTOMOTIVE MECHANICS
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Every graduate is a booster. Let us tell you how to be successful. Send for big free catalogue No. 107.

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Seattle, Wn. or Spokane, Wn.

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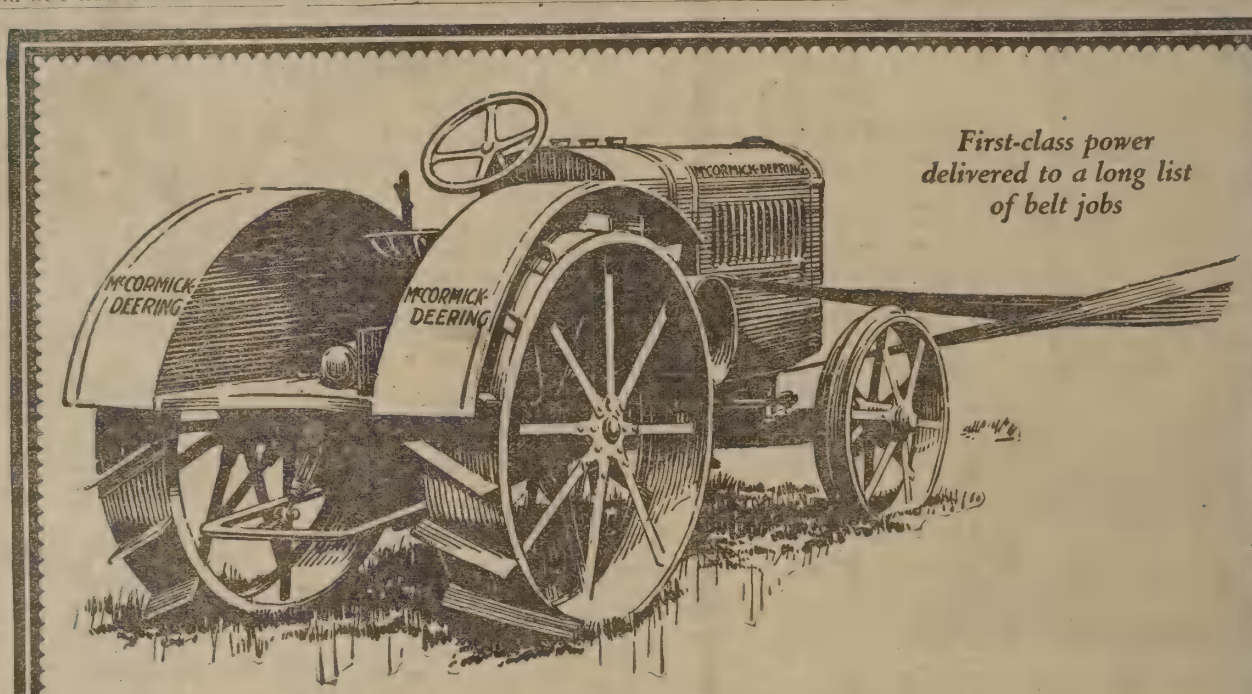


First-class power delivered to a long list of belt jobs

Invest in a McCormick-Deering Tractor

for Plowing and Belt Work

The remarkable new warranty covering the crankshaft and the crankshaft ball bearings in McCormick-Deering Tractors may well prove the deciding factor in *your own investment.* The ironclad agreement, printed below, provides you with a lasting security covering these important parts of the tractor. It is evidence of quality in the entire tractor. It is an indicator of practical design, accurate assembly, generous size of parts, and long life.

Do your plowing speedily and well with a McCormick-Deering and fit your tractor to fall and winter work. McCormick-Deering Tractors are designed to handle belt jobs as you want them handled. And McCormick-Deering machines are made to work right with tractors. The combination can't be beat.

Stop at the McCormick-Deering dealer's and go over the construction and the features of these tractors. Study the value of replaceable wearing parts, the unit main frame, ball and roller bearings at 28 points, etc. And remember this important fact: When you buy a McCormick-Deering Tractor you get all necessary equipment—throttle governor, belt pulley, platform, fenders, brake, etc. No extras to pay for.

Make your power investment safe by placing an order for a McCormick-Deering 15-30 or 10-20 Tractor.

SPECIAL WARRANTY
given every purchaser

The seller agrees to replace free the Two-Bearing Crankshaft in any 10-20 or 15-30 McCormick-Deering tractor, should it break during the life of the tractor, provided the broken parts are promptly returned to the factory or one of the branch houses.

Further, the seller agrees to replace free any Crankshaft Ball Bearing in the 10-20 or 15-30 McCormick-Deering tractor, which may break, wear out, or burn out during the life of the tractor, provided that the defective ball bearing is promptly returned to the factory or one of the branch houses.

INTERNATIONAL HARVESTER COMPANY
of America (*Incorporated*)
606 So. Michigan Ave. Chicago, Ill.

Bring $2250

Sorensen Sells 15 Head of Jerseys

A total of $2250 was received for 15 head of purebred Jersey cattle at the N. C. Sorensen dispersal sale held November 26 at the Southwest Washington fairgrounds. Colonel J. W. Hughes of Forest Grove, Ore., was auctioneer, assisted by Messrs. Scanlon & Rowswell. There was a fair-sized crowd in attendance, some of the buyers being from Grays Harbor, Thurston and Clarke counties. Prices for the 15 head averaged $170 each, this including two baby heifer calves. However, those who bought got their cattle cheap, considering the splendid line of breeding that Mr. Sorensen had to offer and the fact that he had official test records on some of the cows and very near relatives of some of the yearling and 2-year-old heifers sold.

The twice gold medal cow, Dahlia Forest Girl, sold for $270, E. Munn & Son of Olympia being the buyers. However, this splendid animal's age was against her, date of her birth being August 17, 1914.

Offerings and the buyers were as follows:

Firwood St. Mawes, bull, dropped August 10, 1922; to Mrs. John P. Winkler, Chehalis, $155.

Firwood Noble St. Mawes, bull, dropped August 10, 1922; Edward and Frank Yates, R. F. D. 2, Chehalis, $120.

St. Mawes Anna, dropped August 26, 1917, $135; bought by W. A. McEwen, R. F. D. 1, Winlock.

Firwood Queen, dropped October 15, 1922, $125, and Firwood St. Mawes Holly, dropped July 15, 1921, $180, went to Claude Anderson, La Center, Wash. Mr. Anderson was formerly Lewis county cow tester.

Firwood Dahlia's Fern, dropped September 15, 1922 $135; Eugene C. Williams, Oakville.

Firwood Holly's Pride, dropped August 18, 1922, $140; John J. McEwen, R. F. D. 1, Winlock.

Firwood Holly's Pet, dropped August 28, 1923 $100; Robert E. Munn, Olympia.

Firwood St. Mawes Primrose, dropped May 15, 1922, $205, Fred Blechschmidt, Oakville.

Firwood St. Mawes Dahlia, dropped June 26, 1921, $130; Eugene Williams Oakville.

Dahlia of Primrose Ranch, dropped February 18, 1909, $125; F. Moony, Elma, R. F. D. 1.

BABCOCK SELLS TWO CALVES.

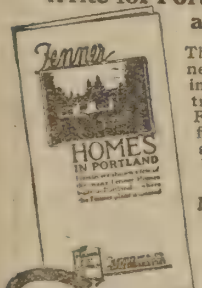
O. H. Babcock of Port Angeles, Clallam county, has filled two orders from eastern Washington for calves with cow testing association records on their dams and out of bulls backed by production records of more than 600 pounds butterfat.

You'll Like the Way Fenner Does Business

"Home building made easy" defines the Fenner method exactly. On request we will send portfolios of plans and pictures of beautiful, practical Fenner homes—more than 250 designs to choose from. Select the home of your choice and we quote you the exact price on all lumber cut to fit and ready to erect, all doors, windows, frames, building paper, nails, hardware, paint, stains, varnish, eave gutters and down spouts, and material for scaffolding.

Thus you know exactly what you are going to get and what it will cost. That is the Fenner way of doing business. It gives you better materials, a better constructed home and saves you time, money and worry.

Write for Portfolio of Plans and Pictures



This and other Fenner Portfolios show interesting and attractive pictures of Fenner houses, with floor plans, also specifications, etc. Write!

FENNER MANUFACTURING COMPANY
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Portland, Oregon

Fenner FACTORY CUT HOMES

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Name _____
Address _____

See what DELCO-LIGHT offers for $599.50

the most Popular Farm size Delco-Light Plant *completely installed* ready to turn on the lights

Here is what you get — and the Order Blank to get it with

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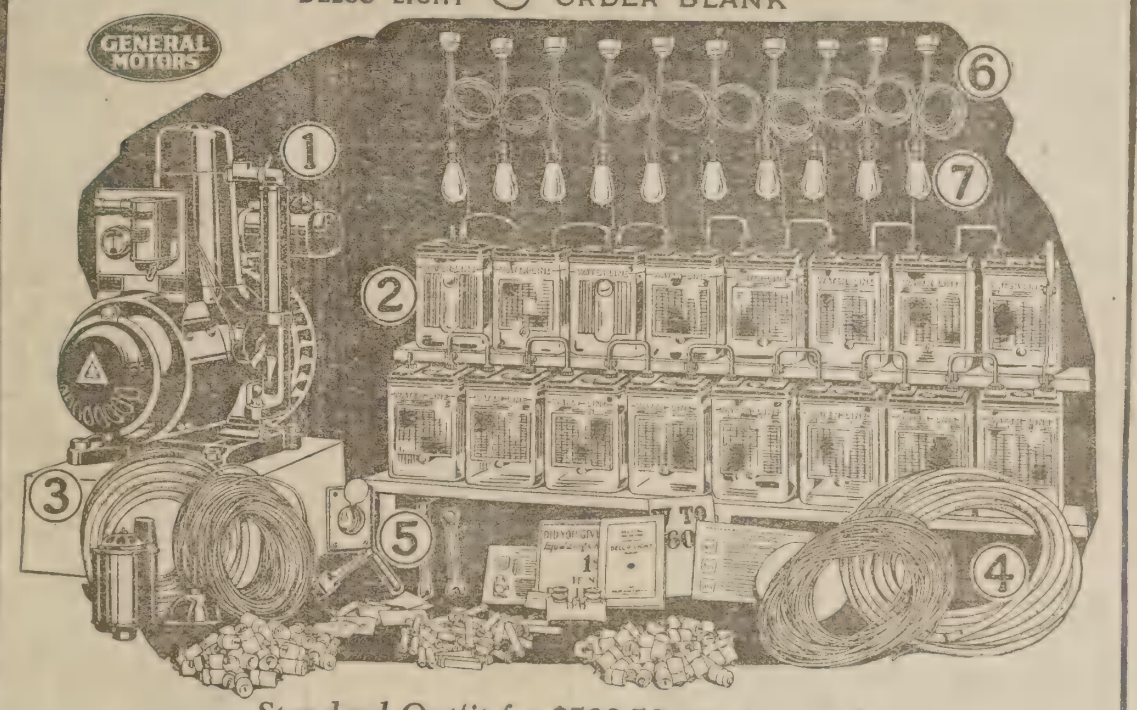

Standard Outfit for $599.50, consisting of

1-One Delco-Light Plant, the most popular size—Model 866, 850 watts capacity, 32 volts (freight paid to nearest railroad station).

2-One standard Delco-Light Exide Battery, with 16 large capacity cells, extra thick plates and heavy glass jars (freight paid to nearest railroad station).

3-The installation of plant and battery—except purchaser is to furnish a concrete base and battery rack and haul the plant from nearest railroad station.

4-Wiring house for ten (10) lights—to be located wherever specified by purchaser.

5-One general power outlet to be located in house wherever specified by purchaser.

6-Standard set of ten (10) drop lights with sockets installed in house.

7-Ten (10) standard electric light bulbs.

Similar Outfit With Smaller Size Plant—Model 608—$475.50

Modern Appliance Co., [illegible] 1st Ave. So., Seattle, Washington.

You may consider this as my order for a completely installed Delco-Light outfit in accordance with the price and terms I have checked.

Outfit Desired	Check Here	Cash Basis	Check Here	Time Basis	Check Here
Standard Outfit $599.50		5% Discount for Cash		$203.50 Cash on Installation—Balance $33 a Month for 18 Months.	
Smaller Plant Outfit $475.50		5% Discount for Cash		$175.50 Cash on Installation—Balance $25 a Month for 12 Months.	

Name _____

Street No. or R. F. D. _____

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OPTIONAL TERMS—4 quarterly, a semi-annual, or 1 yearly payment if desired.

NOW you can get your DELCO-LIGHT

Over 200,000 Satisfied Users

MODERN APPLIANCE COMPANY, Distributors
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LIVESTOCK AND DAIRY

Dairy School

Two-Weeks' Course at Enumclaw

The two-week dairy school put on by the state college extension service at Enumclaw was brought to a fitting climax by a banquet in the Presbyterian church at noon, November 23. The Enumclaw Commercial club members suggested the dinner and brought the members of the school in as their guests. There were 100 who attended and listened to talks by club members, Superintendent of Schools C. E. Beach, Dr. S. B. Nelson, director of extension at the state college; Soren Sorenson, president of the Washington state farm bureau; J. A. Scollard, president of the United Dairy association of Washington. Otto Tamm, president of the Enumclaw Cooperative Creamery company, spoke for the farmers.

Arthur McKinnon, state representative for this district, emphasized the value of having farmers come in as members or as visitors to any of the commercial club meetings.

The trend of the speakers' themes was toward a greater cooperation between the farmers of the community and the business men of Enumclaw. The farmers were complimented for their splendid success in working together, both in their creamery and with their fire insurance organization, both of which has gained renown in cooperative circles.

The dairy school, which was originated by the extension service through the help of W. W. Henry, the county agent, was well attended and it covered many vital dairy subjects.

This is the first of four similar schools that are to be held in different counties about the state during the next few months.

DIE OF HOG CHOLERA.

Approximately 4 per cent of the hogs on farms in the United States died of hog cholera last year. This estimate is made by the United States department of agriculture for the fiscal year ending June 30. Losses were heaviest in Iowa, Nebraska, Indiana, Missouri, Illinois, Ohio, Georgia, Minnesota and South Dakota, in the order named. Each of these states lost more than 100,000 head of swine from the disease during the year.

GENERAL ADVERTISING.

Swedish Inventor Has New Oil Light

Claims Whiter and Much Cheaper Light Than Electric or Gas.

Edison enabled us to enjoy the benefits of electric light, Count Welsbach's mantle made it possible to have the incandescent gas light, but it remained for a Swedish engineer named Johnson, now living in Chicago, to devise a lamp that would burn ordinary, every day kerosene oil and produce a light said by the many scientists who have seen it to be whiter than electric. The lamp is as simple to operate as the old style oil lamp, burns without odor, smoke or noise and is proving a sensation where oil light is needed.

Mr. Johnson offers to send a lamp on ten days' free trial and will even give one to the first user in each locality who will help introduce it. A letter addressed to W. R. Johnson, 31 N. Fifth St., Portland, Ore., will bring full particulars about this wonderful new lamp. He has an interesting agency to offer, too.—Adv.

Hamilton Sale

The complete dispersal sale of the A. L. Hamilton herd of registered Holsteins on the old Phelps farm, near Centralia, November 16, resulted in the entire 25 head changing hands. The average for the 16 cows in milk was $139. The total sale brought $3025, a figure which was slightly below their estimated value. The reason for the slow bidding was due, perhaps, to the fact that Lewis county is already fairly well stocked up with dairy cattle.

Mr. Hamilton had spent much time and capital in getting this herd started and the local dairymen appreciated this fact and kept the greater part of the animals in the county. The dispersal of the herd was deemed necessary after the sale of the farm lease had been made. Mr. Hamilton, however, intends to remain in the county. A few of the farm implements, a splendid work team and four grade milk cows were also sold at auction.

Mrs. V. L. Bevington of Chehalis paid $315, the top price of the sale for C. K. K. S. V. Marie, a daughter of Chimacum King Corndyke Sadie Vale and out of Cascade Marie. The dam has a record of 1107 pounds of butter and is one of the four 1000-pound daughters of Sir Johanna Ruth Fayne. The sire has six daughters that have produced over seven pounds of butter in seven days and six 700 to 900 pound butter records as 2-year-olds. All of the dams of the heifer in question have good A. R. O. records.

A list of the animals, their selling price and the buyers follows:

Lady Pontiac Idske Marie, $125, Mrs. V. L. Bevington, Chehallis; Newaukum K. C. Jewel, $100, Fred Deitchler, Chehalis; Newaukum Lunde Cornucopia, $290, B. P. Conine, Yelm; Chimacum Lutske Burke, $200, Bevington; Frame Farm Aralia Fancy, $185, C. A. Ives, Centralia; Newaukum K. C. Elnora Hengerveld, $125, Deitchler; unnamed bull calf, $100, R. McDaniel, Auburn; Newaukum K. C. Veeman Hengerveld, $175, Deitchler; C. K. K. S. V. Marie, $315, Mrs. Bevington; Aggie Nena Cornucopia 2d, $135, Thomas Nisbet, Chehalis; Lady Olga Fayne Korndyke, $130, Conine, Yelm; Newaukum K. C. Pauline Jewel, $150, Deitchler; De Kol Nellie Korndyke, $125, H. R. Shoultes, Chehalis; Carnation Edith Aggie, $100, Deitcher; Newaukum Burke De Kol, $90, Mrs. W. A. Root, Chehalis; Newaukum Palmyra Segis 2d, $80, F. A. Bennett, Oakville; Newaukum K. C. Segis Belle, $90, A. O. Hamilton, Chehalis; Blossom Pontiac Segis Beets, $70, O. Blechschmick, Oakville; Newaukum Lunde Burke 2d, $50, Deitchler; unnamed heifer calf, $75, Blechschmick; Miss Selah Deer Banks, $55, Blechschmick; unnamed bull calf, $45, Boone; unnamed bull calf out of Chimacum Lutske Burke, $25, Babe Kain, Chehalis; unnamed bull calf out of Frame Farm Aralia Fancy, $15, Bone; Galvin Lutske Boone Wayne, $75, Blechschmick.

Perpetual Pasture

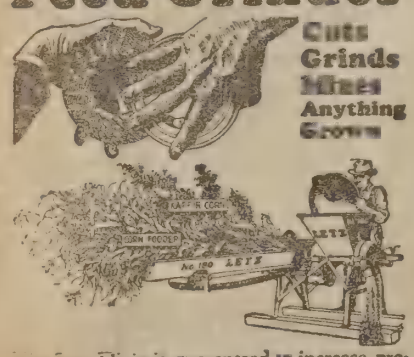
It is just as essential that dairy cows have succulent feed in the summer as in the winter, though dairymen frequently think of artificial succulence as necessary only for the winter months when the pastures are stagnant or impracticable because of winter weather. Spring and fall can usually take care of themselves so far as green feeds are concerned, but both winter and summer need forethought on the part of the dairy farmer.

"The silo provides an efficient means of preserving the succulent feeds of the growing seasons for use during that portion of the year when green pasturage is not available. The farmer with a good supply of silage knows that he can carry his dairy cows or beef stock through a long dry spell with practically no loss in milk flow or falling off in the condition of his stock. If you want to increase your herd don't buy more land; buy a good silo," says the DeLavel Pacific company in its dairy equipment booklet which it is now distributing to those who desire it. The advice is worth considering. The last sentence is especially meaningful. It suggests soil efficiency rather than large area. There are not many farms that could not easily be made to produce more feeds and foods than they do, and the use of a good silo aids materially in the process of increased production and minimum cost of production.

SLAUGHTER 4,000,000 HOGS IN JULY.

Nearly 4,000,000 hogs were slaughtered during July of this year in establishments operating under federal meat inspection, breaking all previous records for hog slaughter during that month. The exact number slaughtered and inspected, according to the records of the bureau of animal industry, was 3,983,435.

Feed Grinder



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Surely such a result is worth trying for. It is the poor milkers in the herd that eat up the profit made by the good producers. Usually they are poor milkers because of some impaired condition of the genital functions—the milk producing organs.

The medicinal properties of Kow-Kare affect just these organs. Its toning, stimulating action is quickly apparent. Sluggish cows have improved appetites and assimilation and better milk flow is sure to follow.

In the treatment or prevention of Barrenness, Abortion, Retained Afterbirth, Scours, Bunches, Milk Fever, Lost Appetite, Kow-Kare has a reputation founded on successful use for over twenty-five years. You, too, can realize greater profits from dairying through the judicious use of Kow-Kare. Try it.

Kow-Kare, large package, $1.25; medium size, 65c—at feed dealers, general stores and druggists. If your dealer is not supplied, we will send postpaid on receipt of remittance.

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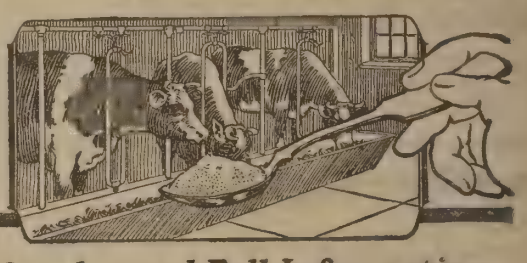

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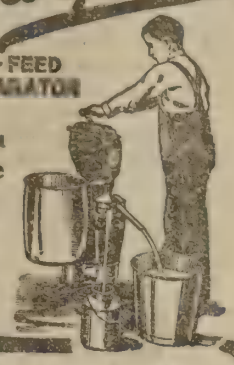

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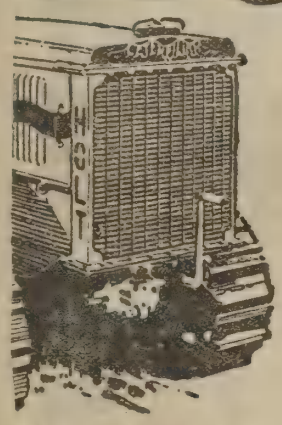

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By DR. E. E. WEGNER, W. S. C.

COWPOX.

This disease is not generally considered in this class, since the case reports are few. Occasionally, however, we get evidence that this infection can infect both man and animals, being transmitted from man to animals and back again. Recently I was advised of a case where certain members of a family were vaccinated for smallpox, one of the boys that was so treated milked the cow night and morning. The place of vaccination was not covered and the boy rubbed the place and scratched it while it was healing, because of the itching there. A few days later the cow contracted sores on the teats similar to cowpox.

The father helped with the milking and some days after the cows showed evidence of the cowpox he developed poxlike lesions on the thumbs of his hands where he had small breaks in the skin. He also developed similar, though smaller, lesions on the arms and body. The father was accustomed to meeting a baby son on returning with the milk and usually took the child by the arm as they walked along. The child developed poxlike lesions on the arms and body, though appeared to suffer very little.

The mother developed extensive poxlike lesions on the face after a night of chills and fever and it is believed that she contracted the infection from the child, with which she slept, since the child was accustomed to sleep with its arm around its mother's neck, and its hand on her face.

From the above it seems certain that it is possible for animals to contract the poxlike diseases from man and for the man to take them again from the animals. It is likely that when such cases occur that it is due to a particularly virulent strain of bacteria having been used, as we do not consider that this ordinarily happens. No serious illness occurred and there is no cause for alarm, but it is interesting to know that such transmission is possible, and that, while one may care for animals immediately after vaccination, it is wise to keep the vaccinated area covered until healing is quite complete, as there is danger of susceptible animals becoming exposed. Likewise there is some danger of people contracting a poxlike disease from animals with cowpox.

Ringworm.

This skin infection so commonly seen in young animals is the same as that observed in children and it may be transmitted from the young puppies or kittens to the children who play with their infected pets.

In puppies the ringworm appears like a small roughened area of skin from which the hair is removed or only a few broken hairy stumps left. Later this becomes larger and the area appears rough and scaly, the hair disappearing almost completely. The outer area is reddened and shows a tendency to widen more and more, as, in fact, the diseased area becomes larger and larger.

These areas sometimes appear to itch and irritate the animal which scratches or gnaws the part.

Children who play with their pets are apt to contract this disease when the pets have them. The cause is a fungus that grows in the skin and causes the above diseases. This fungus will grow on the skins of other animals as well and when the part is rubbed or when the hand of the child is passed over that area some of the fungus may be transmitted to the hands. Lesions may then appear on the hands or on other parts of the body where the lesions appear.

The lesions are not dangerous, though they are not to be invited and it is well to have the animal treated as soon as the condition is noticed. If this is done there is little danger of it being transmitted to the human family because it can be killed quickly and does not become a menace to the whole family. Painting the roughened area and the outer part particularly well with tincture of iodine is very good to keep the infection from spreading by killing it before it gets a good start.

Better Sanitary Methods

Better sanitary methods which will help to prevent the spread of infection, such as segregating any infected animals, and the frequent thorough disinfection of the barns, will help to prevent contagious abortion, according to Dr. E. E. Wegner of the school of veterinary science at Washington State college at Pullman. It is also a good plan to adopt better feeding methods, such as will supply the necessary minerals and other body building substances in order to give the cows more resistance in fighting off the disease.

Investigations are being held through the efforts of the school of veterinary science, and it is hoped that more definite information can be secured in the near future regarding this disease.

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POULTRY AND RABBITS

Roup in Fowls

Control Dependent on Early Recognition of Disease

"Roup or colds are common fall and winter diseases which affect poultry and in some cases the trouble occurs at other times during the year, when conditions are favorable for their development. While not as frequently found, or as serious as many others," says Dr. W. T. Johnson of the Western Washington Experiment station, "these diseases often produce perplexing problems to the poultryman.

"The symptoms and diagnosis of colds and roup are largely familiar to experienced poultrymen, but to the beginner they are not so well known and in such cases the diseases may obtain a considerable start before the situation is fully appreciated. Proper control is dependent in a great measure upon early recognition.

"With colds there is an increased amount of secretion formed by the membrane which lines the breathing passageways of the head. At first this is not apparent externally, but as it increases in severity more secretions are formed, filling the nasal passageways and resulting in a discharge from the nostrils which has a tendency to dry and close these openings. When this discharge persists for some time the fowl wipes it off on the neck feathers and also on the wing, particularly on the back of the wing and where the wing joins the body.

"Since the nasal passageways are directly conected by a tube-like structure with each eye cavity and a cavity located below and in front of each eye, known as a sius (suborbital), it is only natural for the secretions of these cavities, as well as from the nasal passageways, to collect in these places and cause enlargements of the head when the nostrils become closed. It is when this stage is reached that a serious condition exists. If the collected secretion is not removed within a very few days it becomes cheese-like in consistency and can not be removed except with difficulty. In very severe cases the various passageways become filled with the hardened secretion and it is impossible to remove it.

"In those cases where the eye region becomes involved and particularly when there is a marked odor from this region the condition is most commonly regarded as roup. Whether we call it roup or an advanced stage of a cold makes no material difference, the important point being the understanding of the fundamental factors in the case.

"Fowls affected with simple colds show no particular detrimental effect. When the disease proceeds to swellings of the face and eye regions, droopiness and lack of appetite is noted. When affected with the disease in the early stage egg production is not seriously diminished, but the later stages are associated with a decided slump.

How to Detect Cold.

"In diagnosing a cold before a discharge has been noted at the nostrils it is necessary to apply pressure to the nasal passages and force out the collected secretion. It is always possible to detect a cold by this means. Some times a watery substance which has come up from the crop may be forced out. The secretion found with a cold is thickened and not watery.

"Chicken pox as found in connection with the eyelids may be confused with roup. In this connection one must bear in mind that roup is always preceded by a cold and in case of roup one should be able to detect increased formation of nasal secretion by its discharge through the nostril.

"With colds and roup it is not at all uncommon to find yellow, cheese-like spots (canker) in various parts of the mouth and it is advisable when handling such cases to take note of this condition should it be present.

Common Causes.

"Any factor which subjects the fowls to exposure or sudden and marked changes in temperature will tend to produce colds, which may later advance to roup. Some of the factors which may be expected to lead to colds and roup are: Shipping fowls so that they are subjected to exposure; connection with the roosting region; insufficient ventilation; improper regulation of the open front curtain, and leaving the rear windows open during stormy weather.

"Whether or not many of our poultry houses are sufficiently ventilated, particularly in the roosting closet, is an unsettled question. This is the place where the greatest precaution should be taken to provide proper circulation of air, but a glance at the common poultry house will show that the customary arrangement of this part of the house makes it the least ventilated of any part of the house. The long poultry house, especially one with a large open front, with no cross walls outside of the end walls and the roosting closet partitions to break the wind, demands that close attention during inclement weather be given to the open front curtain. This is especially true where the house is faced in such a direction that the prevailing winter winds strike it obliquely.

"It some times happens that the housing facilities are ample, but that the fowls crowd certain sections of the roosting quarters, resulting in the development of colds. Congestion in part of the roosting quarters and abundance of room in other parts is at times brought about by feeding practices such as feeding in a given place and inducing the fowls to gather more at these points or permitting them to enter the house from an opening at one end or the other of the house.

"There is a popular impression that roup and colds are due primarily to infection. While this may be true the evidence at hand to support this view is not convincing and it would be well to consider housing and management factors first in attempting to locate the cause.

"The idea that roup and chicken pox are the same disease is erroneous. Chicken pox is a germ disease which has been conclusively proved as such and may or may not be associated with the occurrence of roup.

Control of the Disease.

"The logical procedure in considering the control of colds and roup in an affected flock is at first determine the number of fowls and then if serious locate the cause and remove it. Some times the cause has been automatically removed as in the case of leaving the open front curtain up too much during a brief period of stormy weather. Since fowls are very susceptible to colds it should be no cause

(Continued on page sixteen.)

GENERAL ADVERTISING.

Poultry Expert Tells How to Make Hens Lay

Getting More Eggs From the Flock Will Solve a Financial Problem for Many Housewives—An Egg a Day Per Hen Possible.

The director of an agricultural experiment station is responsible for the statement that it may be possible to breed chickens which will lay an egg a day, every day in the year. And R. A. Lynn, whose advice has been followed by thousands of poultry raisers with striking success, says, "I believe that any poultry raiser can at least double and probably increase his poultry profits five times, simply by getting more eggs in the winter, when prices are high."

Healthy, Vigorous Hens Should Lay 250 to 300 Eggs a Year.

"I have given years of study to the subject and am convinced that hens loaf in the winter and after the moult because certain elements are missing in the feed which are needed to keep the generative organs in a healthy laying condition. Furthermore I demonstrated that these missing elements could be easily supplied by adding certain mineral elements to the drinking water, thus insuring a plentiful supply of eggs at highest prices."

Thousands of poultry raisers praise the work that I am doing, and letters pour in to me every day. For instance, T. E. Asher of Naylor, Mo., writes: "Before using my secret I was getting only one egg a day, the next week I got 194 eggs."

I am glad to help any poultry raiser and will send full instructions regarding my system and two regular $1 packages of my wonderful mineral compound on free trial to any reader of this paper who will write me. If after trying the system 10 days your flock is not healthier in every way, and laying many times as many eggs, it will not cost you a cent.

Don't send any money, but just your name and pay the postmaster only one dollar and postage when he delivers the two one-dollar packages. You can sell one package with instructions to a neighbor and thus get your own package free. Not only that, if you say so (and you are the judge), your money will be returned, as I fully guarantee this offer. **R. A. Lynn, 139 Gateway Station, Kansas City, Mo.**—Adv.

Get Winter Eggs!

See to it that there is song and cackle, scratch and action, going on in your poultry yard.

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Read the "Want Ad" page this week for good offers of all kinds.

ORCHARD AND GARDEN

Pruning Season

Is Formally Opened in Stevens

The 1924-1925 pruning season of the orchardists of Stevens county was formally opened November 24, by M. D. Armstrong, horticultural specialist of the extension service of the Washington State college, who demonstrated pruning at the Abe Heidegger orchard at Rice and the J. W. Bradbury orchard of Kettle Falls. The entire day's work was done in a steady downpour of rain, which restricted attendance.

The following points relative to the correct way to prune were emphasized. Heading back is not the correct way to prune. It is supposed to limit size of trees and induce stockiness in the branches and it accomplishes neither. It is detrimental, as it dwarfs the tree, retards production of fruit and makes the annual job of pruning much more burdensome. The only time this method is needed is when the trees are very young, to enable the grower to form the tree by inducing branches to grow where needed and to eliminate them where this is desirable.

The thinning out method is now known to be the correct one. It opens the trees and admits sunlight which is necessary to the production of fruit. Sunlight is the power and the leaf is the factory which makes the food which forms the fruit. Hence the necessity of sunlight.

Mr. Armstrong stated that when the northwest orchards were set out much faulty information was given out relative to distances to plant. Much trouble is arising from this at the present time and it is found necessary in some orchards to even pull out some of the trees. A method has been worked out whereby this may be done with a minimum of inconvenience.

As regards time of pruning, Mr. Armstrong stated that summer pruning was never advisable except the removal of water sprouts and suckers. The proper time to prune is as soon as the leaves fall, carrying it on throughout the winter as weather permits.

The following Stevens county growers witnessed the demonstrations: Abe and Raymond Heidegger, Louise Schnegge, W. L. and Jesse Alldredge, Ed. Curry, Joe Robinson and J. W. Bradbury. Incessant rain prevented large attendance.

The Bees in Winter

The question is repeatedly asked how to care for and protect the bees in winter. In answer to this inquiry, we print an article that appeared some time ago in THE FARMER, written by George W. York, one of the prominent bee authorities in the northwest.

It seems natural to put off doing some needful things until the very last minute or day, and so it comes that some beekeepers either forget or simply neglect to see that their bees are prepared for safe wintering until it is almost too late to do the work properly.

The very first and altogether the most important part of winter preparation is the matter of food stores. It frequently occurs that owing to drought or other unfavorable conditions the bees have not been able to store sufficient honey to carry them through the winter, or until they can again gather from natural sources the following spring. Under such circumstances the only thing to do is to feed the bees.

If the beekeeper has money on hand or can get some that he is positive is entirely free from disease germs perhaps it is best to feed that, but if short of good honey, the next best thing to feed the bees is sugar sirup. Exclusive of the weight of the hive, the winter stores should weigh around 40 pounds.

The sirup is prepared by dissolving, say, two pounds or two pints of cane sugar in one pint of boiling water. These should be thoroughly stirred until the granulated sugar is completely dissolved.

Now as to the best way to give the sirup to the bees. I prefer to use a bee-feeder placed diagonally across and on top of the brood frames in an empty super. Across the top of this feeder, place four or five short wooden sticks about six or eight inches long and about one inch thick. These should be placed, say, four inches apart, then fill the feeder with the warm sirup. On top of the short sticks put a burlap cover. This may be a gunnysack, folded so as to cover the whole of the inside of the super.

The short sticks will hold the burlap above the feeder so the bees can come up from below and get under the burlap to the sirup. The burlap will help to keep all the heat of the bees around the feeder and sirup, thus causing them to carry the sirup down in the brood combs very rapidly.

This way of feeding is much better than any outside feeding, as there is practically no danger of robbing, especially if the feed is put in just before dark in the evening.

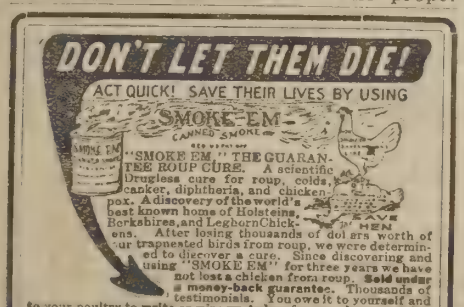
The bee-feeder is made of a solid block of wood about 20 inches long, two and a half or three inches thick and four inches wide. On one side it is sawed out, leaving three or four partitions of the wood, so the bees will not be drowned in the sirup. The block of wood is sawed almost through. This makes a fine feeder.

Of course, if this feeding has been neglected until midwinter, then the best way is to make thin cakes of sugar that can be laid on top of the brood frames and under the packing, when the bees will come up and get it.

The hive entrance should be reduced down to about two inches in length and three-quarters or one-half inch high while feeding, or entirely closed, so no other bees can get in to help themselves. When there is no outside nectar from flowers to be had, bees from strong and well- supplied colonies are apt to go snooping around to see what they can find for themselves, even if they do not need it. Bees are quite different from people, as they (the bees) seem to have been born busy.

SHORTAGE IN THE CELLAR.

Now is a good time to make a careful inventory of the winter vegetables that are in the cellar. What is lacking? Are the onions, beets, squashes missing? If so, it is probably because you were careless in planning last spring's garden. One of the great advantages of the farm home is the possibility of having a generous supply of good, home-grown things to eat at every season of the year. If some of these things are absent from the cellar this winter it is a good time to make a note of it and figure out a place for these particular things in the garden that will be planted next spring. Do not wait till March or April to begin "making garden." Make it on paper this winter.



Read what Mr. H. J. Schuette, Box 47, Evansport, Ohio, says: **"SMOKE 'EM"** is a wonderful roup cure. It certainly does the work. Dealers, we have a good proposition.

THE H. M. SPAHR BREEDING ESTATE
Dept. 57A, Spahr, Frederick Co., Maryland.
Telegraph Address: Thurmont, Maryland.

Vita Gland Tablets Start Hens Laying in Twenty-four Hours

Hens have glands just like humans and also require vitamines. Because they directly stimulate the organs involved in egg production the mysterious newly discovered VITA GLAND Tablets, crushed into hens' drinking water, turn winter loafers into busy layers almost over night. Science has discovered how to control egg production with essential vitamines, and gland extract that works directly on the OVARIAN or EGG producing gland of the hen. The wonderful effect of gland stimulation is shown by a simple test. Government experiment stations report that hens properly fed vitamines, etc., lay 300 eggs as against the sixty of the average hen. "Leg weakness of baby chicks due to insufficient Vitamine B," says The Official Bulletin. Also says: "Hens start laying at an average age of 139 days when fed vitamines."

Get One Box Free

EGGS, EGGS, EGGS and fine healthy chicks, prosperous flocks without fuss or bother or drugs or expensive feeds can be had. Just drop these tablets into drinking water. So simple to double your profits. Chickens now full of pep and life. Nests full of eggs. Summer production at winter prices. So confident are the Alexander Laboratories, the manufacturer of the original and genuine VITA GLAND tablets, that you will be amazed at results that they offer to send a free box for your own use. This is how. Send no money, just name. They will mail two boxes, each regular one dollar size, a generous supply. When they arrive deposit only a few cents postage and one dollar with postman. When your neighbor sees the wonderful increase of eggs in your nests let him have one box for a dollar and thus your box has cost you nothing. $5000 in big Kansas City bank guarantees your satisfaction or money back without question, so write today and get dozens of extra eggs this simple easy way. Write **ALEXANDER LABORATORIES, 9037 Gateway Station, Kansas City, Mo.**

What's the Verdict?

THE test of a mealtime drink is not alone how it tastes, but also what it does. Many a coffee-user finds wakefulness and restlessness after drinking coffee with the evening meal—and other health-disturbances follow on.

There's double pleasure and benefit in Postum; delightful taste, complete satisfaction, and agreeable friendship with nerves and health.

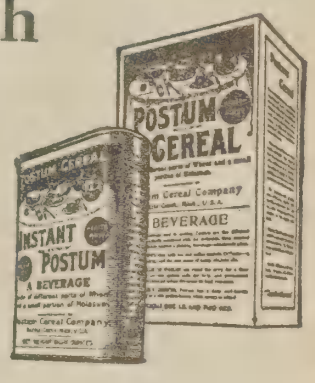
There's charm without harm in Postum.

Let a ten-days' trial of Postum instead of coffee show you the marked improvement in health and comfort which so many others have found.

Sold by grocers everywhere!

Postum for Health

"There's a Reason"



Your grocer sells Postum in two forms: Instant Postum (in tins) prepared instantly in the cup by the addition of boiling water. Postum Cereal (in packages) for those who prefer the flavor brought out by boiling fully 20 minutes. The cost of either form is about one-half cent a cup.

Made by Postum Cereal Co., Inc.,
Battle Creek, Mich.

It is not alone the superior workmanship, materials and design but its all-around fitness to the tractor user's every requirement that makes the Two-Ton Caterpillar Tractor (T35) the supreme small tractor.

Send for catalog of 2-Ton or larger sizes

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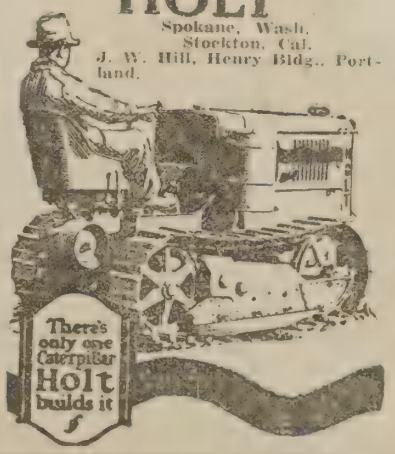

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To Earn $150 to $300 per Month

Learn Auto Tractor Engineering

We want 100 men who are willing to accept positions at above wage. No experience necessary, as we train you in very short time, as Engineers, Auto Mechanics, Electrical Experts, Truck Drivers, Chauffeurs, Salesmen, Battery, Tire Vulcanizers and Welders. Many good jobs now open. Before joining any other school it will pay you to see Hemphill's, the million dollar trade school system. We give free transfer and life scholarships to our 16 schools in U. S. A. and Canada. The largest and most practical system in the world. Write at once for free poster and list of jobs from Free Employment Dept.

Hemphill Auto Electrical & Tractor Schools

304 E. Pike St., Seattle; 1115 Granville St., Vancouver, B. C.; 228 9th Ave. E., Calgary, Alta; 580 Main St., Winnipeg, Man., Canada; or 107 Nicolett Ave., Minneapolis, Minn. Write nearest branch to you. We pay railway fare to nearest branch.

The department editors of this paper are anxious to be of service to you. Do not fail to write to us if they can be of help to you.

Nitrate of Soda

Michigan Agricultural Experiment Station reports a gain of 7.47 bushels of wheat per acre from top-dressing in the spring with 100 lbs. of Nitrate of Soda. Virginia Station Bulletin number 221 says, "On wheat crops needing nitrogen an increased yield of 5 bushels per acre can be expected from each 100 lbs. of Nitrate of Soda applied per acre." Demonstrations in Pennsylvania have shown an average gain of 7½ bushels of wheat per acre and 37% increase in the straw.

Wheat

Potatoes New Jersey Experiment Station shows that the largest yields of potatoes are obtained when Nitrate of Soda is used as the sole source of Nitrogen. What is true of potatoes is true of other vegetables.

Early Vegetables They come earlier and main crops become better and more prolific when Nitrate of Soda is used. This is why Market Gardeners use such large quantities.

Tobacco Ohio and Virginia Experiment Stations report wonderfully profitable gains from the use of Nitrate of Soda on tobacco. My own demonstrations in Pennsylvania prove that 200 lbs. of Nitrate of Soda used at planting time will add 100 lbs. or more tobacco to the acre.

Apples Practically all the Experiment Stations in the apple districts now recommend Nitrate of Soda as necessary and are recommending its use in the spring before blossom time. This applies equally well to Peaches, Pears, Cherries and other fruits.

Why not try it on your crops?

My Free BULLETIN SERVICE, covering the use of Nitrate of Soda on all kinds of crops, is issued for your information and explains how to use it, where to use it, when to use it. If you want it send me your address, name the crops you grow and to identify this advertisement add the number 3432

Dr. William S. Myers, *Director*
Chilean Nitrate Committee
25 Madison Avenue New York

Hand Power Hercules

Fastest, Cheapest Way to Clear Land

At a contest held recently in England, Hercules all-steel triple power stump puller pulled stumps faster than any other method. Quick work—low cost and one man does the job. Hand power in four speeds, single, double, triple and quadruple power. Easy to pull—quick winding cable, and other features. Horse Power Hercules is most complete, up-to-the-minute stump pulling outfit made. Write for prices and catalog—get my 1923 introductory offer.

$10.00 Down Easy Payments

B. A. FULLER, Pres.
Hercules Mfg. Co.
614 29th St.
Centerville, Iowa

Comes complete ready to use

Horse Power Hercules

Have you glanced over the farm bargains on the "Want Ad" page?

Mail-O-Grams

By State College Specialists

A. B. Crane, Agricultural Engineering: Trim out all weeds and brush along your open ditches and burn the trash.

B. A. Slocum, Apiculture: Plan your next year's work. If you need queens or package bees in the spring, place your order now for early delivery.

E. Belle Alger, Clothing: To freshen up a velvet hat, hold it over the spout of a teakettle in which the water is boiling.

Don G. Magruder, Dairy: Use vaseline on chapped teats. If very bad, wash well with warm water and apply glycerate of tannin or equal parts of spermaceti and oil of sweet almonds.

Leonard Hegnauer, Farm Crops: Pull up and burn all weeds which may have gone to seed.

R. N. Miller, Farm Management: House and grease all farm machinery for the winter.

M. D. Armstrong, Horticulture: Pick up the scattered apple harvesting equipment and get it under shelter.

C. M. Hubbard, Live Stock: Be prepared for early farrowing or else have your sows farrow later.

George L. Zundel, Plant Diseases: Potatoes, if stored in cellars where the temperature is too high or too low, develop a bundle browning similar to the symptoms often found in fusarium blighted tubers.

W. D. Buchanan, Poultry: Green feed in winter is the result of planning. Plan now for this winter's supply. Mangels and alfalfa leaves and blossoms may be substituted for fresh greens.

Pacific International

For the first time in several years that a show string from his Firerest farm herd of Guernseys has been on the circuit, Dr. A. Macrea Smith, the well-known physician of Bellingham, Wash., was able to be at the ringside. He saw them win 11 blues and junior, senior and grand championship on females, also the Staples trophy for best calf herd and the Lady Oregonian trophy, a magnificent silver chryanthemum vase, offered by the late F. S. Peer for best group of four Guernsey felames. This was won in 1921 by Appletree Point farms of Burlington, Vt., but last year and this year was taken by a Smith group. First aged cow (senior and grand champion), first junior yearling heifer and first senior heifer calf (junior champion) were included in the quartet that won it this fall. When La France of Bralee was defeated for the championship last fall by Jewel of Rose City, Mrs. Smith thought she would not show the animal again. She changed her mind, however, and this fall saw her placed over River Banks farm's Imp. River Banks Valuentine, that defeated Jewel at the Oregon State fair.

Kenneth Hinshaw and Earl Selle, youthful Berkshire breeders from Goldendale, Wash., encountered the stiffest competition that they had run into since their swine left home in August and started the round of the northwest fair circuit. They had to be content with a fifth and a sixth in the open classes and a third and two sixths in club classes, but they have 33 blue ribbons and 10 purple from other shows to add to their collection of over 300 which they have made in eight years of club work.

One of the most welcome easterners at the show was Karl B. Musser, formerly extension dairy specialist in Washington and now secretary of the American Guernsey Cattle club, with headquarters at Peterborough, N. H. Musser was selected something over two years ago to be one of several Guernsey field men, and worked for a time in New York state. He was presently called into the office, however, soon became assistant secretary, and upon the retirement of W. H. Caldwell was made secretary. He was an interested spectator of the Guernsey judging and was the principal speaker at the Guernsey banquet.

M. S. Prescott of Lacona, N. Y., editor of the Holstein-Friesian World; Earl Cooper of Chicago, junior extension leader for the Holstein-Friesian Association of America; A. C. Oosterhuis of Oconomowoc, Wis.; and Judge R. E. Haeger of Algonquin, Ill., were the black-and-white breed's most distinguished eastern guests. Prescott has been out at least twice before; Cooper saw the show last fall and visited the northwest again this summer, on club work; but Haeger had never seen the Pacific International, though he judged at the Washington State fair about 1908. He is as well known an auctioneer as he is judge, and his success as an exhibitor has never been approached. He said he had never seen a better 3-year-old than John L. Smith's reserve champion, and the line-up of females he pronounced by far the best of the season—and he has judged a score of shows from coast to coast. In the absence of W. A. Moserip of St. Elmo, Minn., who was expected but who was unable to come, Haeger conducted the Holstein judging school, and was assisted by Oosterhuis, who worked with him on the national committee which developed the "true type" Holstein.

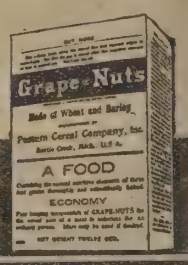
The Winter Breakfast

which includes Grape-Nuts with cream or good milk, will have one dish that has both engaging flavor and true nourishment.

Grape-Nuts is more than "something good to eat." It is a building food in most digestible form; rich in proteins, carbohydrates, mineral elements and vitamin B—all vitally essential to the daily rebuilding of every part of the body.

It pays to keep oneself in the highest physical condition, for with the strength and vigor that go with health you can "do things" and be happy.

There's a way—and *"There's a Reason"*



for **Grape-Nuts**

Secretary Hoover Says:

In an address delivered at New York City November 13, 1923, referring to the electrical industry—

"It is fitting that I should make some remark upon the remarkable progress and ability shown by the whole electrical industry since the days of Mr. Edison's initial genius. They have come to have a large vision of co-operation and service and have in very large measure realized their responsibilities to the public.

"One great mark of their progress is that despite the greatly increased cost of labor, coal and other materials, there is but little if any increase in the cost of light and power to the consumer today over prewar prices.

"From an annual utility production of 4,000,000,000 kilowatt hours twenty years ago we have increased to 50,000,000,000 today, with an increase in consumption from 60 to 500 kilowatt hours per capita.

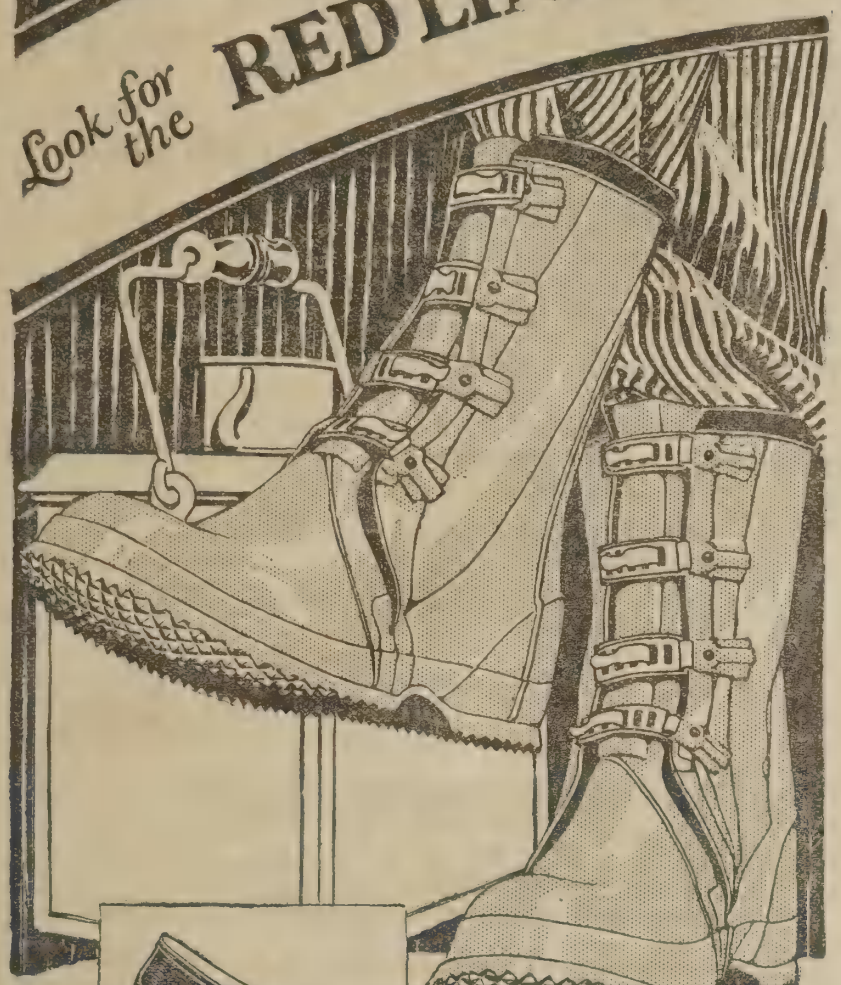
"It is a magnificent achievement of the initiative and ingenuity of these industries, and that it has attained such a growth under public regulation is itself proof of the ability and co-operation of our public officials."

Northwest Electric Light and Power Association

F-S

TAKE ADVANTAGE OF GUARANTEE mentioning THE WASHINGTON FARMER when writing to advertisers; you are doubly protected. See the guarantee on the editorial page.—Adv.

Look for the **RED LINE** 'round the top!



"Straight-Line" light rubber overshoes for the entire family

There is just one way to get that long, unequalled service that *"Hi-Press"* Boots and Shoes deliver—

And that is to insist on the genuine *"Hi-Press."* You can always tell it by the RED LINE 'round the Top.

That RED LINE is today a sure guide to greater footwear economy for millions of users.

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Goodrich HI-PRESS *Rubber Footwear*

Avoid Motor Oils

containing paraffin, asphalt or any other non-lubricating substance. Aristo Oil is refined by the most advanced processes, designed to remove everything in the crude which has no lubricating value.

A section of the interior of this building showing one of the many laboratories.

The Research Laboratory of the Union Oil Company of California at Wilmington, devoted to research work to insure superiority in Union Non-Detonating Gasoline, Aristo Motor Oil and other products.

Seek More

in motor oil than simply perfection as a *lubricating film*

In Aristo Motor Oil there is every lubricating quality that the best oil can possess.

A staff of chemical experts produce it, backed by "Union Oil" facilities permitting of the most exhaustive research and conclusive tests.

A durable, fine film results, penetrating to and protecting the motor's every moving part.

Every drop is as near to perfection as a lubricating film as modern science can make motor oil.

But there is more to look for in your oil.

Two "Carbons" —one is Flinty, *Hard*

All motor oils, as all oil makers know, deposit some carbonaceous residue.

One kind is gritty, flinty, hard—hard enough to score cylinders and scratch rings, pistons, valves and bearings. It has a tendency to cling. It acts as an abrasive, causing wear. It becomes incandescent, pre-ignition following. It coats spark plugs, short-circuiting the spark.

Lost compression results from its accumulation around valve heads and seats.

The Other Kind

The residue from Aristo Oil is fluffy, soft. Because of its non-clinging tendency, most of it blows out with the exhaust.

It is softer than the metal it touches, so can't cause wear. It is deposited in smaller quantities than the other kind.

Cars run thousands of miles farther and tractors months longer without pre-ignition, short-circuiting, or loss of power through impaired compression.

Hence four motor troubles are eliminated by it in addition to its service as a perfect lubricant.

There's a deal more satisfaction in such oil. For sale at all first-class garages and service stations.

Union Oil Company of California

ARISTO Motor Oil

Roup in Fowls

(Continued from page twelve.)

for alarm if a few affected fowls are found in a commercial flock.

"After removing the cause the question arises as to what should be done with the flock. It does not seem practical to separate the affected from the well birds except in the case of those seriously affected and showing swellings of the face and eye regions. These should be removed from the flock and if one has the facilities and time, many that would die without treatment could be saved by masscaging the head parts so as to force the collected secretion out of the nostrils, the cleft in the roof of the mouth and out between the eyelids. This should be rather vigorously done and before the secretion has become firm. With the cause removed the simple cases of colds in the flock can be left to recover themselves. Many mildly affected fowls will continue to lay if left in the flock under the above circumstances, but if removed for treatment frequently will stop laying. Where the mild cases are left in the flock it is well to keep a close watch for fowls affected with swellings of the head, so as to detect them as early as possible. Upon recovery these fowls may be turned back in the laying pens again.

"Vaccination has been recommended by some during recent years to lessen the severity of the lesions of roup. In the present state of our knowledge regarding this phase of control the writer prefers to resort to other means such as proper housing and management to control the disease. It is well to remember that the vaccine sent out by this station is not for the control of roup, but for chicken pox only.

"A number of drugs have frequently been used in the past with the thought of lessening the severity of colds and roup by this means. Most prominent among these drugs has been permanganate of potash. This has been added to the drinking water in such amount as to give it a rather deep wine color. No experimental data are available which definitely establishes the value of this drug in controlling colds and roup. Its use is only based on popular conception which does not necessarily determine its value."

Yellow Blossom Alfalfa

Recent correspondence from one of our eastern Washington readers referred to a yellow-blossomed alfalfa as being able to grow under conditions such as are found in our dry land sections when inadequate moisture handicaps common alfalfa. Asked his opinion of the variety, Professor E. G. Schafer, head of the department of farm crops at the state college at Pullman, says:

"There are many varieties of alfalfa and they vary in their hardiness against cold and drought. The yellow-blossomed alfalfa referred to is no doubt suited for growing under adverse conditions. It has been grown in northern Europe for a long time before being introduced into the United States. It was perhaps noted more for its hardiness against cold than drought in its native home. Objections to it are that it has a tendency to grow close to the ground and it produces a smaller amount of forage. It is also said that the stems early become woody.

"We have grown this variety in small plots here at Pullman, where we have had opportunity to observe its character of growth. Our opinion is that it is more hardy for extreme conditions than various other varieties, but that its yield is much less. I am uncertain whether it will have any marked superiority over some of the common varieties for dry land conditions. It is possible that some selection of this variety might prove more valuable than this variety as ordinarily grown. At the present time I do not believe that it has any great advantage over the other varieties."

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Price List
of Goods in Our Great
Army Goods
SALE

U. S. Army Wool Coats

Brand new olive drab wool coats, serge lined, sizes 36 to 42 only. Extra special at

$1.95

U. S. marine pants, 32 to 42 waist only	$2.98
U. S. army wool underwear, Per garment	98c
U. S. army reclaimed overalls, without bibs	69c
U. S. navy blue sweaters, all wool	$2.39
Arctic overshoes, 6-buckle	$2.45

Many other bargains in our free price list. Ask for it.

WE PREPAY POSTAGE.
Order now—Remit for merchandise only. Make orders payable to J. B. Robinson. Give size and color desired.

U. S. ARMY SUPPLY STORE
1310 Pacific Ave., Tacoma.
Reference: National Bank of Tacoma.

Farmers' Want Ads

MONUMENTS F

COMPLETE STOCK. WRITE FOR DESIGNS and prices. Inland Monument Co., N1001 Monroe, Spokane.

HELP WANTED—MALE 3

LEARN A TRADE IN THE LARGEST AND fastest growing industry in the world. High grade automobile mechanics, electricians and trouble shooters are in demand everywhere. Our training has placed scores of men into pleasant, well paid positions. Write for free booklet which gives full details. Y. M. C. A. Automotive School. Fourth and Madison, Seattle, Wash.

ALL MEN, WOMEN, BOYS, GIRLS, 17 TO 65, willing to accept government positions, $117-$250, traveling or stationary. Write Mr. Ozment, 208, St. Louis, Mo., immediately.

RAILWAY POSTAL CLERKS, CARRIERS AND forest rangers; experience unnecessary. For free details write Mokane, Dept. A11, Denver, Col.

WANTED—EXPERIENCED DAIRYMAN. PERfection Dairy, Pendleton, Ore.

HELP WANTED GENERAL 5

MEN AND WOMEN, AGE 17 TO 30, AT ONCE to train for positions with Western Union Telegraph Co. and various railroads. Pacific Telegraph Institute, Spokane, Wash.

SITUATIONS WANTED—Female 18

WHO WANTS A HOUSEKEEPER? 65; PREfer place where there is but one in family; good cook; neat and clean; must have reasonable wages. Box 262, Forest Grove, Ore.

SCHOOLS AND COLLEGES 26

EARN $110 TO $250 MONTHLY; EXPENSES paid as railway traffic inspector; position guaranteed after completion of 3 months' home study course or money refunded. Excellent opportunities. Write for free booklet G-157, Stand. Business Training Inst., Buffalo, N. Y.

FRESH FOOD PRODUCTS 51-3

GOOD QUALITY, MEDIUM SIZED ITALIAN prunes, 100 pounds, $7, unprepaid; 25 pounds, $3.25, postpaid in 4th zone; 9-pound bag, $1.30, express prepaid; satisfaction guaranteed. Fred Kubin, Salem, Ore.

FISH—4 LBS. SMOKED SALMON, $1; 4 LBS. Alaska salmon bellies, $1; 4 lbs. black cod, $1; 3 lbs. best codfish, $1; delivered by mail. Coffin Fish Co., Seattle, Wash.

ALMONDS, SOFT SHELL, 7 LBS., ROYAL apricots, 5 lbs., seedless raisins, 4 lbs., all for $3.60, delivered; satisfaction or money back. P. S. Yawter, Arbuckle, Calif.

FRESH FOOD PRODUCTS (Continued) 51-1

FOR SALE—PRUNES, FAMOUS OREGON NONirrigated, dehydrated, Italian variety, direct from Red Hill orchard; especially fine quality, packed in sanitary, wax paper lined boxes, 30-40 to the pound, 28-pound box, 25-lb. net, $3 box; 100-pound double bag, $10; 40-50 to pound, 28-pound box, 25-lb. net, $2.75 box; 100-pound double bag, $9; 50-60 to pound, 28-pound box, 25-lb. net, $2 box; 100-pound double bag, $6. Dried loganberries, 15½ gross, 12½ net, $4.35 per box. Edward Dencer, grower and packer, Route 3, Box 158, Prices f. o. b. Salem, Ore.

MERCHANDISE 51-5

YOUR ANNUAL OPPORTUNITY—FOR QUICK disposal we offer salesmen's samples of woolen goods, underwear, hosiery, blankets, sheepliined coats, mackinaws, leather vests, etc., at one-third to one-half less than regular prices. Our price list of sample goods is now ready. Send for it today. Minneapolis Woolen Mills Co., Dept. 23, 612 1st ave. North, Minneapolis.

SPECIAL—ONE-POUND TIN "SATISFACTION tobacco" and pipe for $1. Smoking, chewing tobacco, cigars, cigarettes and complete line of pipes. Wholesale and retail. Peter M. Jacoy, 3 Washington st., Spokane.

HONEY 53

ALFALFA, SWEET CLOVER HONEY, PREpaid second zone, 3 10s, $5; 60 lbs., $8.30; two cans, $14.50, not prepaid. Harry Fisher, Prosser, Wash.

HAPPY HOME HONEY — ALFALFA AND clover; 60-lb. can, $7.50; two cans, $14.50; case six 10-lb. pails, $8.50. H. N. Paul, Mabton, Wash.

FINEST HONEY, FIVE POUNDS, $1; TEN pounds, $1.95, postpaid; sixty pounds, $7.50; two cans, $14.50; add transportation. Satisfaction guaranteed. Bancroft Apiaries, Hermiston, Ore.

KING CLOVER'S ALFALFA-SWEET CLOVER honey; 60-lb. can, $7.50; two cans, $14.50; 60-lb., prepaid, second zone, $8.29. King Clover, Sunnyside, Wash.

EXTRACTED HONEY—1 60-LB. CAN, $7.50; two, $14.50, collect; 3 10-lb. pails, $5, prepaid, third zone. Wells D. Rose, Sunnyside, Wash.

HONEY—FRESH ALFALFA-SWEET CLOVER honey; one 60-lb. can, $7.50; two cans, $14.50. A. L. Traner, Touchet, Wash.

ALFALFA-SWEET CLOVER HONEY, 10-LB. pails, $1.45 f. o. b. Rigby, Idaho; quality guaranteed. MacDonald Co.

ALFALFA HONEY, SIXTY POUNDS, $7.50; two cans, $14.50, not prepaid. Skovbo, Hermiston, Ore.

MISCELLANEOUS—FOR SALE 60

SASH AND DOORS—O. B. WILLIAMS CO., 1943 First ave. So., Seattle. Chicken house sash, 20" wide by 25" high, 80c; a dozen different sizes in stock for immediate shipment. Skylights for chicken houses, 36"x40"; price, glazed, $2. This is the size recommended by the Western Washington experiment station. We carry them in stock for immediate shipment. Sash and doors for all purposes at lowest prices. All orders receive prompt attention. Our large illustrated catalog No. 35, showing full line of building material and built-in fixtures for the home, free on request. O. B. Williams Co., Established 1899.

PIPE—GET PARTICULARS ON OUR SPEcial flue pipe, 1¼, 1½ and 2 inch. Big saving on it. We also have all sizes second-hand and new standard pipe at low prices. We also save you on roofing, belting, pumps, engines, cables, etc. Alaska Junk Co., S120 Adams, Spokane, Wash.

HOMESPUN TOBACCO—FIVE POUNDS chewing, $1.75; ten, $3; twenty, $5.25. Five pounds smoking, $1.25; ten, $2; twenty, $3.50. Send no money, pay when received. Pipe and recipe free. Kentucky Tobacco company, Paducah, Ky.

WALL BOARD—WRITE FOR SAMPLE OF Washington plaster wall board; won't warp, won't burn. Manufactured by Washington Building Products company, 6851 E. Marginal Way, Seattle, Wash.

NATURAL LEAF TOBACCO—CHEWING, 5 lbs., $1.75; 10 lbs., $3; smoking, 5 lbs., $1.25; 10 lbs., $2. Pay when received. Pipe and recipe free. Farmers' Tobacco Union, D19, Paducah, Ky.

NATURAL LEAF TOBACCO—5 LBS. CHEWing, $1.75; 10 lbs., $3; 5 lbs. smoking, $1.25; 10 lbs., $2. Pay when received; pipe and recipe free. Cooperative Farmers, Paducah, Kentucky.

OLD KENTUCKY TOBACCO, READY FOR pipe; trial order, one dollar; money back if dissatisfied. Dixie Tobacco company, M382, Owensboro, Ky.

TOBACCO — KENTUCKY'S PRIDE; EXTRA fine chewing; 10 pounds, $3; smoking, 10 pounds, $2; 20 pounds, $3.50. Farmers' Club, Mayfield, Ky.

SMOKE ON US—WRITE FOR FREE SAMPLE of Kentucky's best. Hawesville Tobacco Co., Hawesville, Ky.

CANE FEED MOLASSES. WRITE A. A. LEWis, S151 Lincoln, Spokane.

MACHINERY—For Sale. 93

DOLLARS IN YOUR POCKET ON OUR USED engines, wood sawing outfit, farm equipment. New sawmill outfits, etc. Fallquist Brothers, W20½ Riverside, Spokane.

AUTOMOBILES—FOR SALE 112

SEE CHEVROLET FIRST—NEW AND USED cars at prices that will surprise you; stop in or write Inland Empire Chevrolet Sales Corp., 916 2d ave., Spokane. Open evenings. Open Sunday.

AUTO ACCESSORIES AND PARTS 119

NEW AND USED AUTO PARTS, NEARLY all cars. Our low prices and prompt service will convince you. Money refunded if not satisfied. C. & D. Auto Salvage & Supply Co., 1904 Grand ave., Kansas City, Mo.

STOVE REPAIRING 128

WRITE MYER RUBENS, SPOKANE, ABOUT stove repairs, welding broken parts, nickel plating.

PATENTS 150

PATENTS, TRADEMARKS, COPYRIGHTS. Write to B. P. Fishburne, registered patent lawyer, 398 McGill bldg., Washington, D. C.

PETS—Dogs, Birds, Etc. 171

6 FOXHOUND PUPS, 4 MONTHS; 2 SIX months old, 1 three years old. Albert Dimbat, Sherwood, Ore. Route 5.

FIFTY PAIRS YEARLING ROLLER CANARies, fifteen dollars a pair. Mrs. J. Wellborn, Warren, Ore.

WHITE COLLIE PUPPIES FOR CHRISTMAS delivery. Croandale Farm, Oakley, Idaho.

RABBITS and HARES. 173

RABBITS, TOULOUSE GEESE HAVE MADE my living for 10 years. Prize winning blue Flemish Giants, New Zealand Reds, Himalayans, at utility prices. Agnes Brenner, R4, Box 49, Tacoma, Wash.

POULTRY—Baby Chicks 174

CERTIFIED WHITE LEGHORN QUALITY chicks from selected free-range, heavy-laying, utility hens, mated to double pedigree cockerels with authentic trapnest records. Our breeding flocks are inspected and accredited by the Sonoma county farm bureau. Safe arrival and full count of live, vigorous chicks guaranteed. Booking orders now for the spring season of 1924 delivery. Send for catalogue and attractive prices. Must Hatch Incubator Co., Inc., the world's largest electric hatchery, 445 Seventh st., Petaluma, Cal.

"FRESHLAID" WHITE LEGHORN CHICKS for 1924 will produce results. Thirteen years hatching of real chicks. High record males, vigorous, mature females, unlimited free range, a chick producing proposition hard to beat. We send out chicks that will make you a permanent customer. Discount on large orders. World's largest electric incubator. Free catalog. Freshlaid Farm, Colfax, Wash.

WHITE LEGHORN BABY CHIX OF UNUSUAL value, from especially well culled hens mated with full pedigreed males. Prices, per 100: January, $16; February, $15; March, $14; April, $12.50; May and June, $12; 100 per cent live, strong chix guaranteed. We are accredited by the Sonoma county farm bureau. The Pioneer Hatchery, 422 Sixth street, Petaluma, Calif.

ACCREDITED CHICKS — ALL OUR CHICKS for 1924 will be from accredited flocks mated with certified cockerels sired by hens with 225-egg record. A limited number of chicks from cockerel sired by our $1000 champion cockerel and our world's record pen of hens. Write for special prices for those who order early. Queen Hatchery, 1430 1st ave., Seattle, Wash.

"HENACRES" BABY CHICKS FOR 1924—Booking orders now. Early orders get delivery when wanted. We never have enough February, March or April chicks to meet the demand. Strictly high grade chicks at common chick cost. $22 per 100; $200 per 1000. Free catalog. "Henacres," Box A, Prosser, Wash.

BABY CHICKS—YOU GET THE BEST FROM successful breeders, using nothing but eggs from their own trapnested stock. Order them from the Carnation W. Leghorn Farms. My 16 years' experience in breeding enables me to give you entire satsifaction. Ernest W. Raush, Carnation Poultry Farms, Kent, Wash.

WHY DELAY?—PLACE YOUR ORDER FOR 1924 chicks with the White Hatchery, the hatchery with a reputation for good chicks. Safe arrival, full count guaranteed. Member Accredited Hatcheries, Sonoma county, "A" and "AA" stock. Price right. Send for catalog. White Hatchery, Petaluma, Calif.

S. C. WHITE LEGHORN CHICKS, 100 PER cent live, delivery guaranteed; 20 per cent books order. 100, $16; 500, $75; 1000, $140, postpaid; hatch only eggs from my own flock; no lights; trap records to 292. Absolutely only one grade. Catalog free. Roy S. Hands, B614, Cottage Grove, Ore.

TRAPNESTED WHITE LEGHORNS, HOLLYwood and O. A. C. stock. We offer 75,000 chicks, 25,000 hatching eggs, 5000 pullets. 11 years at the business. Satisfaction guaranteed. Booking orders now. Send for price list. Inwood Leghorn Farm, Corvallis, Ore.

PREPAID—WHITE LEGHORN CHICKS, OREgon Agricultural college stock; the famous egg producers; $16 per 100; prices on quantities. Only 10 per cent deposit. Safe arrival strong, husky chicks guaranteed. Russell Poultry Yards, Corvallis, Ore.

BEST QUALITY CHICKS AT MONEY-SAVING prices—100 per cent live delivery guaranteed. White Leghorns, Reds, Barred Rocks, White Rocks, Black Minorcas, Anconas. Write today for price list. Salem Chickeries, Salem, Ore.

ORDER ANCONA BABY CHIX EARLY, FROM prize stock; great layers of pure white eggs; easy keepers, small eaters. Full description in catalog on request. Brainard's Ancona Hatchery, 8332 46th ave. So., Seattle, Wash

THE POEHLMANN HATCHERY FOR BETter quality W. L. chix from selected free range hens mated with double pedigree cockerels. Literature and price list sent on request. 610 Main st., Petaluma, Calif.

WHITE LEGHORN BABY CHIX FROM flocks mated to cockerels sired by hens with 250 to 285 egg record; $20 per 100; hatching eggs, $1.50 per setting. Surlay Poultry Ranch, W. L. Grider, Route 3, Kent, Wash.

LARGE, ENGLISH WHITE LEGHORNS, WINter laying strain; bred to lay, and sure do. Chicks, 100, $18; choice cockerels and yearling cocks, $5 each. Mrs. M. L. Russell, Route 3, Meridian, Idaho.

WHITE LEGHORN BABY CHICKS FROM MAture hens, mated to male birds with sire's dam's records of 252 to 316 eggs; $18 per 100; $160 per 1000. D. A. Gillette, R4, Yakima, Wn.

ANCONAS—BACKED BY OFFICIAL CONTEST records and splendid list of winnings in the west's leading shows. Booking chick and egg orders. Oscar Dunlap, Junction City, Ore.

SPECIAL PRICES ON GUARANTEED DAYold pullets; fall and winter delivery. Write for particulars. Eureka Hatchery, Petaluma, Cal.

SUPERIOR WHITE LEGHORN BABY CHICKS at very low prices for 1924 delivery. Write the Rio Linda Hatchery, Rio Linda, Calif.

BABY CHIX FROM TANCRED AND EXPERIment station strain W. Leghorns. Wax's Poultry Farm, Kent, Wash.

25,000 TANCRED WHITE LEGHORN CHICKS, prepaid, 14c each. Beverly Egg Ranch, Leona, Ore.

Turkeys.

MAMMOTH BRONZE TURKEYS—LARGE boned, well marked young hens and toms, $6 and $10 each; May hatched; toms, 24 lbs. Mrs. Henry Hose, Sterling, Idaho.

PRIZE WINNING MAMMOTH BRONZE TURkeys; large boned and beautifully bronzed. Hens, $10 and up; toms, $15 and up. Urton's Farm, Genou, Mont.

THE BIG BONED NARRAGANSETT TURkeys, 30-lb. toms, 25-lb. hens, 1923 hatched, for sale. Mrs. C. C. Dillon, Warsaw, Mo.

22 YEARS A SPECIALTY BREEDER OF M. B. turkeys; prize-winning stock. Mrs. Frank Browning, R. 1, Nampa, Idaho.

MAMMOTH BRONZE TURKEYS, LARGE, well developed toms and hens. Joseph M. Loomis, Cherry Grove, Ore.

MAMMOTH BRONZE TURKEYS, PRIZE winners; unrelated stock. Mrs. Leo Coffin, Route 1, Eagle, Idaho.

(Continued on the following page.)

The amazing endurance and low upkeep costs of "Caterpillar" Tractors prove the value of Holt highest grade materials and workmanship.

Built in four sizes
Write for catalog

There's Only One Caterpillar HOLT Builds It

HOLT

Spokane, Wash.
Stockton, Cal.
J. W. Hill, Henry Bldg., Portland.

POULTRY—Turkeys (Continued) 174

MAMMOTH BRONZE TURKEYS FROM NEW eastern stock from Massachusetts and Missouri. Toms, $10 to $25; pullets, $8 to $10. Mrs. H. D. Moore, R1, Box 21, Hubbard, Ore.

PURE MAMMOTH BRONZE TURKEYS; choice breeding stock. Toms, $10; hens, $6; until December 1st. Pure Toulouse geese. Mrs. F. Crane, Hagerman, Idaho.

GIANT BRONZE TURKEYS—SWEEPSTAKES at state fair; Los Angeles breeding and exhibition birds, with size, vitality, color. M. M. Reiman, Planada, Calif.

PUREBRED MAMMOTH BRONZE TURKEYS, prize winning stock. Hens, $8 to 10; toms, $10 to $15. Order early. Mrs. K. Tontz, Beaverton, Ore.

GIANT BRONZE TURKEYS FROM PACIFIC International winning strain; circular free. Herbert Stoneberg, Route "B," Eugene, Ore.

MAMMOTH BRONZE TURKEYS—CHOICE OF 500; sires, 45 lbs.; hens, $6 to $8; toms, $10 to $20. Harry Smith, Coupeville, Wash.

WE WANT YOUR TURKEYS, GEESE, POULtry and eggs; highest prices. Hotchkiss Produce company, Spokane.

TURKEYS — THOROUGHBRED GIANT Bronze of real merit. J. Lewis Johnson, Box 69, Eugene, Ore.

WHITE HOLLAND TURKEYS, UNRELATED pairs and trios for sale. Mrs. E. D. Sitton, Carlton, Ore.

GIANT STRAIN PUREBRED MAMMOTH Bronze turkeys. Mrs. C. R. Lowery, Route 2, Boise, Idaho.

PUREBRED BRONZE TURKEYS, MAMMOTH Toulouse geese. Emma Moehnke, Beavercreek, Ore.

BOURBON RED TURKEYS, $8 AND $6; TOUlouse geese, $3 each. Mrs. Wm. Emery, Macleay, Ore.

PUREBRED BOURBON RED TURKEYS; hardy stock. Napton & Napton, Homedale, Idaho.

MAMMOTH BRONZE TURKEY TOMS, $8. Amanda Erb, Hubbard, Ore., R2, Box 86.

GOLD BRONZE TOMS, $8; PULLETS, $6; EXtra fine. Meadors, Norwood, Idaho.

PUREBRED MAMMOTH BRONZE TURKEYS. Mrs. S. L. Maltby, Rogerson, Idaho.

WHITE HOLLAND TURKEY HENS, $6; TOMS, $8. J. V. Jenkins, Eugene, Ore.

Miscellaneous Poultry.

KEEP INFORMED — SELECT POULTRY reading with care. Only paid writers of recognized authority featured in The Pacific Poultryman. Must read it to get the best. Has guided thousands to success. Special, four months for two-bits; two years for a dollar. 503 Polson bldg., Seattle, Wash.

FULL BLOOD WHITE ROCKS, COCKERELS, $5; cock, $10; pullets, $1.50; chix, 20c; hatching eggs, $1.50 for 15; $8 per hundred. Won 6 blue ribbons at southern Oregon and Josephine county fair this year. Walter Holmes, Route 2, Grants Pass, Ore.

IMPERIAL PEKIN DUCKS, PRIZE WINNING, long bodied, heavy kind; choice young drakes, $3; eggs and baby ducklings; low prices. Mammoth Bronze turkeys, toms, $8 to $12. H. L. Moody, Parkland, Wash.

PUREBRED S. C. RHODE ISLAND RED cockerels, from an exhibition, winter laying strain; flock averaged 61 per cent through the winter months; dark red in color; $5. Mrs. Earl Day, Colfax, Wash.

PULLETS—CHOICE W. L. PULLETS, APRIL hatch; husky, free range birds of Hollywood strain; heavy laying stock; ready for the laying pens; $1.85 each. Pulletpens, Prosser, Wash.

HUNT'S BARRED ROCKS, UTILITY COCKerels from the best egg producers, Imperial Ringlets, both matings. Prices right, satisfaction guaranteed. W. A. Hunt, Lebanon, Ore.

PURE BARRED ROCK COCKERELS; good laying strain. Also a few Buff Orpington cockerels. Write to Mrs. A. A. Nafziger, Salem, Ore. R7, Box 151.

SINGLE COMB RHODE ISLAND WHITE cockerels: Holt strain; second, third and fifth, Helena fair; two to five dollars. R. R. Parker, Hamilton, Mont.

S. C. RHODE ISLAND RED COCKERELS; fine, large birds; beautiful color; Rainey strain. Special price, $5. Mrs. Archie Hatten, Creston, Wash.

APRIL HATCHED ROSE COMB AND SINGLE Comb Black Minorca cockerels; bred for exhibition and utility. Oakley Durham, Polson, Mont.

JERSEY BLACK GIANTS, YOUNG STOCK FOR sale, and two-year-olds, guaranteed purebred. E. M. Chambers, Box 601, Bovill, Idaho.

FOR SALE—PRIZEWINNING WHITE WYANdotte and White Minorca cockerels. Roy Canary, 2201 Highland, Everett, Wash.

SINGLE COMB REDS, SHOW BIRDS. BREEDers write for prices. Peter Jessen, Harbor Heights, Magnolia Beach, Wash.

BARRED ROCK COCKERELS, IMPERIAL ringlets; good laying strain; price, $5, $7, $10. J. H. Prutes, Boardman, Ore.

USED INCUBATORS AND BROODERS, Queens, Cyphers, St. Helens. Hi-Quality Poultry Ranch, Yelm, Wash.

FINE RINGLET BARRED ROCK COCKERels; sire from E. B. Thompson, N. Y., $4. Mrs. Robert Munsell, Condon, Ore.

BUFF ORPINGTONS—PRIZE WINNERS; 22 birds with ribbons won, $35. C. J. Oberst, R2, Farmington, Wash.

S. C. BROWN LEGHORNS, PEDIGREED stock. Write your wants to E. H. Rosenkranz, Colfax, Wash.

ROSE COMB BLACK MINORCAS—COCKERels, $2; pullets, $1; hens, $2. Mrs. Carley, Carley, Wash.

SHEPPARD'S FAMOUS ANCONA COCKERELS, $4.50 and $5. Mrs. Bessie Gaiser, R1, Moscow, Idaho.

TO MAKE ROOM, WILL SACRIFICE ROCK and Leghorn breeders. D. W. Allen, Laconner, Wash.

PRINTING FOR POULTRY MEN. EMPIRE-Pacific Printing Co., Auditorium bldg., Spokane.

PUREBRED BUFF ORPINGTON COCKERELS, $3; pullets, $2. H. W. Cade, Okanogan, Wash.

FOR SALE—PUREBRED BROWN LEGHORN cockerels. B. H. Campbell, Freewater, Ore.

FULL BLOOD ROUEN DRAKES, $2.50 EACH. Charles Tipler, Farmington, Wash.

SMITH'S ANCONA FARM, CALDWELL, Idaho. For cockerels, 333-egg strain.

PRIZE WINNING BARRED ROCK COCKERels. C. H. Murrey, Medford, Ore.

POULTRY AND LIVE STOCK WANTED 175

SHIP YOUR POULTRY AND EGGS TO THE Washington Meat & Poultry, Spokane, Wash.

FARMERS' WANT ADS

This is the farmers' "want," "sale" and "exchange" department for small advertisements of farmers, including live stock and poultry.

Advertising rates for ads running 1 to 3 times, 10c per word per insertion, with a special rate to Farmer subscribers, as follows: Ads running 4 to 12 times, 9c per word per insertion; ads running 13 times or more, 8c per word per insertion.

All commercial and land advertising, 10 cents per word per insertion. Open also to nonsubscribers.

In using these columns advertisers must observe (1) No advertisement will be accepted containing less than 10 words per insertion. (2) Every word, number and initial, including name and address, must be paid for. (3) New advertisements, changes of copy or cancellations must reach general office, Spokane, Wash., 10 days in advance of publication date. (4) Cash must accompany order.

Above rates include insertion in The Washington Farmer, The Idaho Farmer and The Oregon Farmer, which constitute the Pacific Northwest Farm Trio, 46 Review building, Spokane, Wash.

POULTRY AND LIVESTOCK WANTED 175 Continued.

WE GUARANTEE TO PAY THE HIGHEST market price for your poultry and live stock. Owing to the constant changes in the market we are unable to quote prices in this paper from week to week. We will furnish tags and prices when you are ready to ship. Write us what you have to sell. Prompt returns. John Lewis & Co., Spokane, Wash.

DOLLARS FOR YOUR EGGS—WE PAY THE top market prices for your eggs and poultry. Daily cash remittances. McClintock-Trunkey Co., produce department, Spokane.

WE PAY TOP PRICES FOR YOUR LIVE OR dressed veal, hogs and poultry. Your check by return mail. Shipping tags on request. M. & J. Packing Co., Spokane.

TOP PRICES PAID FOR CREAM, EGGS, poultry, turkeys, geese, ducks. Inland Products company, Second at Cedar, Dept. E, Spokane, Wash.

LIVE POULTRY WANTED — WE REMIT promptly at market prices. Commercial Creamery Co., 1327½ Railroad, Spokane, Wash.

WANTED—150 OR 200 TURKEY HENS, NOTHing under 12 pounds. Arthur Hill, Grand Dalles, Wash.

LIVE STOCK 177

FOR SALE—ALL REGISTERED STOCK; twenty Shorthorn bred cows and heifers, four Shorthorn bulls; Poland China boars and gilts, Chester White sows, to farrow soon; O. I. C. boars of serviceable age. A few gilts, all at farmers' prices, to sell quick. Elton Webb, Halfway, Ore.

FOR SALE OR EXCHANGE—PUREBRED registered Guernsey bull, Mildred's Topsy Boy, two nearest dams average milk, 16,182 lbs.; fat, 772.8 lbs. Age 5 years; daughters now milking; gentle and easy to handle. Grange Warehouse Co., Oso, Wash.

MILKING SHORTHORN BULLS, SIRED BY bulls from record of merit dams; a grandson of a 13,226 lb. cow, 510 lbs. butterfat; also others equally well bred, of breeding age; priced right. C. P. Truesdell, Centralia, Wash.

REGISTERED SHORTHORN BULLS OF quality and breeding; red, white or roan; polled or horned; of serviceable age or younger; priced to sell. Wm. Mulhall, Buena, Yakima county, Wash.

FOR SALE—FIVE HEAD REGISTERED Guernsey bull calves, nicely marked, from high producing cows. Priced at $50 each for quick sale. Kineth Farms, Coupeville, Wash.

DUROC PIGS, $15 EACH; REGISTERED Great Orion Sensation breeding, either sex. Order now, they won't last. Marella Farm, Hagerman, Idaho.

FOR SALE—2 REGISTERED HOLSTEIN bull calves; dams with cow testing association record. John Hagglof, Oakville, Wash.

SPOTTED POLANDS—HOGS ARE AT THE bottom, now is the time to buy purebreds. Howard Tucker, Route 1, Boise, Idaho.

PUREBRED, BIG TYPE POLAND CHINA boars, ready for service; two gilts, weaned pigs. J. K. Jorgensen, Dietrich, Idaho.

FOR SALE — CHESTER WHITE BOARS. Write for prices. Booking orders for bred gilts. H. S. Curtis, Palouse, Wash.

HIGH CLASS DUROC JERSEY SWINE. Young stock for sale; bank references. Dimick Stock Farm, Hubbard, Ore.

FOR SALE—PUREBRED POLAND CHINA pigs, White Wyandotte cockerels. Fred M. Schmidt, Trout Lake, Wash.

DUROC-JERSEY SWINE, BOTH SEXES FOR sale; booking orders for bred gilts. Stadacona Farms, R1, Spokane.

BRED HAMPSHIRE EWES AT BARGAIN prices, also twenty ewe lambs. J. G. S. Hubbard & Sons, Monroe, Ore.

CHOICE DUROC JERSEY SERVICE BOARS, open and bred gilts; priced to sell. Geo. De Bok, Oregon City, Ore.

WANT 12 POLAND CHINA SOWS, MED. OR large type, short legs, bred. Write Geo. H. Johnson, Gold Hill, Ore.

MILK GOATS—REGISTERED SAANENS AT prices that will please you. Ferd. H. Dietzel, Portland, Ore.

DUROC JERSEY PIGS, $5 EACH. MAMMOTH Toulouse geese, $6 each. W. D. Good, Mt. Vernon, Wash.

FOR SALE—9 REGISTERED GUERNSEYS; 2 bulls and 7 females. Robert McClay, R8, Salem, Ore.

HAMPSHIRE BOARS, PRIZE WINNERS; cheap for quick sale. E. O. Green, Monroe, Wash.

MILK GOATS, TOGGENBURG BRED DOES, $20 to $25; bucks, $30. A. Teal, Falls City, Ore.

REG. SHROPSHIRE AND HAMPSHIRE rams. Write McK. Edwards, Valley, Wash.

FOR SALE—90 HEAD PUREBRED HAMPshire ewes. Wm. Sturges, Jerome, Idaho.

HEREFORD BULLS FOR SALE OR EXchange. Frank Roberts, Westport, Wash.

MILK GOATS, BRED DOES, $10 TO $25. FANnie Branson, Dallas, Ore.

HAY FOR SALE 200

ALFALFA, GRAIN HAY, TIMOTHY AND straw; guaranteed quality; prompt shipment. Prices upon application. Richard Nyman, Walla Walla, Wash.

HARNESS and SADDLERY 189

SEND FOR FREE HARNESS AND SADDLE catalog today; cut out the middleman, buy direct from the manufacturer. Lowest prices in the west; satisfaction guaranteed. Established 1881. Write Pierce Harness Co., Dept. T, Spokane, Wash.

HOTELS 306

WHITE'S HOTEL AND RESTAURANT. ROOMS $1 and up; special weekly rates. Stevens and Sprague. Right on the corner; 5 minutes from all depots. In the heart of the business district, Spokane.

HOTELS (Continued) 306

FAIRMONT HOTEL—RATES $1 DAY AND UP. 319 Riverside, Spokane. Free bus.

JOB PRINTING 372

CHRISTMAS AND NEW YEAR'S CARDS, LETter heads, business cards, wedding announcements and invitations, circulars, sales bills and other kinds of printing. Peterson & Ross Printers, 815 Main ave., Spokane, Wash.

WEDDING ANNOUNCEMENTS AND INVItations, catalogs, booklets, high school annuals, letter heads, envelopes, cards, butter wrappers, etc. Union Printing Co., 412 First ave., Spokane, Wash.

TANNING 425

WE WILL TAN YOUR COW OR HORSE HIDE for robes or coats, and guarantee our work. We are custom tanners, manufacturers and taxidermists. Write for prices. Spokane Fur Tanning Co., 7 Pine st., Spokane.

ANY KIND OF HIDE TANNED WITH HAIR on, or for leather. Fur and taxidermy work done to order. M. R. Mohl Co., 321 Sprague, Spokane, Wash.

TAXIDERMISTS 426

DEER HEADS AND BIRDS MOUNTED, HIDES tanned and made into rugs and robes. Withers Bros., 913 Sprague ave., Spokane.

KODAK FILM DEVELOPING 472

FREE ENLARGEMENT WITH 75C ORDER high gloss print. Spokane Film Co.

FILMS DEVELOPED FREE—KODO, THE PICture King, 815 Stevens, Spokane.

MATERNITY HOMES 497

MATERNITY HOSPITAL; STRICTLY PRIvate; doctor in attendance; prices reasonable. Mrs. Elizabeth Peel, matron, W1324 Broadway, Spokane.

BUILDING MATERIAL 588

TACOMA SASH & DOOR CO., 15TH AND Dock, Tacoma, Wash. Direct selling means direct saving. These prices demonstrate: Chicken house sash, 20"x23," 75c; other sizes in stock. Chicken house skylights, 36"x49," glazed, $1.95; western Washington experiment station recommends this size. Sash and doors correspondingly low priced. Prompt delivery, careful filling of orders guaranteed. Catalog No. 1 is yours for the asking.

FIX BROKEN PLASTER WALLS WITH PERfection plaster wallboard; nailed on like lumber; takes calcimine or paint; sample and booklet from Western Wallboard Co., Seattle, Wash.

SEEDS 620

BURBANK'S NEW QUALITY SPRING WHEAT yields 1 to 10 bushels more per acre than Baart or Bluestem. Smooth heads and strong straw. Ripens 10 to 14 days earlier. Fine milling qualities. For seed write Fred Kramer, Odessa, Wash.

HUNGARIAN VETCH, APHIS RESISTANT, hardy, superior forage crop; 50 lbs. postpaid, $3.50. Murphy's Seed Store, Albany, Ore.

NURSERY STOCK 624

RELIABLE TREES AND PLANTS—PRUNES, apples, pear, cherry, peach, apricot, grafted walnut and filbert trees, gooseberries, currants, etc., at attractive prices for early orders. Send your want list today for quotations. Benedict Nursery Co., 185 E. 87th st. N., Portland, Ore.

NURSERY STOCK, ALL KINDS—GRAFTED walnuts, filberts, prunes, peach, apple, pear, cherry, etc. Berries, etc. We sell direct—we save you money—we supply the best. Send right now for catalog. 34 years in business. Carlton Nursery Co., Carlton, Ore.

IMPROVED FRENCH PRUNES, ITALIAN prunes, apple, cherry, pear, peach, franquette grafted walnut and filbert trees. Order direct and save agents' profit. Fruitland Nursery, 161 South 14th st., Salem, Ore.

TREES—NOW BOOKING MAIL ORDERS AT reduced prices for limited time only. Apples, pears, peaches, nut trees, prunes, cherry, small fruits, etc. Live agents wanted. Lafayette Nursery Co., Lafayette, Ore.

PLANT ISLAND BELLE GRAPES, THE BEST commercial grapes of the northwest. Write for prices and directions how to grow them profitably. E. H. Urban, Box 777, Bremerton, Wash.

NURSERY STOCK—PRUNES, WALNUTS, FILberts, fruit trees of all kinds, gooseberry and small fruits. Buy direct and save 50 per cent. Brooks Nursery, Lafayette, Ore.

TREES—CHERRY, PEAR, PRUNE, APPLE, walnut, filbert. Mazzard cherry seedlings. Prices based on production costs only. Homer R. Brixey, McMinnville, Ore.

NURSERY STOCK SOLD DIRECT TO PLANTers; apple trees a specialty; no agents employed; can save you money. Write for prices. Lawson Nursery, Gates, Ore.

FILBERT AND WALNUT TREES, THE BEST paying crops for the northwest. Write for prices on the different grades. Villa Nurseries, Route 1, Portland, Ore.

STRAWBERRY PLANTS—SIXTEEN VARIEties. Asparagus and Munger black caps. Prices low. Brigg's Fruit Ranch, Olympia, Wn.

FARM LANDS FOR SALE 651

5000 ACRES, SMALL TRACTS; NEWAUKUM river valley lands; easy terms; employment. Big mill and timber companies are selling their large holdings in this well known and fertile valley, at Chehalis, Washington, on most advantageous terms and conditions, where settlers are assured steady employment, good wages and live at home. Positively all high type agricultural land; level bench and valley. No gravel. No mountains. No irrigation required. Already well settled community; good schools and markets. 20 acres or more, $15 to $50. Terms to suit purchaser. Graham Land Company, 1008 American Bank bldg., Seattle.

$5800—TWENTY ACRES; GOOD BUILDINGS, springs, orchard; $4300 cash. Sarah Gibbs, Route 3, Boring, Ore.

$8500—SIXTY ACRES, NEAR SCHOOL, creek; 25 cleared; $6500 cash. Edward Koeble, Route 4, Aurora, Ore.

FARM LANDS FOR SALE (Continued) 651

ATTRACTIVE HOME FARMS—PRODUCING paying crops of alfalfa, grain, vegetables, etc., year after year, can be secured in the Lethbridge northern irrigation district at low prices and on easy terms. Favorable climate. Rich soil. Ample moisture. Wonderful country for mixed farming. Near towns, railway, good schools. Send for descriptive booklet to the Irrigation Council of Alberta, 12 Provincial building, Lethbridge.

WILL SACRIFICE FINE 600-ACRE RANCH at Yelm, Washington; 280 under cultivation, land adjoining selling up to $100 per acre; all stock, machinery and equipment included; house, barn, goat shed, 2 large chicken houses and other outbuildings; worth at least $36,000; will take $20,000; retiring, reason for selling; don't fail to at least investigate. C. W. Ross, owner, 606 Grand ave., Portland.

20 ACRES CULTIVATED VALLEY LAND; 3½ acres berries, small house, large chicken house, all outbuildings; a real berry and poultry ranch; $1600; terms. 80 acres fine land, 45 cultivated, balance pastured; 8-room modern house, all outbuildings; plenty fruit; 25 cows, some young stock; fine team, all machinery. A real farm; $7800; terms. Clay D. Bowles Co., Centralia, Wash.

HARRINGTON DISTRICT — 320 ACRES good wheat land; 100 acres pasture; new good buildings; macadamized road; two miles from Harrington; main line Great Northern, good schools, churches, stores; small payment will handle, balance easy terms; consider to trades. Owner, W. E. Shrader, Harrington, Wn.

WE HAVE 160 ACRES IN THE YAKIMA valley; 60 acres in alfalfa; a fine stock and dairy ranch. Price $150 per acre; a small payment down will handle. This land is under the government ditch and very productive. Water rent $1 per acre per year. Lincoln Trust Company, Spokane, Wash.

FOR SALE—STOCK RANCH, 1280 ACRES; well located. Price $7 per acre. Will take clear property up to $2500, $1500 cash. Time to suit on balance. Also 270 acres, all stocked, to exchange for city property. What have you? T. W. Hornback, 24 E. 6th ave., Eugene, Ore.

BIG OPENING SALE OF YAKIMA VALLEY farm land, under an assessed state and government approved irrigation project; best deep soil; close to town and good roads. Price $25 per acre and up. Very easy terms. Western Lands, Inc., owners, 918 Green bldg., Seattle.

WE HAVE 204 ACRES, 3½ MILES N. E. OF Cheney; very fine land; we will sell on small payment down, long time on balance. The price is $75 per acre. It is convenient to town, good schools, good roads and a good place to live. Lincoln Trust Co., Spokane, Wash.

ON PUGET SOUND—12 ACRES, WITH BEACH frontage; spring water; good soil; partly cleared; plenty of wood; near clam and oyster beds; good fishing and hunting. Price $1075; terms. Charles Somers company, Alaska bldg., Seattle.

BIG LUMBER COMPANY LAND SALE—IN Skagit county; 10-acre tracts, $1200; $200 cash, balance easy. Lots work for the settler. Splendid district, roads, schools, towns. Information free. H. C. Peters, 726 3d ave., Seattle.

SELL YOUR PROPERTY QUICKLY FOR cash; no matter where located. Particulars free. Real Estate Salesman company, 301 Brownell, Lincoln, Neb.

320 ACRES, NEAR CALGARY, ALBERTA, 8 mi. from station; 170 broken; 160 bu. wheat this season; nearly new land, $42 per A. H. Woods, Airdrie, Alta.

FAILING HEALTH COMPELS ME TO SELL 5-acre poultry ranch; fully equipped; modern improvements. C. Dimmick, Gig Harbor, Wash.

BARGAINS IN DRY AND IRRIGATED farms. Oregon Mortgage Co., Paulsen bldg., Spokane.

BARGAINS IN YAKIMA VALLEY LANDS. A. B. Capps, Grandview, Wash.

FARM LANDS—Wanted 654

NO COMMISSION — SELL YOUR FARM through Washington Farm Bureau Exchange; represented in 45 states. Lists of farms for sale by owners mailed free. 312 Lindeke bldg., Spokane, Wash.

HAVE INQUIRIES FOR NORTHWESTERN farms, spring delivery. Describe fully, state lowest price. R. A. McNown, 310 Wilhelmsen bldg., Omaha, Neb.

IDAHO AND WASHINGTON LAND BOUGHT, sold and exchanged. Describe fully, stating price. David P. Weir, Spirit Lake, Idaho.

FARM WANTED, IMMEDIATELY. SEND particulars. Mrs. Roberts, Box 70, Roodhouse, Ill.

FARM WANTED FROM OWNER ONLY—SEND full particulars. Ray Smith, Maplewood, Mo.

IRRIGATED LANDS—For Sale 663

OPENING OF THE NEW WHITESTONE IRrigation district—8000 acres of irrigable land. This project was constructed under the direction of the Department of Observation and Development of the State of Washington. Adapted for diversified farming, livestock, dairying, poultry and fruit growing. A picturesque location in the foothills of the Cascade range, Okanogan county, Washington. Write for free pocket folder, giving full details. E. C. Leedy, industrial agricultural development agent, Great Northern railway, Dept. 109, St. Paul, Minn.

FARMERS AND STOCK MEN—THE COLUMbia irrigation district has several tracts of irrigated lands of various sizes, in the famous Kennewick valley, with plentiful water supply. The district wishes to get these tracts into the hands of good farmers who will put them to work, and will make very low prices and long terms to such men. No speculators need apply. One tract 320 acres, especially suitable for dairy or dairy ranch. Write the secretary, Columbia Irrigation District, Kennewick, Wash.

THIS FARM IS SHOWING A GOOD PROFIT—$7000 income this year; 131 acres; close to Yakima; good water rights; excellent buildings; well equipped; good dairy herd. Owner, Western Lands, Inc., Owners, 918 Green building, Seattle.

72-ACRE IRRIGATED FARM: YAKIMA VALley; ½ mile from Outlook; paved highway; school, churches; thirty acres alfalfa; good general farming; fine fruit land. $3000; easy terms. W. C. Wright, Outlook, Wash.

IDEAL DAIRY FARM FOR SALE OR RENT—500 acres irrigated land, with independent water right; close to railroad. Address Mary Watts, Adm., Box 527, American Falls, Idaho.

FARMERS ON SEQUIM, WESTERN WASHington irrigated land are universally prosperous. Write us. Washington Colonization company, Sequim, Wash.

FOR SALE OR EXCHANGE 703

160 ACRES GOOD LAND; 100 IRRIGATED, near Eureka, Mont.; for sale or trade for non-irrigated foothill ranch or California land. C. R. Morse, Shoshone, Idaho.

The Red Lock

(Continued from page eight.)

of the road in the year of grace 1849, instead of in a store on the south side.

The River Road was a bigger institution than the town. It not only halved the town; it well-nigh halved its political faith. From the Warhope farmstead at the east edge to the schoolhouse at the west edge it formed, in political years, a sort of "devil's lane" between the north siders and the south siders. The farmstead and the red-roofed cottage—which is to say Jack Warhope and the Colins—were both on the north side of the road.

Simon Colin had once been Zeke Polick's partner, but had dissolved the partnership years before to follow the more lucrative business of lending money and collecting rents—mostly his own. A banker without a bank, so shrewd was his judgment and so hard the bargains he drove, that half the Flatwoods was under mortgage to him.

He still kept a sort of office in the store—a corner at the front closed off by a low fence of ordinary garden palings, with a sagging gate of the same material, that, in the many years it had been dragged open and shut, had grooved a deep half-circle upon the floor. Within was a desk by the dusty window; a narrow shelf nailed along the tops of the palings at the longer side; a chair; a table against the wall, on it three or four law books that were never opened. There was no safe. That was at the red-roofed cottage.

Not a very imposing office—but the commerce of the Flatwoods passed across those time-faded, unpainted palings. Even Zeke Polick, Simon's closest business associate, would have been astonished to know the actual wealth that journeyed in

"The Reverend Caleb Hopkins, I 'low?"

an old satchel back and forth every day between house and store.

Dangerous?—twice the attempt had been made to see inside that satchel, and a man had died each time. The old banker carried a huge double-barreled horse pistol, loaded half to the muzzle with buck shot, and he knew the way to its light trigger as the weasel knows the way to its den.

And the safe at home—a cracksman from the city tried that one night. The old man blew a hole in his ribs the size of an open hand with a sawed-off shotgun he always kept near his bed.

The old banker had just closed his desk, picked up the rusty satchel, scraped open the sagging gate, scraped it shut, and come out on the porch of the store when his daughter and the big woodsman joined the crowd around the postoffice—a crowd doubly large, gathered for the doubly auspicious occasion.

The girl ran to her father and slipped an arm about his waist—about the waist of his coat, to be exact, for the tall figure was mostly coat—a frock coat that had once been black, but which time had bleached to an uncertain reddish-brown. He looked down at her and grunted. It was the only sign he gave that he knew she was there.

Up beyond the Warhope farmstead there came a prodigious rattle of wheels, a clatter of iron-shod hoofs, and the Milford stage dashed into sight; roared across the wooden bridge where the River Road crossed Eagle Run; rumbled past the church into the village and pulled up in front of the postoffice.

The crowd flocked around it. The guard threw off the mail sack. Zeke Polick picked it up and carried it in. The driver sprang down from the box; ran around the double team; patted the noses of the leaders; looked at the harness, the wheels; remounted the box; gathered up the reins; cracked his whiplash, and the lumbering stage rattled away down the river.

One passenger had alighted, a tall young man wearing a full beard, neatly cropped and pointed—the new preacher, without a doubt—quite the oddest array of satchels and umbrella, patent leather boots and high hat, stiff neck stock and enormous spectacles, that had ever invaded the Flatwoods.

The natives winked at one another and grinned—on the off side. Jack Warhope was possibly the only one to notice that the young preacher beneath the odd trappings of his calling, carried what looked to be a very capable body, tall and strong.

He seemed nervous as he stood at the side of the road peering through his enormous spectacles, slightly amber tinted, upon the crowd.

The old banker, with his daughter a step behind him, advanced, touched his faded black hat and extended his hand.

"The Reverend Caleb Hopkins, I 'low?"

The eyes behind the huge spectacles lighted. The young preacher dropped one of his satchels and met the outstretched hand.

"Ah—Mr.—Colin, I take it?"

"All but the mister. I'm just plain Sime Colin."

The old man grinned, as broadly as the pinched shrewdness of his dry face would allow. The man of books studied him as a scientist might study some new and interesting specimen. The banker talked on.

"I want y'u t' meet my daughter." He half turned; jerked his thumb toward the girl; jerked it back toward the preacher. "Texie, Mr. Hopkins."

The young preacher touched his tall hat; dropped his other satchel, grasped the girl's hand in both his own and pressed it closer than the occasion could possibly warrant.

It may have been merely the expression of a genial nature touched with the fervency of his profession—the outflowing of a benevolence that embraced all humanity—but even so, it brought a quick flush to the girl's face, and drove her eyes to the ground.

The old banker had turned to the crowd.

"Step up, step up," he called, "and shake hands with the new parson. The way y'u hang back, he'll think he's drapped off amongst a pack o' publicans and sinners."

He seemed to think the remark topped the occasion with particular nicety, for his dry face crinkled up into a splintered grin and he rubbed his bony hands together like a man very well satisfied with himself.

The crowd had evidently been waiting for just such an invitation. Many a man wiped a grimy hand on his blouse; many a woman's hand stole under her apron—it was against Buckeye etiquette ever to offer a hand to the preacher without first wiping it. Stolid faces raveled into grins, and the quaint vernacular of the Flatwoods had an airing. Odd bits of philosophy, ancient jokes, that nobody would have dared to spring on his neighbor, were freely sprung on the hapless and helpless sojourner from the polite east.

Phrases that had done de[illegible]milar occasions were brushed up an[illegible]h another fling. Hanner Polick made the same speech that she was known to have made six times before. Aunt Liza Wiffles "'lowed" he was "middlin' young f'r a preacher," and pursed up her lips and hitched them around toward the right ear in a way that dared anybody to dispute it.

The informal reception was over and most of the crowd gone when Texie noticed

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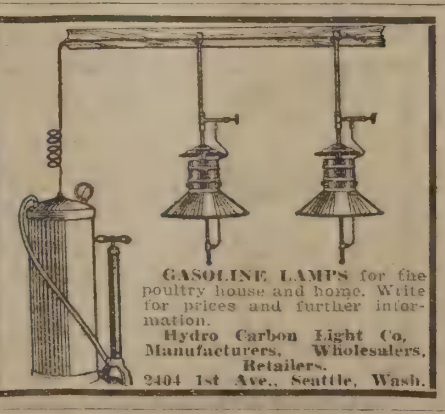

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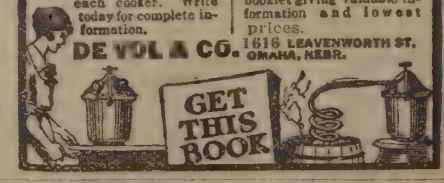

The department editors of this paper are anxious to be of service to you. Do not fail to write to us if they can be of help to you.

Jack Warhope still leaning against the porch post where she had left him. She ran back, caught his arm and dragged him forward.

"Mr. Hopkins, meet Ja— Mr. Warhope."

"Glad to meet you, Mr. Warhope."

The young preacher stretched forth his hand; the other grasped it. The peering eyes behind the heavy glasses studied him with curious intentness, but the woodsman, only mildly interested, missed the inquisitive look.

The old banker had taken a step up the road.

"Well," he said, "I 'low that jist about winds up the how-d'-y'-doin'. Texie, run in and git the mail, and we'll be moseyin'."

He half turned and glanced over his shoulder at the preacher.

"I've dickered the use of our ol' preacher's study f'r y'u at the parsonage. Sister Mason—the widder, y'u know—she 'lows she'll be right glad t' have y'u come over and use the study, she's that lonesome sence the parson died. We'll stop as we go a-past and you can take a look at the study and meet Sister Mason. But, as I writ y'u, I'm aimin' f'r y'u t' put up with me, at least f'r a few days"—the brisk, raspy voice softened—"I'm honein' t' have a talk with y'u about—the boy."

He glared down at the road; the preacher studied him curiously.

So long had the old money lender been accustomed to dominate everybody about him that it did not once occur to him to inquire what the preacher's wishes might be. He strode another step or two up the road, remembered that his daughter had gone in after the mail, stopped and frowned half impatiently toward the store door. The preacher picked up his two handbags and waited. Jack Warhope had gone back to the porch and was again lounging against a post.

At that moment Texie came out with half a dozen letters in her hand, saw the big woodsman, and, with a tiny wisp of roguishness in her eyes, stopped on the edge of the porch.

"Mercy! but you're a hard man t' herd. Don't y'u know you're goin' along home with us t' supper?"

"First I hear'd of it," the woodsman drawled, shifting his shoulder against the post.

The girl glanced at the preacher standing at the edge of the road, jerked her head ever so slightly toward him—a motion so elusive that it would have escaped anybody else but Jack Warhope—and lowered her voice to a whisper:

"We'll git 'im t' tell us about —Ken."

She turned away. The shoulders left the porch post and the man followed.

The old banker was holding out his hand for the letters. He glanced them over, grunted, thrust them unopened into the pocket of his faded coat; muttered a word, drew them forth again, sorted out one, stared hard at the address and postmark; and then, with a half petulant grimace, knocked the bunch of letters together, crammed them back into his pocket again and, followed by the others, trudged away up the road.

(To be continued.)

To Trap a Skunk

By GUY E. POWELL.

Trapping is the best method of taking a skunk. Shooting generally results in defilement of the surroundings. If no trapping were done skunks in some places might become noxious because of their abundance.

Being neither suspicious nor cunning, skunks are easily trapped. They are often caught in unbaited traps placed in the paths they travel, yet the head of a fowl, a sparrow or a dead mouse makes an excellent bait.

Trappers use a medium sized trap—No. 1—and try to take advantage of the peculiar habits and haunts of the animals, placing the trap in such places as the paths they travel to obtain water or near the openings to their dens.

The trap should be set lightly, the trigger filed down to fit the notch loosely, and a little trash—leaves or grass—may be scattered over it with advantage. The bait may be placed on the pan, or a little beyond the trap, or between two traps. The path may be narrowed artificially by setting upright sticks in two converging rows along it and the trap set in the narrow place.

Scent is not often discharged by skunks when trapped, but care is needed to remove them. With caution one may approach near enough to strike the animal a quick blow across the back, paralyzing the hind parts and preventing the discharge. Some trappers use a ware noose attached to a pole. The noose is cautiously lowered over the head of the skunk, and by a quick jerk the animal is lifted and strangled.

Many trappers use a tight box trap for taking skunks. When one is caught the box is carefully lifted and carried to water deep enough to cover it. If no water is available to drown the animal, it may be killed in the box by carbon bisulphid or chloroform.

Automobile Costs

For the year 1922 the average cost per mile of all the cars reported by the county agents in Minnesota was slightly over 8 cents per mile, according to the agricultural extension service of the University of Minnesota. It cost one man 17 cents per mile in 1922 when all his costs were averaged for the season.

The cost has varied from year to year since these records were started five years ago. In 1921 it cost about 9 1-4 cents per mile to operate; in 1920 it cost 11 1-2 cents per mile; in 1919, 10 1-4 cents and in 1918, 8 1-4 cents. These records were kept in the same manner each year and by approximately the same persons so it may be considered a fairly good comparison of the change in costs during that time.

Of the average cost of operation in 1922, about 8 cents, the largest single item was depreciation, about 2 1-2 cents per mile; repairs stood next, 1 3-4 cents per mile; gas was practically the same. These three items were almost three-fourths of the total charge. New tires were about three-fourths of a cent, garage rent about one-half cent, interest about one-third of a cent and oil about one-third of a cent.

Given in percentages the cost per mile of the different items of expense are as follows: Gas, 21.3 per cent; oil, 3.7 per cent; tires, 8.8 per cent; repairs, 21.7 per cent; garage rent, 6.5 per cent; depreciation, 30.7 per cent; interest, 4.7 per cent; insurance, 1 per cent; miscellaneous, 1.6 per cent; making a total of 100 per cent. These figures are based on an average mileage of 8164 miles. On the average the cars made 15 miles per gallon of gas.

Ingersoll

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Stayton, Oregon.

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Before attending THE ADCOX SCHOOL I was an ordinary railroad section hand at $2.50 per day—now I am an auto electrician and make $10 per day.

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Frank Shaw

Adcox training increased my earning capacity 30 per cent—I now have a fine position as auto electrician in Portland's leading auto electrical shop — THANKS TO ADCOX TRAINING.

Harry Bryant

With only $400 capital and ADCOX TRAINING I started a business that pays me more than $400 profit each month.

O. D. Palmer

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ADCOX TRAINING DID IT! They have businesses of their own or are in BIG PAY JOBS. They don't have to worry along on a few dollars a day—they are independent. THEY ARE MAKING REAL MONEY.

Not Enough Good Auto Mechanics

You may think there are too many auto mechanics in the U. S.—and you are right. There are too many of the kind THAT DO THINGS BY GUESS-WORK. But there is a crying demand for experts. We make experts. **Adcox graduates** don't have to compete with "ordinary mechanics" who learned their trade by the "I-picked-up-what-I-know" method. Adcox graduates get the jobs that the "ordinary mechanics" can't hold down.

TRAINING MAKES THE DIFFERENCE

The ordinary mechanic finds it difficult to get a job at low pay, while the **Adcox graduate is in demand at big pay.** The difference is TRAINING. Calls are pouring into our employment department faster than we can fill them. Automobiles are increasing so fast that before long the "common mechanic" will also be in demand.

Million New Jobs Open

At present there are almost 14,000,000 automobiles in the U. S., including trucks—and less than 100,000 garages—or an average of less than 2000 garages per state.

There are about **3,000,000 people employed** in the auto industry and its allied lines—or more than one person to every 5 cars—in other words every time 5 cars are manufactured there is a new job created for some one.

It is estimated there will be over 5,000,000 cars manufactured in 1924—which means 1,000,000 new jobs.

AUTO PROSPERITY UNPRECEDENTED.

At the end of 1924 we will have approximately 20,000,000 autos in the U. S. and figured on the basis of 100 cars per garage, we will need 200,000 garages to take care of these cars—an average of 4000 garages per state—think of it—**1,000,000 new jobs in one year** and 2000 new garages needed in each state—it's almost unbelievable—but these figures are taken from the National Automobile association statistics—and are reliable. All the automobile trade knows this, AND PREPARATIONS ARE AFOOT FOR A BIGGER WAVE OF AUTOMOBILE PROSPERITY THAN THE WORLD HAS EVER KNOWN.

Adcox Not Ordinary Auto School

The Adcox school is not ONE OF THOSE SCHOOLS THAT GUARANTEES TO TEACH YOU THE BUSINESS IN SIX OR EIGHT WEEKS—we offer no FREE TOOLS—FREE RAILROAD FARES—FREE ROOM AND BOARD—etc. If you are looking for a short, cheap course or something free and would be satisfied with an "ordinary auto mechanic's" wages then don't answer this ad, but if you are keen to realize the value of thorough training—**want to forge ahead** in this world—then I want to teach you the finer points of auto repairing and I will assist you to a position paying from $150 to $500 per month.

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FAMILY CIRCLE

ALICE W. BARLAND
EDITORIAL CONTRIBUTOR

Experience Letters

Somebody said it couldn't be done,
But he, with a chuckle, replied
That maybe it couldn't, but he would be one
Who wouldn't say so till he tried.
So he buckled right in, with the trace of a grin
On his face; if he worried he hid it.
He started to sing as he tackled the thing
That couldn't be done—and he did it.

Somebody scoffed: "Oh, you'll never do that—
At least, no one has ever done it."
But he took off his coat and took off his hat,
And the first thing we knew he'd begun it.
With the lift of his chin and a bit of a grin,
Without any doubting or quiddit,
He started to sing as he tackled the thing
That couldn't be done—and he did it.

There are thousands to tell you it cannot be done;
There are thousands to prophesy failure;
There are thousands to point out to you, one by one,
The dangers that wait to assail you.
But just buckle in with a bit of a grin,
Then take off your coat and go to it;
Just start in to sing as you tackle the thing
That cannot be done—and you'll do it."

—Selected.

Dear Young People of the Circle: After reading the description I gave you of my own home life where we spent our evenings around the reading table or took part in country amusements, I imagine I hear you say: "but things are different now." Yes, of course they are. I am not one to talk about "the good old days" as if they were better than these days in this period. This is the very best age that ever has been. There are more interesting things to go to, to read about, and it is easier to go to places where we can be instructed or amused or both, than ever before.

I have no fault to find with the automobiles when they are driven by careful people and I do not bewail the fact that there are movies. But the restlessness in the air and the constant desire of young, and ofttimes middle aged, to be constantly going somewhere, so that an evening at home seems a great bore, is, I maintain, very deplorable.

I also believe that it is a great mistake for people to turn the Sabbath day into a time given over to riding about the country, taking the place of church attendance. And I am not alone in this belief. All the greatest minds of the day seem to agree that the restlessness noticeable among the young people and the lack of proper restraint by their parents and slackness in attendance at Sunday school is eating at the roots of our national home life. The home is now and always has been the place where young people should receive impressions of, and practice in, self-government, and when so little time is spent by them in their homes they show the lack of self-restraint in a very marked manner.

My dear girls and boys, I wouldn't have you think that I begrudge you your happy youth, your joyous young life, or that I would have you always at home and in bed by nine o'clock. Even that wouldn't hurt you, the being in bed by nine I mean, but this I would try to impress upon your minds: that we are living in an age where it is even more essential that we should maintain a proper balance of mind than was necessary during the period when things did not move along so rapidly. I know from experience how infectious the restlessness can become. I, too, was young once, you will remember. And I am still so closely associated with young people that I have a very good understanding of them.

You may have the "going" disease quite firmly fastened upon you, but every one of you has that within you which, if exercised, would throttle and put down that restless desire to run away to dances, to movies, to rides every night in the year. Physically, mentally or morally no one can carry on such a program, as many of you have written me that you do, without weakening in about all these ways. It is up to you, dear young folk, to become something or nothing or only a small per cent of what you might be.

Very many boys and girls have written to tell me that they have thought over a lot of things since these letters have been coming out from week to week, and many have changed their views for the better. This is most gratifying to me, I assure you. I love this country and I thank God every time I lay down a daily paper that I live here instead of across the water, and that this is my country, with all its blessings and its privileges. It is is up to all of us, my young people, to keep this the grandest country on the globe. We have no right to do anything which shall tend to weaken us as citizens or blind us to our responsibilities.

I heard a public speaker say a few days ago that we Americans had a sort of faith, perhaps unexpressed but none the less existing, that nothing very bad could really happen to us here in America; that someway, somehow God would take care of that, and that we should always jog along in a very comfortable manner. He went on to say that though we were the greatest and most fortunate nation today it was not outside a possibility that we might go down as other republics have gone, if we should become a nation where the home fires were neglected and part of us remained law abiding and part unlawabiding. You know who are the unlawabiding. They are the ones who go about with a bottle in hip pocket and the sneaking bootleggers and moonshiners. Again and again this speaker spoke a truth namely, that we must stand together for the enforcement of law or fall ultimately. Your friend,

ALICE W. BARLAND.

Dear Mrs. Barland: I have read with a great deal of interest a letter in the October issue of The Farmer signed "Mrs. C. E. B., Wash." I am proud and glad that there is at least one woman who is honest enough to state conditions as she finds them in a farming community in this great state of Washington. Shake lands, Mrs. C. E. B., whoever you are, I congratulate you!

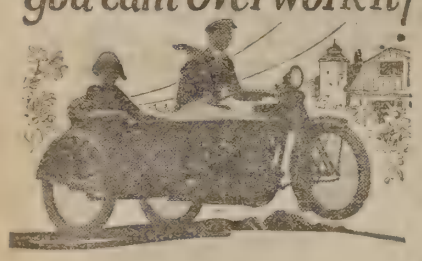
We live on a 160-acre diversified farm 20 miles from the city of Spokane, and as I look around I see conditions exactly as Mrs. C. E. B. has stated them to be. Within the last three months we have attended three auction sales in our immediate neighborhood where the farmers were being sold out for debts.

Those poor people had worked early and late and tried in every possible way to make ends meet, but on account of low prices for all farm produce the struggle was too great and so they are all going down and out, one by one.

The first family to go "broke" had seven children, the next two and the third nine. When asked where they were going they said they didn't know. The taxes are so high that the men who do hold onto their farms have to go out and work in the lumber camps to earn enough to pay them. The wife and children stay home and do the chores and whatever farm work they can. While the people who toil (?) in steam heated, comfortable offices and receive large salaries, grumble because eggs are 45 cents a dozen and potatoes $1.25 a cwt. Let them try farming for a while and they will find what a snap they have. I have tried both and speak from experience. MRS. L. R., Wash.

Send for our large illustrated catalog.
U. S. ARMY SUPPLY STORE.
1310 Pacific Ave.,
Tacoma, Wash.

You Can't Overwork it!



TURDIER than ever! Easier to care for! More comfortable! That's the 1924 Harley-Davidson. Aluminum-alloy pistons prevent overheating, reduce vibration; full-floating, semi-elliptic springs make roomy sidecar easier riding; Alemite lubrication (first on any motorcycle).

Save time and money, save wear and tear on your car by using a Harley-Davidson for business errands to town, creamery, neighboring farm, school, etc. Two cents a mile pays for gasoline, oil, tires and all.

Ask your dealer about his Pay-as-you-Ride-Plan. Write us for free literature, showing 1924 models in full color.

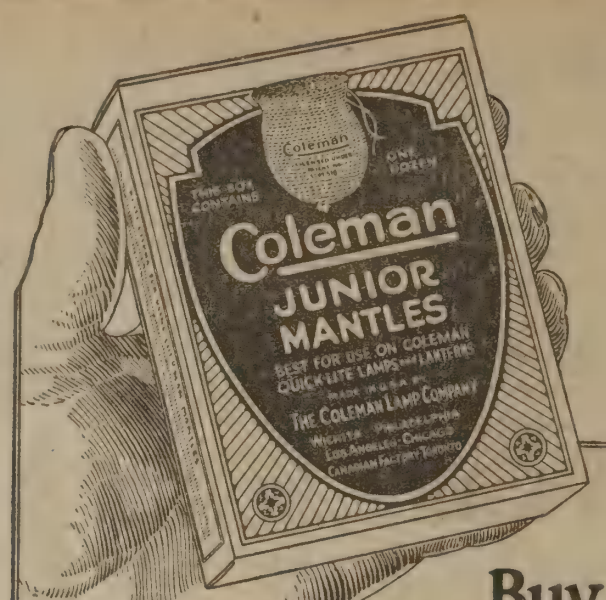
HARLEY-DAVIDSON MOTOR COMPANY
Dept. WF, Milwaukee, Wis.

Harley-Davidson
The Motorcycle

Money-making sales opportunities in open territories. Write for particulars.

Write for 1924 Catalog to
HIRSCH CYCLE CO.
HARLEY-DAVIDSON DISTRIBUTORS.
SPOKANE, SEATTLE AND TACOMA.

Have you glanced over the farm bargains on the "Want Ad" page?

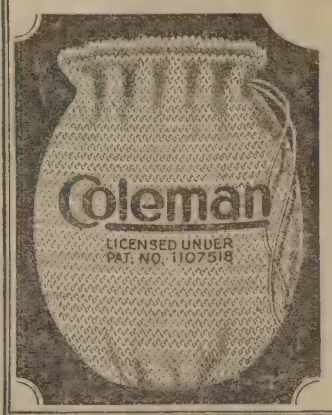


Buy them by the Package

Have Coleman Mantles on hand whenever you need them. Buy them the economical way—packed in a special paraffined package that keeps them in perfect condition until you are ready to use them. The price is only $1.20 for a box of twelve.

Look for the Name "Coleman" on the Mantles You Buy

Coleman
TRADE MARK REGISTERED



High Power
MANTLES

—last longer, give more brilliant light and stand hard usage better than any other mantle. Made from the very best materials by a special Coleman process. Chemically treated to give extra strength. Perfectly designed in size, shape and texture to give the powerful white light that has made Coleman Quick-Lite Lamps and Lanterns known all over the world.

80,000 Dealers sell and recommend Coleman Mantles. Accept no substitutes nor any "just as good" for there are none. If your dealer cannot supply you, order direct from our nearest office. $1.20 per dozen, postage paid. Address Dept. P. N. 72.

THE COLEMAN LAMP COMPANY
WICHITA, KANSAS
Philadelphia Chicago Los Angeles Toronto

The price of cheapness is always too high

76th Year

ALL really good articles, all works of taste and merit must bear a price in proportion to the skill, time, material and expense attending their invention and manufacture.

In the construction of an article which is put to such hard use as a cooking or heating apparatus, it is particularly necessary to use only the best and plenty of it.

This we do.

Those things called dear are, when justly estimated, the cheapest. A composition for cheapness and not for excellence is the most frequent and certain cause of dissatisfaction and waste.

Good, attractive and lasting articles are not made by chance, nor can they ever, in any material, be made at small expense. Only the very rich can afford to buy "cheap" articles—for they can stand the loss resulting from so doing.

The price is high, no matter what you pay, when you buy a shoddy article of any kind.

The price is low when you pay a reasonable figure for a good, honest article.

Reasonably Priced

The most reliable dealers sell them.

HOLLEY-MASON HDWE. CO.
Spokane, Wash.
Distributors in Spokane and Spokane Territory

Charter Oak Stove & Range Co., St. Louis

LOOK AT THE GOOD FARM BARGAINS THAT ARE OFFERED ON THE FARMERS' "WANT AD" PAGE THIS WEEK.

Your Health

By Royal S. Copeland, M. D., F. A. C. S.

Just now I attended a very remarkable function. It was the dedication of a park, to be used by convalescent patients, the doctors and the nurses of a great hospital. It was a gift to the hospital public, presented by the father and mother of a son who died a few years ago. God has prospered the father since and, while he is not a rich man, he has accumulated enough to feel justified in erecting a monument to the memory of the beloved child.

Dr. Copeland.

The mother had thought it all out—she wanted no marble monument in a cemetery—she wanted something beautiful but useful. The gift of the park is the result. Those of us who have the benefits and the joys of the country little appreciate what multitudes never step upon the grass. A good many times I have told you about the crowded tenements in New York. There is one square mile where live a half million persons. Nowhere else on earth is there such a crowded place.

Sickness and accident are all too common in such congested sections. The overcrowded families have no place to care for the sick. The hospital is a godsend to the dwellers in these caves.

What a blessing it will be to those who are sent from such homes in sickness to this hospital, to have an open place, with grass and trees and flowers, with fountains and birds and music. This wise monument will bless the memory of the youth for whom the park is named and for the generous and humane parents who gave it.

Few animals can live without air and sunshine. Even the blind will not live if placed in a house without windows. It was attempted once and the experiment failed.

Every animal God has made to live on the earth demands air and sunshine. The more of these blessings a man has the longer he will live. The more he has his feet on the springy earth and the softness of the turf, the better will be his health.

Sometimes I pass a house, as I did the other day, where some forlorn person sits behind a closed window, gazing out upon the passing world. This is no way to live—you might as well be looking up through the glass opening of your casket. It isn't daylight alone you want. You must have the direct sunlight, the breezes which stimulate your nerves as they strike the body, and the exercise which you are glad to take in attractive surroundings. You need the inspiration of beauty to set your pulses beating. In short, everybody needs what a park or some natural beauty spot can give.

Just Folks

Reason is control.

Gentleness is gentility.

Thrift demands strength.

Pity is the very last refuge.

New conquests cure past defeats.

Quantity is bigness; quality is detail.

Take your last glimpse of life from the mountain top.

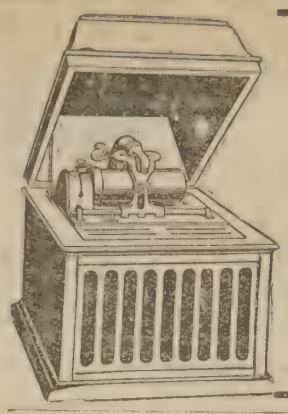
Some know, others think they know, while still others don't care.

It is either you or the other fellow who steps ahead.

To think out a problem is to make it easy to understand.

In doubtful matters publicity may wreck what semi-publicity has built up.

There is consummate art in finished flattery. E A S



CHRISTMAS SPECIAL
THIS EDISON PHONOGRAPH
Sent to Your Home on
5 DAYS' FREE TRIAL
Mr. Edison's New Diamond Amberola and 10 records of your own choosing only cost $38.50
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We will pay all transportation to your own town. It won't cost you one cent to try this wonderful instrument. WRITE US TODAY.

Eilers PHONOGRAPH COMPANY
8-7 Post St. Spokane, Wash.

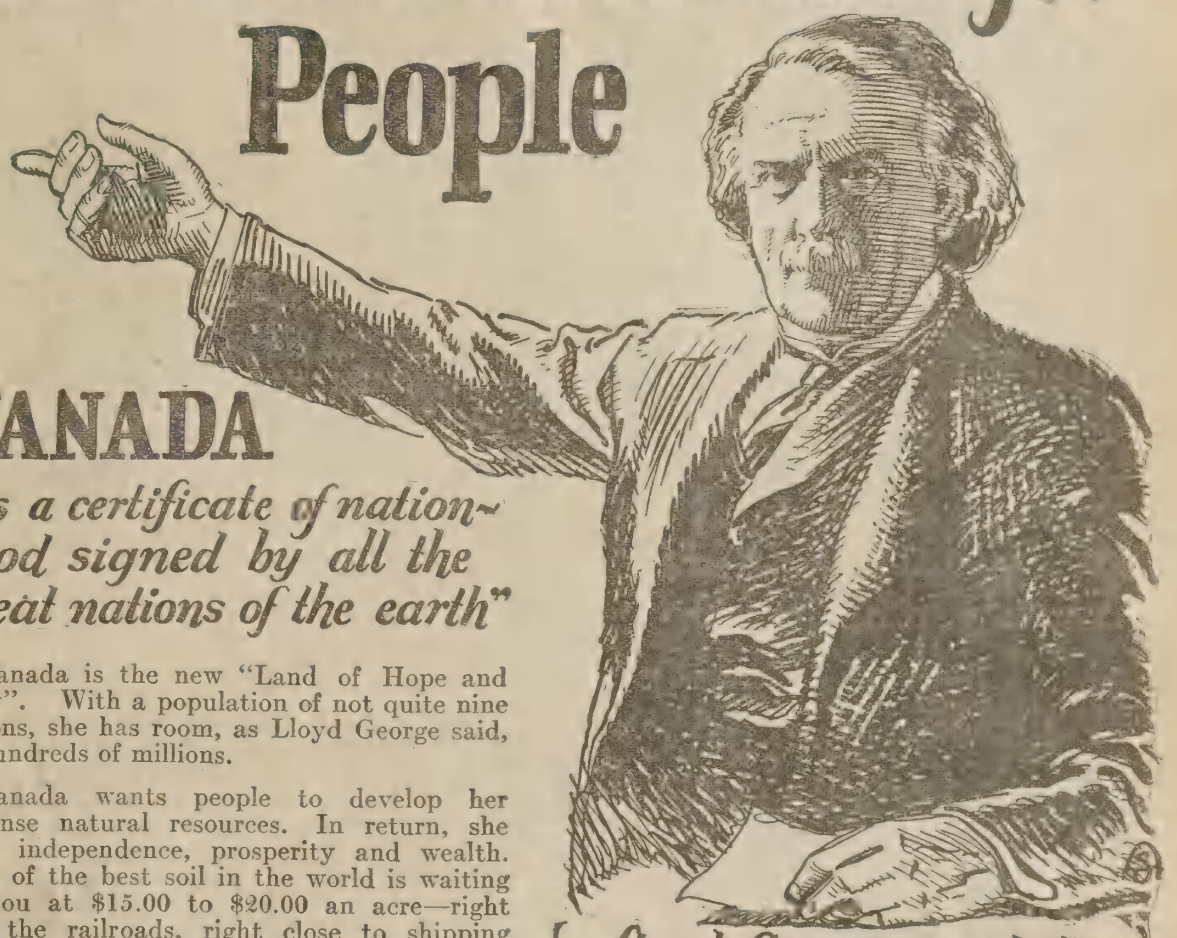
Double Your Money in Less Than a Year
$7000 Cash and 8 Pairs Foxes from 2 Pairs of Our Breeders in 15 Months

This was done by one of our purchasers. Ask about it. Raise ROOSEVELT STRAIN Mormon Foxes, and you can do as well. All breeders purebred, registered, guaranteed.

UNITED STATES SILVER FOX FARMS CORPORATION
200 Hutton Building, Spokane.

SMALL WANT AD IN RIGHT MEDIUM GETS VERY SATISFACTORY RETURNS

A New Nation Calls for People



"CANADA has a certificate of nationhood signed by all the great nations of the earth"

Canada is the new "Land of Hope and Glory". With a population of not quite nine millions, she has room, as Lloyd George said, for hundreds of millions.

Canada wants people to develop her immense natural resources. In return, she offers independence, prosperity and wealth. Some of the best soil in the world is waiting for you at $15.00 to $20.00 an acre—right near the railroads, right close to shipping points and handy to towns, stores, schools and churches. Further back, it is possible to obtain Free Homesteads.

Phenomenal Growth
Dairying—Live Stock—Crops

You would like to hear all about the wonderful opportunities for men and women on Canadian farms. Remember, Canada is a nation now and a young giant of a nation. Since 1900, the value of Canada's dairy industry has increased by $164,000,000. Live Stock, which is the basis of successful farming in any country, has increased in the same period by, approximately, $500,000,000. Canada produced 470,000,000 bushels of wheat this Fall—the largest crop in the world, after the United States, an increase of 415,000,000 bushels in twenty years. You'd do well in Canada.

Send us your name and address. Write a letter or post card right now and receive free booklets and full information about Canadian grain growing, cattle ranching, dairying, diversified farming, etc., and how to get a farm in Canada at low cost or as a Free Homestead.

Our extensive organization—salaried officials of the Government of Canada—is at your service to assist you in moving and getting suitably located. Write now.

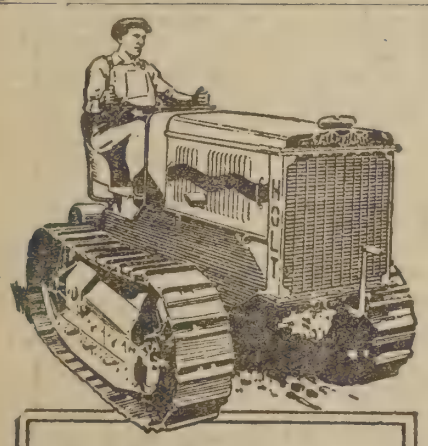
Lloyd George said it:

"In fighting for the independence of another nation, Canada established her own nationhood forever on the registers of the nations of the earth."

The Department of Immigration and Colonization
Room 10, Ottawa, Canada

Come to Canada
Richer Soil~Cheaper Lands

520



Such features as the overhead valve and camshaft motor, three speed transmission, and antifriction bearings of the 2-Ton Caterpillar (T35) Tractor are typical of the superiority of design of the entire line of "Caterpillar" Tractors.

HOLT

The Holt Manufacturing Co.
Spokane, Wash., Stockton Cal.,
J. W. Hill, Henry Bldg., Portland.

Bits of Fun for Everyone

Just in Time.

A certain sportsman went out for a day's rough shooting. He was not a particularly good shot, and so he got nothing; but, since he was rather ashamed to return empty-handed, he bought a rabbit in the town on his way home.

He presented the rabbit to his wife, who, after responding with the usual congratulations, thoughtfully remarked:

"Do you know, it was a good thing you shot that rabbit when you did, John; it wouldn't have kept another day."—Youth's Companion.

Said the Dentist.

We like very much the story of the dentist who went fishing and was disgusted at landing a large and rotund catfish. He seized the beast firmly round its waist and began to work the hook out. Quite automatically and with his usual air of courteous firmness he bespoke the fish: "Open wide," he said.—New York Evening Post.

The New Member.

Visitor (at private hospital): "Can I see Lieutenant Barker, please?"

Matron: "We do not allow ordinary visits. May I ask if you are a relative?"

Visitor (boldly): "Oh, yes, I'm his sister."

Matron: "Well, well, I'm very glad to meet you. I'm his mother."—Selected.

Worth It.

"Why did you tip the boy so handsomely when he gave you your coat?"

"Look at the coat he gave me!"—Record.

Latest High Class Patterns for the Home

Please order the patterns you desire at least two or three weeks before you wish to use them. Desiring to obtain the latest high-class patterns for its readers, THE FARMER has made arrangements to have them sent direct from the east, and under present mailing conditions it takes about that time for them to reach you.

4550. Misses' Dress. Cut in 3 sizes: 16, 18 and 20 years. An 18 year size requires 5 5-8 yards of 40-inch material. For collar and cuffs of contrasting material 5-8 yard is required. The width at the foot with plaits extended is about 3 yards. Price 10c.

4556. Girl's Dress. Cut in 4 sizes: 8, 10, 12 and 14 years. A 12 year size requires 2 yards of plaid or check material, and 1 7-8 yards of plain material. If one material is used 3 7-8 yards 40 inches wide will be required. Price 10c.

4569. Infants' Coat and Cap. Cut in one size. It requires 3 1-2 yards of 40-inch material. The cap alone will require 3-8 yard. Price 10c.

4552. Lady's House Frock. Cut in 7 sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. A 38-inch size requires 4 3-4 yards of 36-inch material. The width at the foot is 2 yards. For facing and collar of contrasting material as illustrated, 1-2 yard of 36-inch material is required. Price 10 cents.

4269. Lady's Dress. Cut in 7 sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. A 38-inch size requires 2 1-2 yards of 36-inch material for the waist and 2 3-8 yards for the skirt. The width at the foot is 2 3-8 yards. Price 10c.

4214, Lady's Apron. Cut in 4 sizes: Small, medium, large and extra large. A medium size requires 2 3-4 yards of 27-inch material. Price 10c.

4342-4379. Lady's Costume. Blouse 4342 cut in 7 sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. Skirt 4379 cut in 7 sizes: 25, 27, 29, 31, 33, 35 and 37 inches waist measure. The width at the foot with plaits extended is 2 5-8 yards. To make the dress as illustrated will require 3 5-8 yards of figured material, and 1 1-2 yards of plain material 40 inches wide. Two separate patterns, 10c for each pattern.

[illegible]dy's Kimono. Cut Small, 34-36; me-; large, 42-44; ex-16-48 inches bust measure. A [illegible]ze requires 5 1-2 yards of 32-inch material. The width of the flounce the foot is 2 3-4 yards. Price 10c.

3061. Doll's Set. Cut in 5 sizes for [illegible]olls: 16, 18, 20, 22 and 24 inches in [illegible]eight. Size 18 will require 5-8 yard of [illegible]6-inch material for the dress, 5-8 yard of 40-inch material for the cape, and 1-2 yard of 20-inch material for the bonnet. Price 10c.

4564. Lady's Blouse. Cut in 6 sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. A 38 inch size requires 2 3-8 yards of 40-inch material. Price 10c.

4568. Child's Rompers. Cut in 3 sizes: 6 months, 1 and 2 years. A 6 months size requires 1 3-8 yards of 36-inch material. Price 10c.

3770. A Dainty Boudoir Set. Cut in 3 sizes: Small, medium and large. The cap No. 1 will require 3-4 yard of 27-inch material. No. 2 will require 5-8 yard. One pair of slippers will requires 3-8 yard for a medium size. Price 10c.

Send 12 cents in silver or stamps for our up-to-date fall and winter 1923-1924 book of fashions.

Please fill in this order and mail with remittance to:
PATTERN DEPT., PACIFIC NORTHWEST FARM TRIO, Spokane, Wash.

Enclosed find ..... cents for which send me the following:

Pattern No..... Size..... Pattern No..... Size.....

Pattern No..... Size..... Pattern No..... Size.....

Name .....

Postoffice ..... State .....

R. F. D..... Box No..... St. No. .....

Be sure to give the pattern number and the correct size.

Warmth without Waste!

Luxuriant warmth at a price you can afford—is at your command when you heat your home with a Majestic Electric Heater.

Warmth in quantity—distributed in sane proportions—without the mess and waste of coal and wood is provided by this radiant electrical companion.

You have only to touch a switch and the *Companionable Warmth* of a Majestic Heater is yours—to direct as you will.

The Majestic Heater—with its many exclusive and distinctive features—is the pioneer among heaters. It is the original electric heater and today—as in the beginning—it sets the pace. Get a Majestic Electric Heater to generate warmth without waste in your home.

GIVE ONE THIS XMAS.

See your dealer today—while he has Majestic Electric Heaters to deliver

FOR SALE BY ALL DEALERS EVERYWHERE

Majestic Electric Appliance Co., Inc.
SAN FRANCISCO, CALIF. KANSAS CITY, MO.

MAJESTIC
Electric Heaters
Provide Companionable Warmth for Everyone

[318]

Color Your Butter

"Dandelion Butter Color" Gives That Golden June Shade Which Brings Top Prices

Before churning add one-half teaspoonful to each gallon of cream and out of your churn comes butter of Golden June shade. "Dandelion Butter Color" is purely vegetable, harmless, and meets all State and National food laws. Used for 50 years by all large creameries. Doesn't color buttermilk. Absolutely tasteless. Large bottles cost only 35 cents at drug or grocery stores.
Wells & Richardson Co., Burlington, Vt.

Free to the Ruptured

Reduced Fac-Simile Gold Medal

STUART'S PLAPAO-PADS are different from the truss, being mechanico-chemico applicators made self-adhesive purposely to hold the distended muscles securely in place. **No straps, buckles or spring attached**—cannot slip, cannot chafe or press against the pubic bone. Thousands have successfully treated themselves at home without hindrance from work—most obstinate cases conquered.

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Soft as velvet—easy to apply—inexpensive—awarded Gold Medal and Grand Prix. Process of recovery is natural, so afterwards no further use for trusses. We prove it by sending trial of Plapao absolutely **FREE.** Write name on coupon and send today.
Plapao Co., 991 Stuart Bldg., St. Louis, Mo.
Name .....
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Return mail will bring Free Trial Plapao.

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Get a *real* Stradivarius model violin outfit and *famous* Imperial note and tuning chart *free*, by enrolling for our complete course of written and *illustrated* violin lessons. **Save time & money.** If you can read *plain* English you can learn to play *standard note music* quickly by this interesting *new short one note at a time* method. *Simple* as *A B C. Lessons only cost. Easy terms.* Successful pupils 8 to 70. Number of free violins limited. Write *today.*
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OLD MASTER ART PROOFS
From your own favorite negatives.

Orders for enlargements received by us up to December 15 will be delivered to you by Xmas.

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Thrice Daily
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SCOTT'S EMULSION
Is a Great Help
To a nursing Mother

Depend upon it, *nothing* is "just as good" as SCOTT'S EMULSION

Scott & Bowne, Bloomfield, N. J. 23-51

PARKER'S HAIR BALSAM
Removes Dandruff—Stops Hair Falling
Restores Color and Beauty to Gray and Faded Hair
60c. and $1.00 at Druggists.
Hiscox Chem. Wks. Patchogue, N. Y.

Just What You Want
may be offered in this week's want ads at a bargain. It's a good idea to look them over every week

Ship Furs

Ship all your furs to Fouke HERE. Regardless of the fur market at any time, depend on Fouke for the most continuous, reliable and profitable outlet for all your furs. Put a Fouke tag on your fur shipment. See how much better grading you get--See how much more quickly you get your returns--See how much more money you get for every skin. See for yourself that—

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Fouke Grading Makes Your Fur Checks Bigger.

FOUKE FUR CO. 399 FOUKE BUILDING

Send name and address at once. ST. LOUIS, MO.

MONEY IN FURS

TRAP AND SHIP TO

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Dealers in

FURS

HIDES PELTS WOOL

AND GET HIGHEST PRICES, HONEST GRADING, PROMPT CASH RETURNS, FREE ILLUSTRATED TRAPPERS' GUIDE TO SHIPPERS : : : : Write for Price List

McMILLAN FUR & WOOL CO. MINNEAPOLIS, MINN.

HILL SAYS-

BE WISE

DIVIDE YOUR NEXT FUR SHIPMENT

If you have never shipped to HILL—do this. Divide your next fur shipment. Send one-half to the house you have been shipping to—send the other half to HILL BROS. Compare the checks you will receive. This will prove to you that HILL pays higher prices than any other house and No Commission Charged.

SATISFACTION GUARANTEED

If requested, we will hold your furs separate and advise you our best price. If not entirely satisfactory, we will return your furs to you. You take no chances. Ship today.

Hill Bros. Fur Co. 349 Hill Bldg. St. Louis, Mo.

Send them to us—have them tanned and made up into attractive, warm, valuable coats, furs, caps, gloves or robes. Our methods save you big money.

COATS AND ROBES AT A SAVING OF 25 TO 50%

On READY MADE GARMENTS. We are specialists in women's fur pieces. Our methods give you latest styles, most value in workmanship at lowest prices. Write today for our beautifully illustrated catalog showing up-to-date styles and giving lowest prices. Sent free.

CEDAR RAPIDS TANNING CO.
929 So. 2d St. Cedar Rapids, Iowa

ONE MAN SAWS 15 CORDS A DAY

—Easy with the OTTAWA Log Saw! Wood selling for $8 a cord brings owner $45 a day. Write for FREE Book and Special Offer today.

OTTAWA MANUFACTURING CO.,
2591S Wood Street, Ottawa, Kansas.
Room 2591S Magee Bldg., Pittsburgh, Pa.

Trappers' Poison GOES' Liquid Poison Capsules

kill fur animals on spot. Eighteenth season on market. Free circular when this paper mentioned.

EDMUND GOES, Station C. Milwaukee, Wis.

Read the "Want Ad" page this week for good offers of all kinds.

Horticultural Meet

At Yakima December 10-12

The third annual convention of the Washington State Horticultural association will be held at the armory at Yakima on December 10, 11 and 12. A well-balanced program has been drawn up, which includes many authorities on horticulture from the agricultural colleges as well as men who have had wide experience in the local fields.

The railroads have agreed to cooperate and give special rates of fare and a half, provided there are 150 who come out. Charles L. Robinson, secretary of the association, reports that there is every indication of a large attendance at the convention.

Officers and directors for 1923 are: Paul H. Weyrauch, Walla Walla, president; R. T. Ried, Bellevue, first vice president; M. L. Dean, Boise, second vice president; Charles L. Robinson, Olympia, secretary-treasurer; directors for one, two and three year terms are: H. L. Douglass, Wenatchee; C. M. Lockwood, Opportunity; J. H. Wright, Yakima; F. A. Wiggins, Toppenish; O. M. Morris, Pullman; J. L. Dumas, Dayton.

Young Farmers

Here are pictures of half a dozen or so coming young farmers of the state. At the right in this picture are Kenton and Dayton Hood, sons of Mr. and Mrs. Y. T. Hood of Spring Valley. They are showing their registered Holstein calves, Nug-

get De Kol Fayne and Eden Valdessa De Kol. These boys are members of the Spring Valley calf club, which secured its calves from one of the dairying sections of Oregon. At the left in the picture are shown Margaret Janson, Tommy Janson, Wesley McNee and the two Hood boys. They are enjoying the prize winning Shetland pony, Midget. At the extreme left stands Mr. Hood.

Exchange Christmas Ideas

A very unique plan of exchanging ideas for making Christmas presents was carried out by the women of Thurston county through the help of Miss Belle A. Shelton, the county home demonstration agent. A total of 11 communities were represented in the exhibit, which was held in Olympia. Fully 30 women attended the demonstration and gathered ideas for making Christmas presents for their own families.

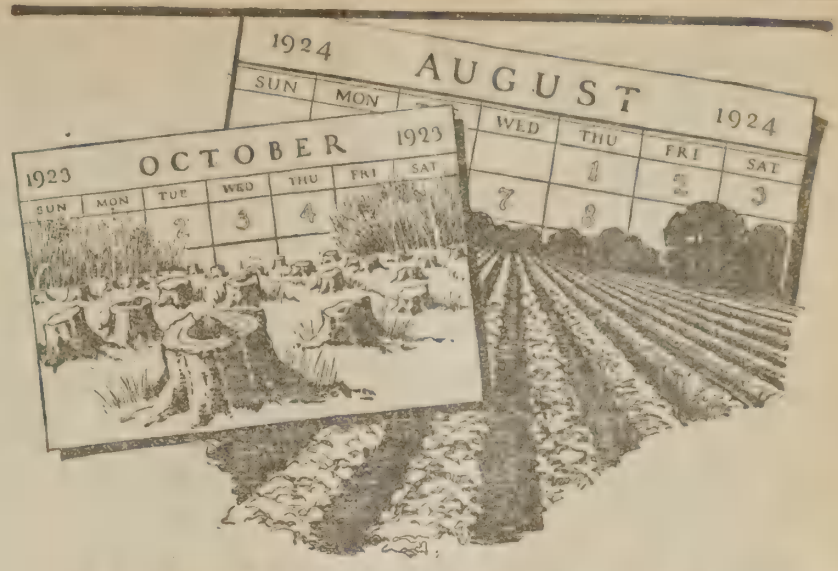
Such articles as could be made at home with small expense were featured, among which were: Handbags from discarded inner tubes, sweaters made by darning fish net curtain material, novel aprons, dresser runners, candles, hand lotions, baskets, rugs and pillow covers.

Special features were a demonstration in the forenoon by the home demonstration agent, decorating candles, candlesticks and vases, with bronze and silver powders and sealing wax. In the afternoon Mrs. M. F. Pugsley showed how to make trays, using a patterned floor matting for the bottom of the tray and the raveled matting with raffia for the sides.

Wins Trip to Chicago

Robert Zindel, a club boy of Kennewick, has been awarded the Armour prize of a free trip to the International Live Stock exposition at Chicago this month. Robert won this award with his splendid pig club work under the direction of Miss Gertrude M. Gage, county club leader, and R. Mitchell, the local pig club leader. Robert raised four Poland China pigs and fattened them with a gain of 3.1 pounds per day during the fattening period. The dam of the pigs is a registered Poland China sow, Miss Long Chief. Robert is only 13 years old, but takes a great interest in pig club work, and needless to say will make good use of his time at the International.

The contest was judged on the greatest average daily gain on pigs fed, the least cost per pound of gain and completeness of the record book kept, and the story of how the year's work was done.



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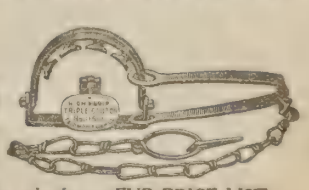

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See "For Sale or Exchange" ads on the "Want Ad" page this week.

High Points in News of the Week

As THE FARMER goes to press, a new congress of the United States is convening in Washington. Problems of organization will occupy the opening days of the session, together with receiving the message of President Coolidge. Next week we shall give a comprehensive digest of President Coolidge's recommendations and a report of the organization of the new congress.

* * *

Following the resignation of the cabinet headed by Chancellor Stresemann of Germany, two weeks ago, when it was denied a vote of confidence by the German legislative body, President Ebert has spent some time endeavoring to find a new chancellor who could form a cabinet satisfactory to that body. He finally secured the organization of a new cabinet, headed by Dr. Wilhelm Marx. The cabinet is the result of a sort of three-party compromise, membership being made up of representatives of the clerical, people's and democratic parties, Dr. Marx being the clerical leader. Other than the chancellor, all members of the cabinet were members under the deposed Chancellor Stresemann.

* * *

Diplomats of this country and England are working upon a treaty which will, if adopted, give the United States a right to search British vessels for illicit liquor supplies beyond the three-mile limit. It will also permit English vessels to bring into American ports, under seal, sufficient alcoholic beverages to serve passengers and crew on the return trip to Europe. The treaty must first be approved by the department of state and later by congress.

* * *

Secretary of War Weeks, in his annual report to congress, urges that, instead of further retrenchment in army appropriations, sufficient increase be given to increase the strength of the regular army. Secretary Weeks says that the present strength is inadequate for the ordinary national defense. The present limit to the regular army is 125,000 men and he urges that the limit be raised at once to 150,000.

* * *

Announcement from Washington says that the department of agriculture, through its bureau of federal grain supervision, is planning an investigation of wheat grades in the Pacific northwest. This investigation is the result of complaints made by northwestern wheat growers through their representatives in congress.

* * *

John R. Quinn, national commander of the American legion, conferred with President Coolidge recently on the matter of the soldiers' bonus bill. Commander Quinn says he expects congress to take early and favorable action on the bonus.

* * *

Measures are being prepared by the department of agriculture, under the supervision of Secretary Wallace, for presentation to congress in a hope that under one or another of them development of the Muscle Shoals project may be brought about. The first bill to be introduced provides for certain modifications in the Henry Ford offer for the project. If this fails, the second bill, providing for government operation of the project, will be introduced.

* * *

Thursday of this week a national election of unusual importance is being held in England. It is an election of members of parliament, but it practically means the election of a premier and a cabinet as well. If the new parliament is made up of protectionists and friends of Premier Baldwin's foreign policies, Mr. Baldwin will remain as premier with his present cabinet. If free-traders win, the new parliament likely will cast a vote of lack of confidence in the Baldwin ministry, whereupon he and his cabinet will resign and the king ask somebody else to form a cabinet in sympathy with the free-trade parliament. That "somebody," under those circumstances, would certainly be either former Premier Asquith or David Lloyd George, both of whom are campaigning together for election to parliament on a free-trade platform. Free-traders, however, are reported to be badly divided as between liberals and laborites.

* * *

A report from London indicates that the British government is disturbed over reports from Germany that the recruiting of the German army and the military training of private citizens are being carried on far in excess of the limit set by the treaty of peace. The British observers do not believe that Germany is now able to equip and put into the field an army in excess of that permitted under the treaty, but foresee a time when it might be financially able to do so and would be able to do so quickly because of the training of men at the present time. It is apparent that something of this nature is one of the points which has led France to take her unswerving position in the point of compelling Germany to live up to the treaty both in letter and in spirit.

* * *

The Great Northern Railway company has announced plans for the expenditure of over $60,000,000 during the next five years in improvements. The Northern Pacific has announced plans for the expenditure of $56,000,000 over a three-year period.

* * *

In a grain rate hearing at Minneapolis recently President Finley of the Chicago Great Western railway desired that within the next 10 years the railroads operating in the northern tier of states from Chicago to the Pacific coast would have to spend nearly $2,000,000,000 if they kept pace with the development of the industries of this region.

* * *

While a delegation of Filipinos is in Washington to urge upon the authorities there that this country grant the Philippine islands their independence, the republican central committee of the Philippines at Manila has adopted a resolution urging congress to amend the original Philippine act so as to provide for permanent control of the islands by the United States.

* * *

The federal reserve board has issued a report showing that the production of basic commodities increased 3 per cent during the month of October and the first half of November. Much of this increase was due to the resumption in mining of anthracite coal.

Farm Business and Markets Outlook

(Continued from page five.)

ments from producing sections are fully up to normal, although they have declined more than 50 per cent in the last six weeks.

Apple markets were nearly steady last week, with midwestern Jonathans quoted at $5 to $6 in Chicago and Kansas City and medium to large fancy Washington Delicious at $2.85 to $3.15 per box, fancy at $2.50 to $2.75, extra fancy Jonathans at $2 to $2.25 and fancy at $1.75 to $2. The carlot movement from producing sections is gradually falling off, but sponding season of the year. Total shipments remains the highest on record for the corre- for the season up to November 17 from Washington, Oregon, Idaho, Michigan and Kansas show decided gains over last year. From New York, however, the movement has been less than half of that in 1922. The boxed apple states have shipped a total of 37,573 cars, compared with 23,350 cars last year, while the barrel apple states have shipped 15,811 cars, against 18,376 cars in 1922.

The Live Stock Market.

PORTLAND, Ore. Dec. 1.—Cattle—Beef steers, good grade, $6.50@7.50; medium grade, $5.50@6.50; common, $4.25@5.50; beef cows and heifers, good grade, $4.50@5; medium, $3.50@4.50; common, $3@3.50; canners and cutters $1.50@3; bologna and butcher bulls, $2.75@4; feeder steers, $5@5.50.

Calves—Medium to choice, 100 pounds down, $8.50@9; 190 to 240 pounds, $6@8.50; 260 pounds up $4@6; cull and common $3@4.

Hogs—160 to 200 pounds medium, good and choice, $7@7.50; 200 to 250 pounds, $6.50@7; 250 pounds up, $6@6.50; packing hogs, smooth, $5@6.50; packing hogs, rough, $4@5; slaughter pigs, $6.25@7; feeder pigs, $6@6.75.

Sheep and lambs—Lambs, 84 pounds down, good and choice, $10@11; cull and common, $7.50@10; yearling wethers, medium to choice, all weights, $6@8; wethers, $5.50@7.50; ewes, medium to choice, $3.50@6.50.

SPOKANE, Dec. 1.—Cattle—Prime steers, $6.75@7.25; good to choice steers, $6.25@6.75; medium to good steers, $5.50@6.25; fair to medium steers, $5@5.50; common to fair steers, $4.50@5; choice cows and heifers $4.75@5.25; good to choice cows, heifers, $4@4.75; medium to good cows and heifers, $3.50@4; fair to medium cows and heifers, $3@3.50; canners, $1.50@2.25; bulls, $3.25@4; light veal calves, $8@9; heavy veal calves, $6.50@8; stockers and feeders, $4@5.25.

Hogs—Prime mixed, $7@7.25; medium, $6.75@7; heavies, $4@6; fat pigs, $6.25@6.50; stockers and feeders, $6@6.25.

Sheep—Prime lambs, $9.25@10; fair to medium, $8.50@9.25; yearlings, $6.50@7.50; wethers $5.50@6.50; mutton ewes, $3@5.

The Grain Market.

PORTLAND, Ore., Dec. 1.—Wheat, hard white Bluestem, Bart, soft white, western white $1.01; hard winter, northern spring, western red, 98c.

Oats—No. 2 white feed, December January, $33.50; do. gray, December, January, $32.50.

Corn—No. 2 eastern yellow, for shipment December, $32; January, $31; No. 3 do, December, $31; January, $30.50.

SEATTLE, Dec. 1.—Wheat: Hard, soft and western white, Big Bend Bluestem, $1.01; hard and soft red winter, northern spring and western red, 99c.

WALLA WALLA, Dec 1.—Bluestem, 88c; Club, 86c; Turkey red, 85c.

PULLMAN, Wash., Dec. 1.—Red, 80c; white, 83c.

DAVENPORT, Wash., Dec. 1.—Bluestem, 80c, Gold Coin, 80c; Club, 80c; Northern spring 78c; Turkey red, 78c.

ODESSA, Wash., Dec. 1.—Bart and Bluestem, 82c; Fortyfold, 81c; Marquis and Turkey red, 80c; Jones Fife, 79c.

COLFAX, Wash., Dec. 1.—Red, 79c; white, 82c. Oats, $28 a ton Barley, $25.

LEWISTON, Idaho, Dec. 1.—Red, 80c; white No. 1, 82c.

DAYTON, Wash., Dec. 1.—Club, 85c; red, 82c.

Hay and Feed Grain.

SPOKANE, Dec. 1.—Wheat—Feed wheat, $36 ton.

Oats—$38 per ton; rolled, $40.

Corn—$45 per ton; cracked corn, $47 per ton.

Barley—$38 per ton; rolled, $40.

Bran—$27 per ton.

Bran and shorts—$28 per ton.

Shorts—$32 per ton.

Alfalfa, $20 ton in ton lots; $22 in ton lots delivered.

PORTLAND, Dec. 1.—Mill feed—City delivery prices: Mill-run, $29 per ton; middlings, $41; scratch feed, $49; rolled barley, $42@44; cracked corn, $50; rolled oats, $43.

Hay—Buying prices f. o. b. Portland: Alfalfa, $17@18 ton; cheat, $13.50@14.50; valley timothy, $19@20; eastern Oregon timothy, $20@22; clover, $14@15; oats, $15@16; oats and vetch, $15.50@16.50; straw, $8.50 per ton.

General Produce.

PORTLAND, Dec. 1.—Butter—Cubes, extra, 45c lb.; prints, parchment wrapped, box lots, 49c; cartons, 50c. Butterfat, 50c; delivered, Portland.

Eggs—Buying prices, white hennery, standards, 47@48c; mixed color standards, 40c. Selling prices, Front street: Selects, 53c; candled ranch 48c; pullets, 38@40c; storage white, 38@40c; storage, mixed colors, 35c; association selling prices, cash at store, extras, 50c; pullets, 38c.

Cheese—Price to jobbers f. o. b. Tillamook: Triplets, 30c; longhorns, 31c; loaf, 30c per lb.

Poultry—Hens, 14@20c; springs, 20c; ducks, 15@18c; geese, young, 15c; turkeys, live, young, 25c; dressed, best, 28@30c; off grade, 15@25c.

Dressed meats—Veal, fancy, 14@14½c; pork, fancy, 11c per pound.

SPOKANE, Dec. 1.—Poultry, live weight—Hens, 4 lbs and over, 18c; light hens, under 4 lbs. 12c; springs, 16@20c; old roosters, 8c; young geese, 15c lb; spring ducks, 16c lb.

Fresh ranch eggs—$11@13; fancy poultry farm, $15; pullet eggs, $10.50@13.50.

Butterfat, 49c.

SEATTLE, Dec. 1.—Eggs—Select local ranch, white shells, cases included, 47c per doz f. o. b. Seattle; mixed colors, 45c per doz; pullets, 29@30c doz; common, 29c per doz; cases returned to shippers, 1c less; do to country stores, f. o. b., 45c per doz, loss off; Eastern Washington and Idaho, subject to candling, 45c per doz.

Butter fat—F. o. b. Seattle: A grade, 52c per lb; raw milk $2.30 per cwt.

Poultry—Hens, 4½ lbs and up, 23@24c per lb; do over 3½ and under 4½ lbs. 17@18c per lb; springs, 2 lbs and heavier, 29c per lb; do 1 to 2 lbs. 28c per lb; hens, 3 to 3½ lbs 15@16c per lb; do dry picked, 2c above live; fryers, roasters, 2½ lbs and up, 20c per lb; capons, live, fat, 6 to 10 lbs, 30c per lb; do dry picked, fancy dressed, 34c per lb; old roosters, 12c per lb.

Beef—Steers fancy, 7c per lb; cows, fat, 5c per lb.

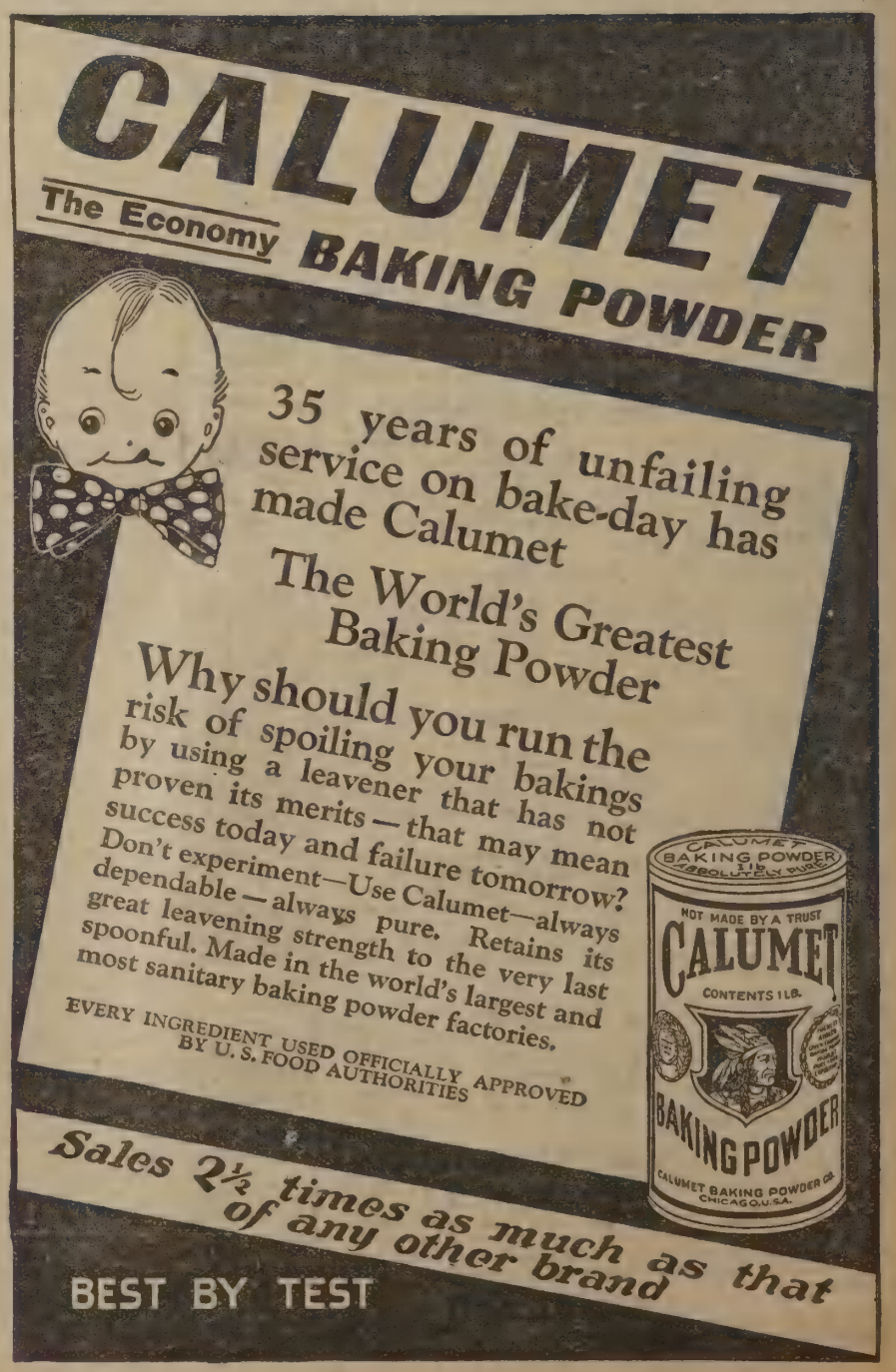
Mutton—Fat, 7c per lb; spring lambs, fat, 15c per lb.

Hogs—Good block, 90 to 150 lbs, 10@11c per lb; do heavy, 5@10c per lb.

Veal—Fat, fancy, 75 to 130 lbs, 14@15c per lb; do heavy, 150 to 200 lbs, 10@11c per lb; medium, 10@12c per lb.

Range of Live Stock Prices for Week Ending November 28

CATTLE.	Chicago.	Spokane.	Portland.	N. Salt Lake.
and prime heavy steers (1100 lb. up)	10.75@12.60			
heavy steers	9.35@11.35			
im heavy steers	7.60@10.15			
ion heavy steers	5.50@ 8.00			
and prime light steers (1100 lb. down)	11.00@12.60			
Good light steers	9.85@11.35			
Medium light steers	7.60@10.15	6.75@ 7.25	6.75@ 7.50	6.25@ 7.30
Common light steers	5.25@ 8.00	4.25@ 6.75	4.50@ 6.75	4.00@ 6.50
Common to choice butcher heifers	4.00@10.75	3.50@ 4.75	3.25@ 5.25	2.85@ 4.40
Common to choice butcher cows	3.00@ 8.00	3.00@ 4.00		2.00@ 4.25
Bologna and beef bulls	2.65@ 6.50	3.25@ 4.00	3.00@ 4.00	2.00@ 3.50
Canners and cutters, cows and heifers	2.15@ 3.50	1.50@ 2.25	1.50@ 3.25	1.00@ 2.00
Canner steers	3.25@ 5.50			
Medium to choice light veals	6.50@ 8.75	8.00@ 9.00	9.50@10.00	6.00@ 7.25
Common to choice heavy veals	4.50@ 6.75	6.50@ 8.00	4.50@ 6.50	4.00@ 6.00
Common to choice feeders (750 lb. up)	5.25@ 7.50	4.00@ 5.25	5.00@ 5.50	
Common to choice feeders (750 lb. down)	4.35@ 7.50			
Common to choice stocker cows and heifers	2.00@ 5.00			
HOGS.				
Top of market	7.50	7.50	7.65	7.00
Bulk of sales	6.50@ 7.20			
Heavy (250 lb. up)	6.60@ 7.40	6.25@ 7.35	6.00@ 6.50	5.50@ 6.75
Medium (200-250 lb.)	6.55@ 7.40	7.00@ 7.50	6.50@ 7.25	3.50@ 6.75
Light (150-200 lb.)	6.25@ 7.10	6.35@ 7.50	7.25@ 7.65	6.40@ 7.10
Light lights (130-150 lb.)	5.40@ 6.85	6.00@ 7.50		
Smooth packing sows (250 lb. up)	6.30@ 6.90	5.00@ 6.50	5.00@ 6.50	5.50@ 6.00
Rough packing sows (200 lb. up)	6.00@ 6.60	4.25@ 5.00	4.00@ 5.00	
Medium to choice pigs (130 lb. down)	4.50@ 6.50	6.50@ 6.75	6.25@ 7.00	
Stock pigs		6.00@ 6.25	6.00@ 6.75	6.00@ 7.00
SHEEP AND LAMBS.				
Medium to prime lambs (84 lb. down)	10.25@13.35	8.50@ 9.75	10.00@11.25	10.00@11.00
Culls and common lambs	8.50@11.25		7.50@10.00	
Medium to prime yearling wethers	7.75@11.25	6.50@ 7.50	6.00@ 9.00	6.50@ 7.75
Medium to prime wethers	5.00@ 9.50	5.50@ 6.50	5.50@ 7.50	4.00@ 5.50
Common to choice ewes	4.00@ 7.25	3.00@ 5.50	3.50@ 6.50	
Culls and canner ewes	1.25@ 4.00			
Feeder lambs	11.00@12.50			10.40@11.00



A nice little letter has been received from eastern Washington from Dorothy Baldwin, who lives in Spokane county. Dorothy says she thinks The Junior Farmer is so nice and enjoys every bit of it. We are always pleased to hear the cousins say this. Aunt Nellie will look for another letter, Dorothy.

Birthday Greetings

THURSDAY, December 6—Myrtle Dick, 10 years old.

FRIDAY, December 7—Hazel Heimen, 11 years old.

SATURDAY, December 8—Glenna Dohrn; Mildred Ensley, 11 years old; Myrtle Hutsell, 10; Edna Johnson, 11.

SUNDAY, December 9—Doris Hale, 10 years old; Donald Naff, 10.

TUESDAY, December 11—Bertha Holmes, 9 years old.

WEDNESDAY, December 12—Bennie Kirkman, 9 years old.

BEDTIME STORIES

By THORNTON W. BURGESS.

JIMMY SENDS OUT INVITATIONS.

Watch your tongue and guard it well,
Lest things not so it chance to tell.

A tongue, you know, is very careless. It says a great many things just for the sake of saying them—things which get its owner into trouble. Take Peter Rabbit, for instance. When Peter boasted to Jimmy Skunk that Jumper the hare, who is Peter's cousin, is the greatest jumper of all the little people of the green forest and the green meadows, he spoke without first stopping to think. He really believed it was so, but he would have been better off if he hadn't stuck to it when Jimmy Skunk insisted that there were better jumpers than Jumper the hare. But he stuck to it, and now he had to prove it by getting his cousin Jumper to enter a jumping match that very night. For the life of him Peter couldn't think of any who could jump further than Jumper, but still he felt uneasy as he started out to hunt for his cousin.

Meanwhile Jimmy Skunk was inviting everybody to a grand jumping match that evening. It was to be held by the tall pine on the edge of the green forest as soon as jolly, round Mr. Sun had gone to bed behind the purple hills. Jimmy got

"Who is going to jump against me?" asked Jumper.

the merry little breezes, the children of Old Mother West Wind, to take his invitation around for him, and he charged them to overlook no one. Everybody was to be invited. He himself had something else to do. He had to get the two jumpers he had in mind to promise to be there and jump against Jumper the hare.

The merry little breezes danced away across the green meadows and through the old orchard and the green forest, telling all the little people who lived there to be sure to be on hand by the tall pine that night to see the great jumping match. Of course everybody was greatly interested as soon as they received the invitation and at once began to ask questions. But these the merry little breezes couldn't answer, and so they just laughed and giggled and hurried on. And of course this just made people more curious than ever and all who were not afraid to be out after dark made up their minds that they would certainly be on hand for that jumping match.

Now, Peter didn't know that Jimmy Skunk was going to send out those invitations until the merry little breezes brought him one, and when he got it he was quite upset. He knew then for sure that Jimmy Skunk was positive that he would have some one there who could jump farther than could Jumper the hare, otherwise he never in the world would have sent out invitations. And Peter knew, too, just how foolish he would appear in the eyes of the other little people if Jumper should be beaten. They would laugh at him for having boasted so without stopping to think.

But there was no help for it now. So he hunted up his cousin Jumper and asked him if he would jump that night.

"Who is going to jump against me?" asked Jumper.

"I don't know," confessed Peter. "I said that you were the greatest jumper in the green forest or on the green meadows, and Jimmy Skunk said he knew some other jumpers who could beat you. Do you think there is any one who can?" he asked anxiously.

"Certainly," replied Jumper promptly. "I know at least two who can, and there may be more. However, they are both friends of mine, so I will be on hand. You see, I don't mind at all being beaten by them, and as long as it is all for fun I am perfectly willing to jump."

"You'll jump your very best, won't you?" begged Peter.

Jumper promised that he would, and with this Peter had to be contented, for Jumper wouldn't tell who the two friends were who could beat him jumping.

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Read the "Want Ad" page this week for good offers of all kinds.

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You can have these most luscious fruits in your yard and enjoy their luxury fresh and ripe from your own garden. The cost of a few quarts of fruit bought at the store will about equal the first cost of a tree. These choice fruits and hundreds of others can be obtained from our 1000-acre nursery. We pay the freight and guarantee satisfaction and safe arrival.

Scott Rainier Apple Winner Wilder Medal, 1922, the fruit world's highest honor. We consider the Scott Rainier the finest dessert apple (for eating raw) that has ever been produced. A thoroughly proven success—trees bear young and are heavy producers. 3 boxes from one 19-year old tree, and 800 boxes from 21 trees composing this orchard.

Red Gravenstein Apple Possesses all the good qualities of the old Gravenstein in flavor, size, shape and ripening period, to which is added a bright red color that greatly increases its attractiveness and market value. The genuine Washington Nursery Red Gravenstein is a sport from the Old Gravenstein, but comes absolutely true to type when propagated. A red apple has a decided selling advantage over others.

Wright's Red Rome Beauty An improved strain which is the same as the ordinary Rome Beauty in size and shape with the same characteristics of growth, appearance, hardiness, production, early bearing and regularity of crop. But it has a handsome red color, a finer texture, and stands up better in cold storage than the old Rome Beauty. Its bright color makes it a better seller.

Cory's Thornless Blackberry The vines have no thorns and yield large quantities of luscious fruit. The berries are very large, often measuring 3 and three-quarter inches in length, and grow in clusters, making very easy picking. The fact that the vines have absolutely no thorns makes the picking of the berries and the training of the vines much easier.

The Bing Cherry There are few more desirable fruits than cherries. The trees are strong, vigorous growers, with large, glossy leaves and open, spreading heads, making a fine shade. The Bing cherry is one of the leading commercial varieties of the West. Very large, blackish purple, very solid, flavor of the highest quality. The tree is hardy and productive. A fine shipping and market variety.

Standard Prune This is without doubt one of the best fresh shipping prunes ever grown. It is much larger than the Italian, fine flavor, firm flesh, large, beautiful fruit. Blooms with the Italian, ripens with the Tragedy. Is even more resistant to frost than Italian. A prune of such all-around merit that it should be planted everywhere for home use and for market.

J. H. Hale Peach The J. H. Hale is enormously productive, fruit very large—fully one-half larger than Elberta, globular in shape, a deep golden yellow overlaid with bright carmine. It has a smooth, thick skin, and firm, solid flesh that is tender, without grain or stringiness, and a most delicious peachy flavor. The J. H. Hale is practically free from fuzz, making it absolutely distinct in this respect.

Write Today for New Illustrated Catalog

WASHINGTON NURSERY CO.

BOX Y, TOPPENISH, WASHINGTON

Giving the Telephone Life

Wherever your thought goes your voice may go. You can talk across the continent as if face to face. Your telephone is the latch to open for you any door in the land.

There is the web of wires. The many switchboards. The maze of apparatus. The millions of telephones. All are parts of a country-wide mechanism for far-speaking. The equipment has cost over 2 billion dollars, but more than equipment is needed.

There must be the guardians of the wires to keep them vital with speech-carrying electrical currents. There must be those who watch the myriads of tiny switchboard lights and answer your commands. There must be technicians of every sort to construct, repair and operate.

A quarter of a million men and women are united to give nation-wide telephone service. With their brains and hands they make the Bell System live.

"BELL SYSTEM"

AMERICAN TELEPHONE AND TELEGRAPH COMPANY
AND ASSOCIATED COMPANIES

One Policy, One System, Universal Service, and all directed toward Better Service

Potato Growers

Are Organized in Stevens County

Fourteen potato growers of Stevens county met recently at Chewelah and formed the Stevens County Potato Growers' association. The object of the association is educational with a view to improving the quality of both the seed and commercial stock of that county.

In order to become a member of the new association, a producer must satisfy the membership committee that he grows potatoes of a certain high standard and the committee's judgment must be backed up by a vote of four-fifths of the membership. By this provision it is hoped that the association will be one of real power in the county and not one which might become dominated by indifferent producers of potatoes.

Steps are already being taken looking toward the possibility of a Stevens county potato show next year just before the show and conference of the Northwest Potato Growers' association at Spokane. The chamber of commerce of Chewelah has gone on record as in favor of such show and has pledged its assistance in putting it on.

The organization meeting at Chewelah was attended by County Agent H. J. Plumb and George L. Zundel, field plant pathologist of the state college, both of whom assisted in the formation of the organization and discussed various features of potato production. A. E. Skidmore of Colville was elected president; William Kline, Addy, vice president, and Otto Meyer, Chewelah, secretary. The other charter members of the organization are H. O. Hansen, F. E. Franklin, R. W. Petts and E. A. Harris, all of Colville; Harvey Harris and W. L. Biggar, both of Rice; R. G. Newell and Olaf Rosen, both of Addy; Chris Hageman, Chewelah; F. C. Bradley, Clayton, and Martin W. Lee, Deer Park.

All of the members of the association are producers of quality potatoes and are endeavoring to improve their product year after year. Mr. Skidmore and Mr. Kline are the original producers of certified seed in Stevens county. It is expected that several members of the association will be producing seed for certification next year. Several are producing commercial and seed crops this year from certified seed, but have not applied for certification of their own product.

"Opinion" Awards Announced

The following are the winners in THE FARMER'S recent "opinion" contest:

First prize, Mrs. Elmer Dewald, Sultan, Wash., $5.

Second prize, Carl J. Menz, Ferndale, Wash., $3.

Third prize, Ruth R. Randall, Prescott, Wash., $2.

Widespread interest was displayed by our readers in THE FARMER'S offer to pay $10 in cash for 100-word opinions as to which advertisements in our October issues were most appealing. After carefully considering all entries the entries of those named above were finally decided as being the best.

It must be stated, however, in justice to the many who sent in opinions, that the task of determining the winners was not an easy one, as the contributions were of high order.

The judges are confident that all those who submitted opinions will feel amply repaid for the time spent in considering the various advertisements, since their letters show that our readers regard the advertising columns as one of the most interesting and instructive features of the paper, with a multitude of helpful suggestions for making both farm and home more efficient. The consensus of opinion seems to be that the reader who pays attention to and who acts upon the advertisements in this publication is helped along the road to success.

Inter-Community Banquet

The importance of the potato to the farming interests of the Yakima valley was emphasized at an intercommunity banquet held recently at Toppenish. There were more than 300 people present who represented practically every community in the valley. The banquet was planned by the Toppenish Commercial club.

Baked potatoes were the prominent part of the menu and during the meal one of the local boys recited an original poem. The speakers took for their talks some phase of cooperation and the advisability of growing sugar beets was emphasized.

Talks were made by the following men: Frederick Benz of Toppenish, J. C. Jenkins of Spokane, O. A. Fechter of Yakima, H. C. Lucas of Yakima, Chapin D. Foster of Grandview, Roy Graham of Toppenish on "Reservation Problems and Crop Diversification"; S. I. Anthon of Yakima on "The Values of Publicity"; Dr. J. S. Kloeber of Selah on "Fruit Marketing," and H. B. Miller.

IMPROVED FARM LAND.

In 1920 37.5 per cent of the area of Montana was in farm lands, but only 11.8 per cent of the state was improved farm land; 31 per cent of Washington's area was in farms and 16.7 per cent improved; 22.1 per cent of Oregon, with but 8 per cent of the state improved land, and 15.7 per cent of Idaho in farms, 8.5 per cent improved.

BIG FREE CHART

Tells how to raise better calves for less money, how to proceed each day from birth to maturity. Handsomely lithographed in six colors.

PROFIT BY THESE VALUABLE TESTED FEEDING DIRECTIONS

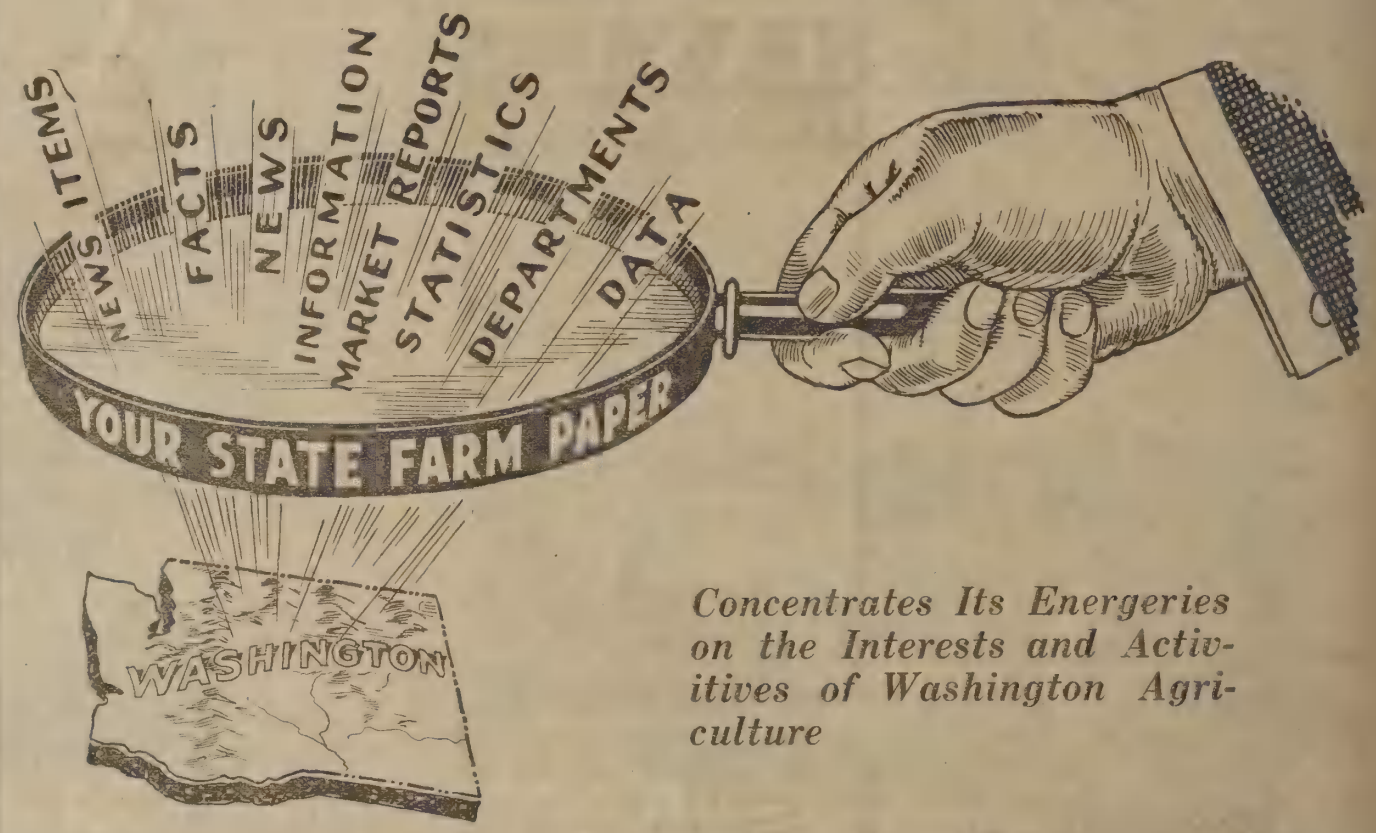
Praised by leading breeders, Agricultural Colleges, etc. Compiled by experts of world's oldest feed manufacturers. Send your name today. Copy sent postpaid. No cost, no obligation.

BLATCHFORD CALF MEAL CO.
Dept. C14 Waukegan, Illinois.

Distributors.
SPOKANE SEED CO. Spokane, Wash.
PORTLAND SEED CO.
Portland, Ore.

When you write to advertisers be sure to state that you saw their ad-

The Washington Farmer Focuses Its Attention on the State in Which You Live



Concentrates Its Energeries on the Interests and Activitives of Washington Agriculture

The state of Washington is big and broad and busy, with a myriad interests and a multitude of activities which belong to this state alone.

The Washington Farmer deals with these interests and activities thoroughly and accurately, leaving other publications to handle the problems of other districts. It brings you the experiences of those who are facing—not the conditions of California or the middle west—but exactly the same conditions and perplexities which confront you. It posts you regarding the events which happen near you. It tells you about the seeds you plant, the soils you cultivate, the markets you sell your produce in.

More than that, it is fighting for the interests of agriculture in this state alone. It is a mouthpiece for the farmers, fruit growers, stock breeders and dairymen of this state. It keeps you informed as to the happenings, the personalities and the public questions in which you are most absorbed. In a word, it is YOUR paper.

By the cooperation of our friends throughout the state, the subscription price has been kept at a rock-bottom level of $1 for 5 years. Cooperation means the elimination of the subscription agent. It means sending in your renewal order at least 60 days in advance of the expiration date on the address label of your own paper, and including your neighbor's order with your own.

Cooperate with us this week by sending the attached coupon.

$1.00 for Five Years
260 Issues

50c for 3 Years
25c for 1 Year

IN CANADA ADD ONE CENT A COPY FOR EXTRA POSTAGE.

THE WASHINGTON FARMER, REVIEW BLDG., SPOKANE, WN.

I enclose herewith $..... for your Cooperative Plan in sending new and renewal subscriptions for a ..... year

I enclose herewith $..... subscription to

The Washington Farmer

Name .....

Postoffice .....

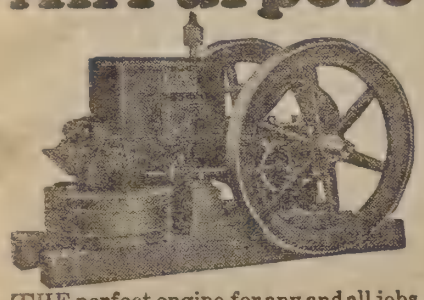
R. F. D. .....

Box .....

State .....

If your subscription is already paid in advance, it will be extended from this date to which it is paid Dec. 6, 1923.

All Purpose



THE perfect engine for any and all jobs with guaranteed steady performance in all temperatures and climates—the WITTE Throttling-Governor ENGINE is the standard of economical, dependable power.

Burns KEROSENE, GASOLINE, DISTILLATE or OILS

Simple, trouble-proof and costs less than 2 cents an hour to operate. Guaranteed for a life-time, and equipped with the famous WICO Magneto, the most perfect system of high tension ignition known. Over 100,000 WITTE ENGINES are working in all parts of the world.

All sizes, 2 to 25 Horse-Power

Ask Your Dealer About the Witte Engine. If he can't supply you write our nearest office for full information.

WITTE ENGINE WORKS
(Founded in 1870)
Kansas City San Francisco Pittsburgh

Witte Engines

News for Breeders

BROWN SWISS MEN ENCOURAGED.

Brown Swiss breeders of the northwest, who presented at the Pacific International this fall an exhibit 50 per cent larger and of considerably better quality than last year's, felt so much encouraged at the development of the breed in this territory and at the interest shown in the cattle exhibited that they organized a western association of Brown Swiss breeders, to cooperate with the national association on all matters of importance to the "Switzer."

Three of this fall's exhibitors were at the show last year, T. Brugger & Son of Gresham, Ore., John Boeckli of Linnton, Ore., and W. O. Bohart of Bozeman, Mont., each bringing about the same sized exhibit. A. Grossen of Linnton, Ore., and Alfred Yaun of Boring, Ore., each exhibited a bull, and Ed Meyersick of La Grande, who has been breeding for about nine years and who exhibited at Salem and at Yakima some years ago, appeared at the Pacific International for the first time with entries in nine classes, including the herd bull he recently bought from Brugger & Sons. His old bull (they traded last summer) was shown by Brugger.

H. M. Hillis of Pawnee farm, Snohomish, Wash., is a new breeder and a new exhibitor. Only three months before the show he bought a herd on Bainbridge island, near Seattle, that originally came from Wisconsin—15 head all told, and he had seven of them at Portland. Unless he found the stock at prices to suit at the exposition he expected to go east in December and acquire some more.

It will be four years next March since Joe Schumacher of Stayton, Ore., bought his first purebred heifers from Brugger & Son, but he showed for the first time at the state fair this fall. In the exhibit were five calves winning two seconds, two firsts and a junior championship. He appeared at Portland with 11 head out of 14 that he now owns, five of them youngsters by Queen's Baby, the 3-year-old bull that he obtained from R. H. Rehder of Waterloo, Iowa. All five were in the money, junior bull calves by Queen's Baby winning first and second, junior yearling heifer first, senior heifer calf third and junior heifer calf seventh. Schumacher's other winnings included first on the bull, two seconds, a third, a fourth and a fifth in individual classes, besides several awards on groups.

HEADS BROWN SWISS HERD.

A new herd of Brown Swiss have been added to a list of dairy herds in Snohomish county. H. M. Hillis of Snohomish is starting out with 13 head, which he recently brought from Victoria, B. C. The herd sire. Velva's St. Patrick, a 3-year-old, whose sire and dam were both imported, was purchased from a breeder on

Bainbridge island. Mr. Hillis believes that this breed will do well in this part of the country, since there are as yet no such herds established in this part of the state. They are good producers of both milk and butterfat and are a sturdy breed that can maintain a good flow of milk and yet stand severe weather if necessary. The accompanying illustration is of the herd bull.

CLALLAM CALF A PRIZE WINNER.

E. A. Schmuck, president of the Clallam County Cow Testing association, has received a letter from a calf club boy in Montana saying that the calf he purchased from Mr. Schmuck last spring won first prize in the show ring. The boy asked for further information about the calf so that a history of his year's work could be written.

DEVELOPED AMAZINGLY.

The first Zeppelin rose in 1900; Wilbur Wright in 1908 remained in the air in an airplane for an hour and 54 minutes. It is a long way, in a short time, from that to the New York to San Diego record, made in 27 hours in 1923.

We Buy and Sell
Grade and Pure Bred Dairy Cattle.
We can save you money whether you wish to buy or sell. One or a carload.
Graham Livestock Co.
E2605 Broadway, Spokane, Wash.
NEAR CARSTENS' PACKING PLANT.

Blackleg Aggressin
NATURAL GERM-FREE VACCINE
OR
Blackleg Filtrate
CULTURAL GERM-FREE VACCINE
Scientifically Prepared and Tested
Consult your veterinarian or druggist.
Write for booklet on blackleg prevention.
Animal Industry Department
—OF—
PARKE, DAVIS & CO.,
DETROIT, MICH.

HAYES
Fruit Fog Sprayers
Mechanically perfected — guarantee to develop 300 pounds pressure year in, year out, and so simple in construction that there is nothing to get out of order. Every part easily accessible. Pumps are corrosion-proof.
PAY NO MORE THAN YOU WANT.
You can pay whatever you want for Hay's Sprayers. We quote them in sizes ranging from 3½ to 16 gals. per minute, with or without trucks, engines or special equipment. Hayes Power Sprayers vary in capacity only. The smallest maintains same pressure as largest size.
SEND FOR CATALOG
showing sprayers for every need.
Fairbanks-Morse & Co., Western Distributors, Offices and dealers in all principal cities.
HAYES PUMP & PLANTER CO. Dept. 312 Galva, Ill.

FREE
— this big book, accurately describing human diseases and those of horses, cattle, sheep, swine, dogs, cats, poultry and birds. Symptoms and treatment explained in detail, in plain, everyday language. Like a doctor in your family. Also contains slashed, rock-bottom, wholesale-to-consumer prices on drugs, chemicals, toilet goods, rubber goods, antitoxins, veterinary instruments, sundries, etc. Send for your copy today—it's FREE, POSTPAID.
Hospital Products Co.
Dept. H 1111-1161 Roosevelt Road, CHICAGO

Read the "Want Ad" page this week for good offers of all kinds.

Breeders' Dept.

Milking Shorthorn Bull
Dropped June, 1922. This is a young bull of much quality, sired by Foothills Corporal, grand champion Pacific International stock show, 1919, of richest milking strain, from Corporal Clay, dam Glenrose Pearl. The dam is a good producer.
$125 for quick sale.
KIRTLAND FARM, Central Point, Ore.

Milking Shorthorns
Special offer until January 1, 1924.
Bull calves up to six weeks old, also two or three yearling bulls, ready for service. Good reds and roans. These are from easy fleshing as well as profitable milking stock.
Satisfaction guaranteed.
NORTHWOOD FARMS, Redmond, Wash.

Kamaduk Herd Milking Shorthorns offer foundation cows up to 10,663 lbs. milk; also richly bred bull calves. Come and inspect this herd; it's federal accredited.
J. E. DANIELS, Murphy, Ore.

Guernsey Bull calf, richly bred, well marked grade, ⅞ Guernsey, ⅛ Jersey; sired by Topsy's Robin Hood of Orchard Hill; carries over 40 per cent blood Sammish Topsy B. F. 831.
WOODSTOCK FARM, R. 2. Renton, Wash.

SPOKANE WASH.
FIRE
On October 31, one of our large stock barns burned. We will be unable to complete building a new barn before spring and have about 40 head of registered Jerseys for which we have no stable room.
We Are Offering
For Immediate Sale and Delivery
40 Head of Jerseys
CONSISTING OF
COWS HEAVY WITH CALF, HEIFERS,
HEIFER CALVES AND A FEW BULLS
AT
Special Reduced Prices
FOR THE NEXT 30 DAYS
Write for Information or Better Still—
Come Select What You Want
WAIKIKI FARM Wm. Auld, Mgr.

Dispersion Sale of Jersey Cattle
At Nampa Sales Yards, Nampa, Idaho, Saturday, December 8, 1923.
Beginning promptly at 1 o'clock p. m.,
The entire herd of C. L. Schneider will be sold without reserve. The lot consists of eight head of developed cows, the herd bull, six head of youg heifers and three young bulls. The cows are:
Alla Lina Cooper, 505404, calved March 15, 1916, tests 4 per cent.
Beautiful Alla Bell, 494337, calved June 27, 1917, tests 5.8 per cent.
Pioneer Lad's Lina, 505405, calved June 12, 1920, tests 6.2 per cent.
Pioneer Lad's Alla, 501388, calved May 24, 1920, tests 4.2 per cent.
Bull—Raleigh of Idaho, 196972, calved November 24, 1920. Four bred heifers to freshen in March, July and August, 1924. This is an extra well-bred lot of Jerseys from the best blood lines attainable.
Terms of Sale—A credit of 10 months will be given on approved notes bearing 10 per cent interest, after 25 per cent of all purchases have been paid in cash, balance in 10 equal monthly installments. Five per cent discount for cash on all except first 25 per cent. Bring your bank references.
MRS. C. L. SCHNEIDER, Owner.
Dickens & Wilson, Auctioneers. G. Harvey Moore, Clerk.

FOR SALE
A choice lot of Holstein calves, both sexes, finest Hollywood breeding, excellent individuals. Several are out of yearly record dams. Have no room for them and they must be sold. Breeding and individuality considered, they are the very best bargain on the market. Write for prices and descriptions. Excellent heifers for calf clubs, fine bulls for bull associations.
A CALF OR A CARLOAD.
HOLLYWOOD FARM, Hollywood, Wash.

Fort Steilacoom Holstein Herd
Where the high records are made. Several exceptionally well bred bulls for sale at most reasonable prices, sired by Chimacum King Korndyke Sadie Vale or Carnation King Matador Mutual, son of a world record senior yearling.
WESTERN STATE HOSPITAL,
Ft. Steilacoom, Washington.

Linn County Holsteins
Cows, heifers, bulls and calves.
LINN CO. HOLSTEIN ASSOCIATION.
GEO. A. McCART, Sec. Harrisburg, Ore.

Hewitt Farms Jerseys
Bulls ready for service of Rinda Lad and St. Mawes Lad breeding, from register of merit dams.
G. G. HEWITT, Rt. 1, Independence, Ore.

Pacific Farm Jerseys
Bred for type and production. Rinda Lad and St. Mawes Lad blood lines.
I. NORDSTROM, Bandon, Ore.

Maple Ridge Jersey Farm
offers strongly bred St. Mawes bull calf; bred for production and type. Reasonable.
J. C. BROWN & SONS, Shedd, Ore.

Graymere Jersey Heifers Bred and open, from 6 to 18 months old. Myra's Missionary, Plymouth Lad and Oxford Majesty breeding.
WARREN GRAY, Box T, Marion, Ore.

Sunny Hill Brown Swiss
Federal accredited herd. Choice young stock for sale.
JOHN BOECKLI, Linnton, Ore.

Mistland Brown Swiss
Bulls and heifers of good breeding and individuality at reasonable prices.
JOE SCHUMACHER, Stayton, Ore.

When answering ads, please don't fail to mention this paper.

Royal Ranch Durocs
We have the best boars we ever raised for sale at less money than you ever bought them for. The type and breeding you want, including the 1923 junior champion of Idaho. The strongest Duroc show of the northwest. 26 herds competing. Write us your needs.
ROY SHUTWELL, R. F. D. NO. 3, Boise, Ida.

Duroc Jersey Boars
By Gem Sensation Leader, champion at Idaho state futurity.
BEVINGTON BROS., Gooding, Idaho.

Welch's Hampshire Swine
Bred gilts, $40. Service boars, $40. Weaned pigs, $20. All from blue ribbon sire.
F. A. WELCH, Route 4, Gresham, Ore.

Pioneer Herd Hampshire Swine
10 head choice boars; 10 head of sows and gilts, backed by show records.
J. M. FRUITTS, Cambridge, Idaho

The Royal Designer Herd
of big type Poland Chinas of best blood lines. We offer tried sows and March gilts bred to our first prize junior boar at Spokane Interstate fair. Also Sept. pigs. Write for prices. Satisfaction guaranteed.
JOHN F. LYNN & SON, Peach, Wash.

For Sale--O. I. C. Swine
Large, smooth fellows. Price is right and the pigs are right. Write for prices.
JAMES STAFFORD, Sumner, Wash.

Berkshires Improve your stock. Get the breeding stock now, pay when you raise the pork. Blood lines unsurpassed. Young stock, both sexes. Write for sale plan. Cedar Canyon Farms.
F. M. CURTISS, Prop., Fruitland, Wash.

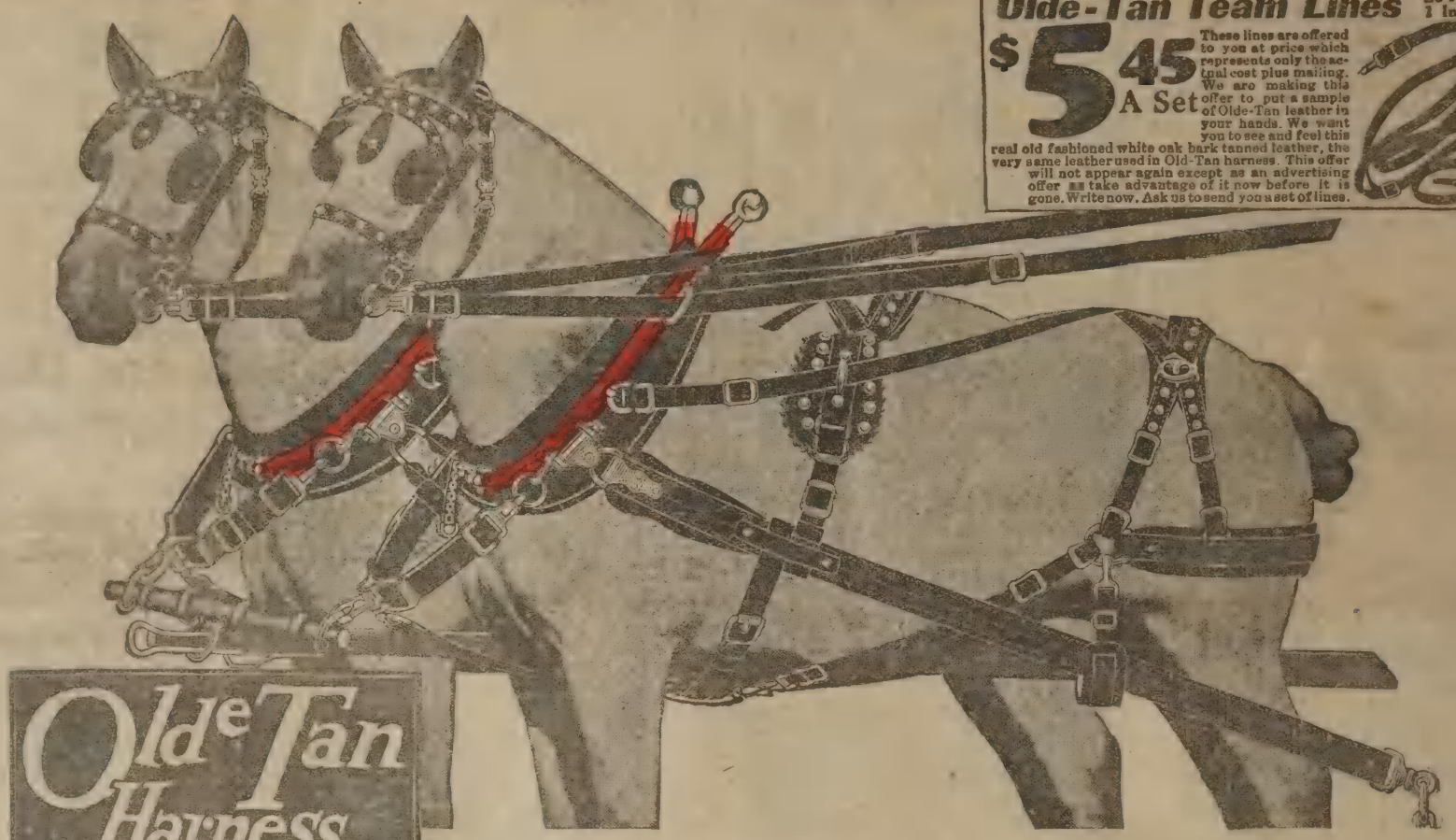
Read the "Want Ad" page this week for good offers of all kinds.

COMP G O
EXPERIMENT STATION
URBANA ILL

Olde-Tan Team Lines — 20 Feet Long, 1 Inch Wide

$5.45 A Set

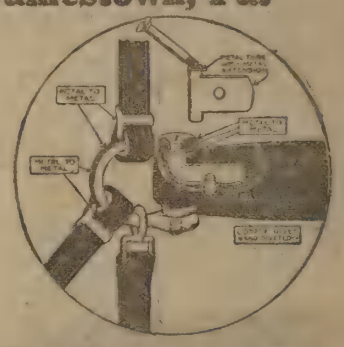
These lines are offered to you at price which represents only the actual cost plus mailing. We are making this offer to put a sample of Olde-Tan leather in your hands. We want you to see and feel this real old fashioned white oak bark tanned leather, the very same leather used in Old-Tan harness. This offer will not appear again except as an advertising offer ■■ take advantage of it now before it is gone. Write now. Ask us to send you a set of lines.



"I Like Metal-to-Metal Better Every Day"

—Fred K. Bates, Jamestown, Pa.

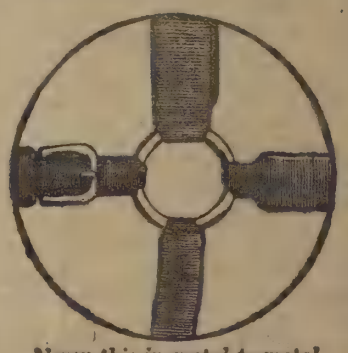
So the letters roll in! Hundreds of them! Metal-to-Metal harness construction, first made by Olde-Tan, has made a great hit. The first real advance in harness-making in half a century. A simple, practical, common-sense advance. No changed harness design. The same sort of a harness you have always had but with the best leather in the world protected by metal. Metal rubbing against metal instead of metal rubbing against leather—that's the idea. Square strap surfaces instead of round rings. Nothing to wear out because there is no place to wear it. Besides Metal-to-Metal construction there is 70 years of tanning skill behind Olde-Tan leather. Harness buyers are amazed at its superb quality.



Metal-to-Metal construction. Metal bushing. Leather held tight without play or friction. Note special riveted metal extension in breeching.

Bid "good-bye" to mending, patching and wearing out of harness. There is many a harness made in the Olde-Tan factory in good shape today that has given service for 25 years. Send the coupon for free harness book.

$7.50 DOWN Puts it on Your Horses!



Never this in metal-to-metal construction. All pull and strain and wear in ■■ metal.

It costs only $7.50 to put Olde-Tan Harness on your horses. If you don't like it, you can send it back. We have made it easy to get an Olde-Tan Metal-to-Metal Harness because we want you to see what Metal-to-Metal construction really is. Be sure to know what Metal-to-Metal Harness is before you buy another set.

BABSON BROS.

19th St. & Marshall Blvd., Dept. 26-89, Chicago

Please send me free your Olde-Tan Harness book and all about your $7.50 down and easy monthly payment offer on Olde-Tan Harness.

I am / I am not } enclosing $5.45 for lines.

My Name.....

Address.....

.....

Send Coupon

For FREE BOOK

Mail this coupon today. Get the full story of Metal-to-Metal construction and the quickest adjustable harness ever offered.

BABSON BROS. 19th Street & Marshall Boulevard Dept. 26-89 CHICAGO, ILL.

THE WASHINGTON FARMER
ESTABLISHED 1894
SPOKANE. SEATTLE.

President Coolidge Addresses Congress

Farm Problems Are Stressed; Tax Reduction Declared Imperative; Big Program Outlined in First Message

President Coolidge delivered his annual message to congress last Thursday. For more than an hour, calmly and in terse phrases the executive addressed a joint session of the house and senate. He frankly informed congress and the country of his position on all of the great problems confronting the nation.

The president prefaced his message with a tribute to President Harding and was given an ovation as he entered and left the chamber and was repeatedly applauded during his address.

Mrs. Coolidge heard the president's address from the front row of the executive gallery.

For the first time in history the voice of a president of the United States delivering his message to congress in Washington was heard on the sidewalks of New York. Clearly and distinctly it came without a break from beginning to end. Thousands grouped on street corners around "loud speakers" heard it as plainly as if they stood within earshot of the capitol.

In a special message delivered later the president dwelt upon the importance of tax reductions and took a firm stand against the bonus for able-bodied ex-service men. The president, however, said the nation should go on with generous care for the disabled men, upon whom $2,000,000,000 has thus far been expended and an additional $500,000,000 is now being spent.

Regarding the league of nations the president said:

"We attend to our own affairs, conserve our own strength, and protect the interests of our own citizens; but we recognize thoroughly our obligation to help others, reserving to the decision of our own judgment the time, the place and the method. We realize the common bond of humanity. We know the inescapable law of service."

The current debt and interest due from foreign governments, exclusive of the British debt of $4,600,000,000, is about $7,200,000,000. "I do not favor the cancellation of the debt, but I see no objection to adjusting it in accordance with the principle adopted for the British debt. The foreign service of our government needs to be reorganized and improved."

Other extracts from the president's message follow:

Whenever there appear works meet for repentance our country ought to be the first to go to the economic and moral rescue of Russia.

I especially commend a decrease on earned incomes, and further abolition of admission, message and nuisance taxes. The amusement and educational value of moving pictures ought not to be taxed. Diminishing charges against moderate incomes from investment will afford immense relief, while a revision of the surtaxes will not only provide additional money for capital investment, thus stimulating industry and employing more labor, but will not greatly reduce the revenue from that source, and may in the future actually increase it.

Being opposed to war taxes in time of peace, I am not in favor of excess-profits taxes.

Another reform which is urgent in our fiscal system is the abolition of the right to issue tax-exempt securities. The existing system not only permits a large amount of the wealth of the nation to escape its just burden but acts as a continual stimulant to municipal extravagance. The time has come to resume in a moderate way the opening of our intracostal waterways.

It has been erroneously assumed that the transportation act undertakes to guarantee railroad earnings. The law requires that rates should be just and reasonable. That has always been the rule under which rates have been fixed. To make a rate that does not yield a fair return results in confiscation, and confiscatory rates are, of course, unconstitutional. Unless the government adheres to the rule of making a rate that will yield a fair return, it must abandon rate making altogether.

The prohibition amendment to the constitution requires the congress and the president to provide adequate laws to prevent its violation. It is my duty to enforce such laws. For that purpose a treaty is being negotiated with Great Britain with respect to the right of search of hovering vessels. To prevent smuggling, the coast guard should be greatly strengthened, and a supply of swift power boats should be provided.

For several years we have been decreasing the personnel of the army and navy and reducing their power to the danger point. Further reductions should not be made.

For purposes of national uniformity we ought to provide, by constitutional amendment and appropriate legislation, for a limitation of child labor, and in all cases under the exclusive jurisdiction of the federal government a minimum wage law for women, which would undoubtedly find sufficient power of enforcement in the influence of public opinion.

America must be kept American. For this purpose it is necessary to continue a policy of restricted immigration.

No more important duty falls on the government of the United States than the adequate care of its veterans. Those suffering disabilities incurred in the service must have sufficient hospital relief and compensation. Their dependents must be supported. Rehabilitation and vocational training must be completed.

All of this service must be clean, must be prompt and effective, and it must be administered in a spirit of the broadest and deepest human sympathy. If investigation reveals any present defects of administration or need of legislation, orders will be given for the immediate correction of administration, and recommendations for legislation should be given the highest preference.

At present there are 9500 vacant beds in government hospitals. I recommend that all hospitals be authorized at once to receive and care for, without hospital pay, the veterans of all wars needing such care, whenever there are vacant beds, and that immediate steps be taken to enlarge and build new hospitals to serve all such cases.

Those who undertake the responsibility of management or employment in this industry do so with the full knowledge that the public interest is paramount, and that to fail through any motive of selfishness in its service is such a betrayal of duty as warrants uncompromising action by the government.

Aided by the sound principles adopted by the government the business of the country has had an extraordinary revival. Looked at as a whole, the nation is in the enjoyment of remarkable prosperity. Industry and commerce are thriving. For the most part agriculture is successful, 11 staples having risen in value from about $5,300,000,000 two years ago to about $7,000,000,000 for the current year.

But range cattle are still low in price, and some sections of the wheat area, notably Minnesota, North Dakota and on west, have many cases of actual distress. With his products not selling on a parity with the products of industry, every sound remedy that can be devised should be applied for the relief of the farmer. He represents a character, a type of citizenship and a public necessity that must be preserved and afforded every facility for regaining prosperity.

The distress is most acute among those wholly dependent upon one crop. Wheat acreage was greatly expanded and has not yet been sufficiently reduced. A large amount is raised for export, which has to meet the competition in the world market of large amounts raised on land much cheaper and much more productive.

No complicated scheme of relief, no plan for government fixing of prices, no resort to the public treasury will be of any permanent value in establishing agriculture. Simple and direct methods put into operation by the farmer himself are the only real sources for restoration.

Indirectly the farmer must be relieved by a reduction of national and local taxation. He must be assisted by the reorganization of the freight rate structure which could reduce charges on his production. To make this fully effective there ought to be railroad consolidations. Cheaper fertilizers must be provided.

He must have organization. His customer with whom he exchanges products of the farm for those of industry is organized, labor is organized, business is organized, and there is no way for agriculture to meet this unless it, too, is organized. The acreage of wheat is too large. Unless we can meet the world market at a profit, we must stop raising for export. Organization

Continued on page ...

Points in President's Message

Favors:

- Speedy tax reduction under so-called Mellon plan.
- Every practical aid to restore farm prosperity.
- Reorganization of freight rate structure.
- Strict enforcement of prohibition laws.
- Constitutional amendment against child labor.
- Continued restriction of immigration.
- Federal board to meet coal emergencies.
- Sale of the Muscle Shoals power project.
- Liberal terms of payment to reclamation settlers.
- Entering world court with reservations.
- Abolition of tax-exempt securities.

Opposes:

- The soldiers' bonus.
- Government price-fixing for farm crops.
- The excess profits tax.
- Repeal of the rate-making clause of the transportation act.
- Revision of the present tariff law.

How's This?---A Million Hens in One Cooperative Association---Page 3

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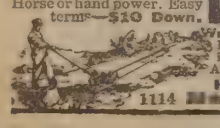

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A Million Washington Hens Are Cooperating

Their Owners, Also Cooperators, Tickle the Palates of Fastidious New Yorkers With Their Product

If all the hens that are laying eggs for the Washington Cooperative Egg and Poultry association should start out to celebrate the success of that organization they would form a parade extending from Vancouver, B. C., to Vancouver, Wash., and probably farther. There are more than a million of them and between January and October 20, 1923, they produced some 100,000,000 eggs, many of which found their way to the fastidious markets of New York to compete successfully with the best eggs from the other producing sections of the country.

The moral of Russell B. Conwell's well-known chautauqua lecture, "Acres of Diamonds," finds appropriate illustration in the development of the poultry industry of Washington. The humble hen has too often been overlooked as farmers of Washington have searched for something with which to increase their incomes. Six years ago there was no Washington Cooperative Egg and Poultry association. But the value of the hen and the necessity of the scientific marketing of her product were discovered, with the result that the million or more birds working for this accociation will produce a business this year of $4,000,000 or more for 2745 poultrymen who have either gone into the poultry business under the inspiration of the association or who were fighting their own individual battles six years ago.

While this association is a western Washington organization and while west Washington undoubtedly possesses advantages in egg production not enjoyed by every section of the state, the entire state is awakening to the importance of the hen as a factor in its agriculture. With practically the same marketing and membership contract as that which has proved so successful on the West Side, the Farmers' Union Egg and Poultry association, with headquarters at Spokane, last month opened for business with a sign-up of between 30,000 and 40,000 hens. Those in charge of the new association have been in close touch with those in charge of the older and larger one. In fact, they have been schooled in marketing methods by those who have gone through the fires of experience with the West Side association.

Quality Counts.

Those in charge of the latter realized from the start that high quality of produce must be secured and maintained and that the buying public must be told about it in ways that permitted no denial. Therefore, they put into operation a grading system, with a view to establishing standards that could be depended upon by the egg buyers. The New York trade thinks that an egg is no good unless its shell is absolutely white. Hence "Washington extras," the principal grade that is shipped to New York, must be pure white, perfectly clean, uniform in size and never weigh less than 22 ounces per dozen. As an actual fact, they average 24 ounces per dozen. The next grade, "Washington extra firsts," are the same as the above except that they may be packed and shipped in second-hand cases. "Washington firsts" may be of slightly mixed colors and include washed eggs, but they must be clean, uniform in size, and weigh the same as the two higher grades. The standard for the lower grades down to what is called "Washington undersized pullets" are less severe, but when a consumer buys a dozen eggs of any grade, high or low, he may depend upon getting just what he pays for.

The old-fashioned egg crate, with its brown filler made from straw, was a wonderful improvement over the egg basket or bucket which it displaced. But it isn't good enough for the Washington cooperatives. The brown filler tended to give the eggs an undesirable flavor if they were held in storage a while, so a filler made from spruce was developed and put into use. One of the latest tricks in the trade is the use of the blue filler. On the same principle that the use of bluing make clothes appear whiter, the use of the blue emphasizes the whiteness of Washington top-grade eggs, and, since the New York trade is willing to pay good money for egg whiteness, this is an important factor. H. E. Wills, sales manager of the association, is the inventor of the blue filler.

Since uniformity has much to do with the appearance of eggs in cases and cartons, the association puts every egg into the filler with the large end up. This not only gives uniformity of appearance, but exposes more white shell to be contrasted with the blue of the filler, and the egg trade likes it.

To avoid losses through breakage, a patent "flat" is now used between each layer of eggs in the case. This flat, made of papier mache, is molded in such way as to provide a small cup for the end of each egg to rest in, thus giving protection to each individual egg when the case is handled roughtly.

Permits no Fraud.

Eggs intended for the home trade are packed in cartons of one dozen each. Each carton is sealed in such a way that the consumer is assured of getting eggs of the grade indicated and not eggs of doubtful character, with which the cartons might otherwise be refilled by unscrupulous dealers. Colored labels are used to designate the four grades sold in this manner.

The association has developed a method of processing eggs for storage during the season of the year when the production exceeds the immediate demand. This processing consists of giving the eggs a bath of hot oil, the heat sterilizing the eggs to prevent the possibility of incubation starting and the oil filling up the pores of the shell to prevent evaporation and the absorption of unfavorable odors. Processing machines are used in the association plants at Lynden, Bellingham, Everett, Tacoma and Seattle.

(Continued on page ten.)

Herewith are the officers and managers of the Washington Cooperative Egg and Poultry association. From left to right, they are: Top row—Harry J. Beernink, manager of the Lynden plant; J. C. Lawrence, manager of the Winlock plant; S. D. Sanders, president and general manager of the association: George H. Brehm, manager of the canned egg department; D. S. McDole, general accounting manager. Lower row—H. L. McIntyre, general feed buyer; H. G. Smith, manager of the Bellingham plant; H. E. Wills, general sales manager; R. E. Darling, manager of the Tacoma plant; J. H. Guffey, manager of the Everett plant.

Here are typical scenes in and about the poultry association's plants. Top row, left to right—The Lynden plant; a scene in the feed warehouse and a scene in a candling for marketing in the shell, and packing eggs in cartons for room. Lower row—Breaking and testing eggs not suitable the home trade.

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Important Place in Farm Schemes

Sheep are not numerous in Clarke county—there are only about 1600 on the tax roll—but they have an important place in some farm schemes and a number of purebreds were lambed in the county this year.

Fortunately for an agricultural industry of this kind which is small by comparison with others in the county, there is a market right at home for its output, at the Vancouver Woolen mills, which claims the distinction of being the only commercial wool hosiery manufacturing plant on the Pacific coast.

Started as a branch of the Washougal Woolen mills to manufacture yarn for the Red Cross during the war, the mill today employs 75 people and does an annual business worth $200,000, which is expected to increase to $300,000 within the year. The business is affiliated with the Pendleton (Oregon) and Eureka (California) Woolen mills, and all goods are manufactured under the Pendleton or Evergreen brands. Shifting of the big logging operations of the country from the middle west and south to the Pacific northwest and consequent demand for lumbermen's heavy socks and other garments is said to be in large measure responsible for the prosperity enjoyed by this industry.

Consider Problems of Apple Industry

Looking forward from the Pacific foreign trade council held in Portland in mid-November to the conference which is proposed to be held in Yakima in January to consider problems confronting the apple industry of the northwest, H. M. Gilbert of Yakima, who presided over the fruit section of the Portland meet, is quoted as offering four concrete suggestions for action, which, in his opinion, would put the industry on a much better basis.

These include construction of storage at Wenatchee sufficient to overcome the necessity of heavy shipments early in the fall; rigid agreement between Yakima and Wenatchee shippers not to sell except f. o. b.; establishment of a bulk and basket trade; and replacement of one-third of the Jonathans in the two districts by other varieties.

Two of the biggest problems discussed at Portland, and problems toward the solution of which real progress was made, were those of securing uniform steamship bills of lading, which are now extremely intricate, and those of establishing uniform insurance protection. Indorsing the proposed Yakima conference, the Portland deliberators recommended special effort to regulate the apple exports. It is said that this year three times as many apples were shipped to England as last year. Investigation of the refrigeration service offered fruit shippers by steamship lines running to Europe, with particular reference to its efficiency, was called to the attention of the United States department of agriculture as a desirable field of activity for its men, and protest was made against the sale of the two government refrigerated ships which formerly plied between northwest ports and the eastern coast of South America. Resumption of this service was held to be extremely desirable.

Freer Use of Milk

"There are more ways than one to get children to drink more milk and it should be borne in mind that milk dishes will also add to the number of ways to serve milk," says Mary E. Sutherland, nutrition specialist of the state college extension service. "Whenever possible the mother should use the positive argument and encourage the children to drink it rather than try to coax them.

"If she says that all strong children like milk and mother likes it, too, because it contains more food than tea or coffee, and people drink it because they like it, she will get much further than if she merely takes the defensive coaxing attitude. If the parents don't like milk they can't expect their children to take to it readily.

"If a straw is used and the milk drunk from the bottle the children will take to it easier in many cases than where it is poured into a glass. The theory that milk will help the complexion as a rule will appeal to the girls, as they all want good, rosy complexions. There are also many interesting stories that show the value of milk and help the children to recognize the value of milk as a food rather than something they have to take. Give them a glass with a picture on the bottom and tell them that if they drink the milk they can see the picture. Above all keep the thought of the use of milk a happy one and there will not be such a tendency for the youngsters to refuse milk in any form.

"The farm home generally has plenty of milk for making such dishes as cottage cheese, custards and puddings in which milk is used. They are all very wholesome dishes and as a rule the children relish any of them and it is a splendid way to get them to take more milk products. Custards can be made in so many different ways and any of them can be cooked as cup custards. There is the plain custard, the cheese custard, the fruit custard, the coconut custard and the chocolate custard. Many other forms can be made up with but little effort.

"Milk can easily be mixed as milk shakes and it is a good plan to keep a few fruit sirups handy for flavoring such drinks. A metal shaker can be purchased for a small amount or any fruit jar or milk bottle can be used. The main thought to carry in mind is that milk is essential to rapid development of the child and he should have all he wants, and if he is inclined to dislike it he should have it put before him in some form that he likes."

From the Community Up

A state is made up of counties and counties are made up of communities. A state organization is dependent in large measure for its success upon the formation and success of county or district organizations of similar purpose and it is equally true that county or district organizations are dependent for their prosperity upon the prosperity of community bodies.

The Northwest Potato Growers' association is one of the young farmers' organizations of the Pacific Northwest. One of the handicaps under which it has labored is the lack of vigorous state, county and community potato growers' organizations to support it. It is interesting, therefore, to note the report of the recent organization of the producers of superior potatoes in Stevens county. One of the avowed objects of the new association is the holding of a county potato show just prior to the Northwest show next season. Naturally, the choicest potatoes in the county show will be sent to the Northwest show to compete for larger honors.

This is a movement worthy the consideration of growers of potatoes in every section of this and neighboring states. If every county that is ambitious to make a name for itself in potato production had an organization and a show of its own, competition at the Northwest show would become so keen that winning would be an honor exceedingly worth while. Now is an excellent time for growers to take steps toward uniting their efforts for their individual and their common good.

Washington State Gleanings

The Bell Lumber company has completed negotiations for erection of a large cedar products treating plant at Newport at a cost of $50,000 to $75,000.

ELBERTON TO SHIP PRUNES.

The Allen Evaporating company at Elberton has finished drying the largest amount of prunes it has ever handled. Grading, processing and boxing have begun. The first car will be sent to London, England.

URGES POISONING GOPHERS NOW.

The pocket gopher is the worst rodent to contend with in the Walla Walla valley, according to Lee K. Couch, junior biologist with headquarters at Olympia. Poisoning now will get 90 to 95 per cent of them, he says.

$500,000 PLANT PLANNED.

Land is being cleared adjoining the sawmill of the Walton Lumber company at Everett for a veneer plant costing about $500,000, and to employ two shifts of 120 men each. It will be operated by the Walton Veneer company.

FEWER CRANBERRY SHIPMENTS.

There is a temporary lull in the shipments of cranberries out of the Ilwaco district, according to J. H. McAfee, one of the leading growers of the Ilwaco peninsula. About two-thirds of the crop has moved up to date, the remainder being held for the later Christmas demand.

BEET GROWERS GET $60,000.

Checks for $60,000 were mailed out November 26 by the Utah-Idaho Sugar company of Yakima to growers of beets. This year but 10,000 tons of beets were furnished the factory, as against 28,000 last year, when growers received $229,320. They were paid $6 a ton this year, while last year they got $8.19 a ton. The company will share with growers any advance in the price of sugar.

ORGANIZE FARM BUREAU.

Columbia county has organized a farm bureau, with the following board of directors: Charles Broughton, Clyde Weatherford, Henry Delaney, J. L. Dumas, E. S. Hubbard, George Spalinger, E. M. King and Troy Lindley, says a report from Pomeroy. The board met afterward and elected Troy Lindley president, Charles Broughton secretary-treasurer, E. S. Hubbard campaign manager.

MUST FULFILL CONTRACT.

The Grays Harbor Dairymen's association has been given a decision against Canfield & Engen, a member firm that was sued to compel fulfillment of a contract to deliver milk to the "co-op." In general, the case was like others involving the liability of farmers joining cooperative associations to live up to their agreements, and the decision was based on one in a similar Pierce county case.

BUYS LAND TO REFOREST.

Acting under the authority granted by the last legislature the state forest board will purchase approximately 8000 acres of logged-off land in Clarke and Skamania counties at $1.25 an acre and will combine them with other lands in the same locality in a reforestation project. The lands adjoin the Columbia national forest.

The bonds, which bear an unusually low rate of interest under the state act, are not general obligation bonds against the state, but are secured by the lands themselves. The Northern Pacific Railroad company will buy them.

NORTH BEACH RECEIVES CUP.

The South Bend Commercial club cup was for the third consecutive time presented to the North Beach Cranberrian fair November 27.

At the meeting a drive was launched to put the annual Cranberrian fair on a permanent basis in a permanent building and to provide an adequate community building for the North Beach.

The formal presentation of the cup was made by Secretary H. J. Henderson of the commercial club. Mr. Henderson told something of the history of the club's gift of the cup in furtherance of community fairs.

WENATCHEE APPLE SHIPMENTS.

According to the latest figures at the Wenatchee Traffic association office 3394 cars of apples have been shipped during November up to the 29th. During the same period in 1922 shipments were 1977 and 4207 in 1921. Total apple shipments for the season, including November 29, are 12,223 cars, or 69 per cent of the crop. Last year shipments all this time were 6594 cars of 47 per cent. In 1921 76 per cent was moved by November 29. During the first 15 days of December it is estimated that an average of 85 cars a day will be rushed out provided the weather is favorable. If this is accomplished, total shipments up to December 15 will be nearly 14,000 cars, which will be by far the greatest volume that has ever been moved out of the district during any season to that date, and nearly as much as all of the 1922 shipments.

SHIP OUT YAKIMA APPLES.

Yakima's 1923 apple crop is 2000 cars greater than has been estimated, according to a check made on storage stocks December 1 by E. E. Samson for the Yakima Valley Traffic and Credit association. This brings the total to 15,500 cars, a new high record for production in the Yakima valley orchards. This takes no account of culls or apples sent to by-products plants, but includes shipment to date of 8030 cars and storage aggregating 7475 cars, making the total 15,505 cars, fully 3000 cars more of commercial apples than has ever been produced before in Yakima valley orchards.

Mr. Samson found there were 2,687,830 boxes in cold storage warehouses and 2,963,360 boxes in common storage. This is a total of 5,561,190 boxes or 7475 carloads. This is 2163 more cars than were in storage in the valley when a check was made on December 1, 1922. The 1922 commercial apple crop was only approximately 10,000 cars and the increase has been 50 per cent.

The monthly report of the Yakima Valley Traffic and Credit association issued December 1 shows the shipment of apples from July 1 to December 1 by months as follows: July, 37 cars; August, 55; September, 1212; October, 3782, and November, 2994 cars, making the total 8030.

Yakima's soft fruit crop is shown by the same report to have been 6960 cars, bringing the total of the year's fruit crop to 22,460 cars, being 7000 cars greater than the crop of 1919, which until this time held the record with a total production of 15,309 cars.

Future of Wheat Growing

Production May Settle Down Finally to Domestic Requirements

In seeking a solution of the problem of the American wheat growers, one must keep an eye upon Canadian production. The Canadian crop has become a big factor in the world's crop and prices. Twenty-three years ago Manitoba, Saskatchewan and Alberta produced only 23,000,000 bushels. The crop of these three provinces is estimated this year at about 425,000,000 bushels. Canada has become the second largest grower of wheat in the world, and the next few years may see her take rank as the chief wheat-growing country of the globe. The discovery and perfection of Marquis wheat, an achievement of the last 20 years, a fine, hard, milling wheat yielding bountifully on far northern lands, is the chief cause of the present disturbance of the wheat growing industry of the United States.

Another important factor that must be considered in connection with the future of American agriculture is the policy of foreign countries of stimulating home production by payment of a government bounty or other paternalistic methods. In Great Britain, for instance, Premier Baldwin has been campaigning on a pledge of payment of a bounty or premium of one pound sterling ($4.35 at the present exchange rate) on every acre of arable land cultivated in the British isles, with the sole condition that the farmer claiming the bounty shall pay his agricultural labor not less than 30 shillings a week (equivalent at present exchange to $6.53).

With Great Britain stimulating agriculture in that way, and British farmers having the advantage of cheap labor, and Canada increasing its wheat production tremendously from year to year, it is difficult to foresee the future of the wheat growing industry in the United States. It is not improbable that production will settle down within a few years to domestic requirements. It is not beyond the range of possibilities that it may be found necessary, in order to hold our production up to domestic requirements, to maintain a higher tariff against foreign wheat than the present rate of 30 cents a bushel.

Increase in Farm Tenancy

The number of farms operated by owners in the United States decreased slightly—.6 per cent—between 1910 and 1920, while the number operated by tenants increased 4.3 per cent, and the manager-operated farms 17.8 per cent.

The farms under managers being limited in number, while tenanted acreages are many, the statistics by acreage tell a different story.

The farm acreage operated by owners increased, during the decade, total farm area 6.4 per cent, improved acreage 1.4; the tenanted acreage increased 17 per cent, 12.5 per cent of which was improved; and the manager-operated acreage increased but .7 per cent for total farm area and 7.3 per cent for improved acreage.

During the period the increase in number of farms was only 1.4 per cent, though that in farm acreage was 8.8 and in improved acreage 5.1 per cent.

Truth Is Established

But a Lying Tongue Is But for a Moment, Says Solomon

The lip of truth shall be established forever; but a lying tongue is but for a moment.—Proverbs 12:19.

A lying tongue is a popular device. It often gets by for the moment and the moment may be measured in the terms of days or even years.

The lying tongue ever adopts the guise of truth and that very guise of truth gives it temporary currency.

The most successful lying tongue bases its efficacy on a modicum of truth. It manipulates the truth in a manner to serve its own lying purpose.

The lying tongue is a breeder of trouble. One lie calls for another. It takes up considerable time and uses up considerable vital energy to back up lies.

There are a lot of economics in truth. Truth is established for ever. You need not keep awake nights to back up the truth.

It may be easier, or more pleasant, to lie than to tell the truth, but the ease and pleasure of the lie fade away as time presses. The lie will not suffice for the morrow.

The truth can afford to be remembered. The day arrives when the lie would be forgotten.

The question of lying or telling the truth simmers down to a question of today or tomorrow.

FARM BUSINESS AND MARKETS OUTLOOK

VARIOUS fields of industry and trade are following different trends as they have been doing since last spring and opinions are divided as to their future course, but the optimists seem to have more ground to stand upon than the pessimists.

Volume of production in basic industries in October ranged slightly higher than in September when seasonal variations are taken into account. Reports of current earnings do not bear out the idea that wages are eating up all profits as has been frequently asserted. It may be that the moderate let-down in demand for labor compared with last spring has raised its efficiency. Such barometers of current distribution of goods as bank clearings and car loadings remain at a high level. The latter averaged over one million a week for six months, compared with only one month at that level in 1920, the previous record year, and the seasonal decline in the fall has arrived later than usual.

New developments in the last two weeks have been mostly in the favorable column of the business chronicle. Sentiment in industrial and financial centers was more confident than for several months. Foreign exchange markets have reflected improvement in the political situation abroad. Low prices in pig iron have attracted bargain hunters and the volume of buying assures activity until well along in the first quarter of the new year. October building permits were 25 per cent greater than in September, automobile sales have held up better than expected and automobile companies are planning for a good year in 1924. These prospects of activity in the coming months are already reflected in a moderate advance in building material prices after a four months' sag and in increased inquiries at steel centers.

Crude oil output has declined moderately, suggesting that the overproduction responsible for depression in that industry has reached its climax. Cotton consumers have not yet ceased to buy because of high prices for raw material and cotton mills are reopening faster than they are closing. The wool market has had a smart recovery and tanners are cutting down production to deal with a surplus of leather, although this action is adding temporarily to the depression in hides. Copper shows signs of improvement. These are industries in which the decline in activity since last spring has been most marked, so that the betterment carries considerable significance. Slowly the foundations for resumption of the period of business expansion are being laid.

Sharp Advance in Cattle Market.

Cattle prices are showing fair strength as a result of a moderate supply. Combined receipts at leading markets dropped about 40 per cent, compared with six weeks ago. The decline in shipments of thin cattle to the country has fallen but little in that interval, so that the net supply going to slaughterers has contracted even more drastically than the foregoing figure would indicate.

Grass cattle have practically disappeared from southwestern markets. Northern points are still receiving some western rangers, but in numbers too small to affect the price. Weather is more favorable for beef consumption and the small receipts have already cleared any accumulation from distributive channels. Cheap pork and poultry remain as adverse influences, however. Cows and heifers have been relieved of the competition resulting from the liquidation of range herds, and cutters, canners and bulls are coming out of the gloom caused by the invariable prewinter cleanup. Veal calves have rallied to the highest point in two weeks and seem to have passed the worst for the fall period.

Stocker and feeder cattle prices have advanced owing to the decline in the western range run and increased interest in cattle feeding as a result of lower prices for corn. Plain light steers have gained more than better grades, but all kinds probably have passed the low point for the fall

Stability Shown in Hog Market.

Hog prices advanced last week under receipts which were but little heavier than a year ago. Average prices at Chicago held below $7 for nearly three weeks, but each time they dropped to the $6.50 level a strong rally was staged. Evidently packers can use liberal receipts at that figure. The country is still liquidating old cows, light unfinished hogs and pigs. Eventually this process will be carried too far, so that substantial improvement in the market may take place before winter is over, but there is not much reason for holding back hogs now ready for market. A survey by the Federal Reserve bank at Chicago indicated 1 per cent fewer hogs on farms in its territory on November 1 than on the same date last year. Interpreted in the light of other evidence, it would appear that the fall pig crop is about the same as last year.

Ups and Downs in Lamb Market.

The lamb market has lost some of its recent gains as receipts have increased. Arrivals in the last month have been much lighter than a year ago, but fat lambs are about $1.50 lower and feeder lambs substantially lower than they were last year. Cheap poultry seems to be the outstanding explanation of the sluggish dressed lamb trade and feeders have bought less freely in the last month than in November, 1922, leaving more of the arrivals for slaughter. The corn belt has a large supply of lambs in preparation for the market, which must be sold in the next two months, so that it will be difficult to stage a big advance in prices.

Demand for wool is slightly less active, but continues on a moderate scale and prices are firm, with an upward tendency.

Wheat Position Strengthens.

The position of wheat has strengthened moderately and prices have responded with an advance of 3 to 4 cents in the last week.

Exports of wheat from July 1 to November 30 totaled 90,000,000 bushels. Our estimated surplus was 150,000,000 to 165,000,000 bushels, so that the remainder does not appear burdensome, with seven months in which to dispose of it. Primary receipts have declined about 25 per cent in the last month and the visible supply declined for the first time since early last July. Part of this reduction in the visible may have been due to large shipments from western lake ports which will reappear when they arrive at eastern points.

The most significant feature was the small deliveries to speculative holders of December contracts. The May delivery is enough higher than December to give elevators a profit on carrying wheat and cash wheat disposed of now could not be replaced elsewhere at lower cost. Hence, elevators are disposed to hold their stocks.

Kansas reports a 15.8 per cent reduction in its winter wheat acreage compared with last year, but the condition is 15 per cent better. One unofficial estimate for the country as a whole shows a reduction of 12 per cent in acreage, but a gain of 11.5 per cent in condition, the latter being 4.5 per cent above the 10-year average.

Corn and Oats.

Receipts of corn at primary markets have practically doubled in the last month, but the rate of distribution has been high, so that the accumulation at terminals is insignificant.

Primary receipts of oats have declined each week since the middle of October and withdrawals from the visible supply have been persistent. Larger consumption on farms than expected early in the season is believed to be taking place.

The rye market has been affected by the strength in wheat.

Cash Grain Markets.

The range of cash grain prices for the week ended December 5 was as follows:

CHICAGO—Wheat—No. 2 red, $1.05 1-2; No. 2 hard, $1.04@1.08 1-2; No. 3, $1.02@1.05 1-2. Corn—No. 2 mixed, 72 3-4@76 1-4c; No. 3, 72 1-2@75 1-4c; No.4, 70@73 3-4c; No. 2 yellow, 76@78c; No. 3, 72 1-2@81c; No. 4, 70@74 1-4c; No. 2 white, 74@74 1-2c; No. 3, 72 1-2@75 1-2c; No. 4, 70@73 1-2c. Oats—No. 2 white, 44 1-4@46 1-2c; No. 3, 43@45c; No. 4, 40@44 1-4c. Rye—70 3-4@72 1-4c. Barley—60@79c.

Seed and Feed.

Imports of red clover seed in November totaled 792,800 pounds, compared with 400 pounds a year ago. Since July 1 nearly four times as much was imported as in the same period last year. Alfalfa imports were heavy in November, but for the season to date are but little larger than a year ago.

The feed market is weak, especially in the east, as consumers are not taking hold with vigor even at lower prices.

Prices per ton (100-pound bags) in carlots: Chicago—Bran, $27; standard middlings, $26; flour middlings, $28.50; cottonseed meal, 36 per cent, $48; 43 per cent, $56; hominy feed, $42; gluten feed, $44; old process oil meal, 45.50; tankage, $55@60.

Hay Market Higher.

Hay markets were firm last week, with prices 50 cents to $1 higher generally, although Chicago was lower. Lower grades, which form an unusually high percentage of the receipts, are moving sluggishly. Country loadings have increased slightly, since producers are less busy with farm work.

Decline and Advance in Eggs.

Fresh egg prices declined rather sharply last week, but began to recover at the close. Receipts of eggs at the leading markets increased, especially at Chicago, where consumption was curtailed by a boycott engineered by a local newspaper. The movement of storage eggs has been disappointing and the situation was already weak because of the large holdings. Fresh egg prices may rise further during the next two or three weeks if receipts become lighter once more and bad weather holds back the increase in the lay which usually starts by the first of the year.

Receipts of poultry have been extremely heacy. Turkey prices have declined sharply from the pre-Thanksgiving level, but chicken prices are holding up fairly well.

Butter and Cheese.

The butter market became firm at the moderate decline a week ago and advanced to the highest point of the season. Confidence is more general as the supply of fresh available on the market is not larger than is moving promptly into consuming channels.

The cheese market has been dull, as buyers failed to follow the cent advance at country points.

Fruits and Vegetables.

Carlot shipments of potatoes from producing districts declined nearly one-third during the last two weeks. The Chicago market has shown a stronger response to this decline, as it was below the level of markets elsewhere. Round whites United States No. 1 are quoted at $1 to $1.10 per 100 pounds sacked and bulk and Idaho sacked Russets at $1.80 to $1.90 in Chicago.

Apple markets are inactive, as consuming channels have not fully digested the heavy shipments of October and early November. Prices are low enough to furnish a stable foundation and a moderate advance seems likely to occur, as the effect of lighter shipments from producing sections becomes noticeable in receipts at the leading cities. Midwestern Jonathans and Northern Spies are quoted at $5.50 to $6 a barrel on midwestern consuming markets. Washington medium to large extra fancy Delicious are bringing $2.85 to $3.15 a box at Chicago, with fancy at $2.50 to $2.70, extra fancy Jonathans at $2 to $2.25 and fancy at $1.75 to $2.

LATEST QUOTATIONS.

The Live Stock Market.

PORTLAND, Ore., Dec. 8.—Cattle—Beef steers, good grade, $6.50@7.50; medium grade, $5.50@6.50; common, $4.25@5.50; beef cows and heifers, good grade, $4.50@5.10; medium, $3.50@4.50; common, $3@3.50; canners and cutters, $1.50@3; bologna and butcher bulls, $2.75@4; feeder steers, $5@5.50.

Calves—Medium to choice 190 pounds down, $9@9.50; 190 to 260 pounds, $6.50@9; 260 pounds up, $4.50@6.50; cull and common, $3.50@4.50.

Hogs—160 to 200 pounds, medium, good and choice, $7.10@7.65; 200 to 260 pounds, $6.50@7.10; 250 pounds up, $6@6.50; packing hogs, smooth, $5@6.50; packing hogs, rough, $4@5; slaughter pigs, $6.50@7.10; feeder pigs, $6@6.75.

Sheep and lambs—Lambs, 84 pounds down, medium, good and choice, $10@11; cull and common, $7.50@10; yearling wethers, medium to choice, all weights, $6@9; wethers, $5.50@8; ewes, medium to choice, $3.50@6.50.

SPOKANE, Dec. 8.—Cattle—Prime steers, $6.75@7.25; good to choice steers, $6.25@6.75; medium to good steers, $5.50@6.25; fair to medium steers, $5@5.50; common to fair steers, $4.25@5; choice cows and heifers, $4.75@5.25; good to choice cows and heifers, $4@4.75; medium to

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A Tale of the Flatwoods

THE RED LOCK

By DAVID ANDERSON
Author of *The Blue Moon*

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CHAPTER IV
Whispering Spring

THE venerable widow, like the rest of the village, must have been on the lookout for the new preacher, for she was at the door to meet him as he came up the walk with the others. The old banker presented him.

"So glad to have you come, Brother Hopkins. It has been so dreadfully lonesome since——!"

The mild old eyes floated full of tears. The preacher seemed not to notice.

"I saw your husband's obituary in one of the church papers."

The widow dabbed at her eyes with a black bordered handkerchief; the preacher, in his hesitating, jerky way, went on.

"I immediately wrote to Mr. Colin offering to come on a—ah—sort of vacation trip and serve the congregation until the vacancy could be filled. I was more attracted to the thought of coming because my health had given way under the dual strain of preaching and teaching. And then, too, I had heard much about Buckeye and the Flatwoods from a—ah—classmate of mine while a student in the college in which I now have the honor to hold a professorship."

The banker frowned thoughtfully; Texie glanced at Jack.

Evening shadows were gathering thick in the corners of the room. The old man, becoming aware of them, glanced about him and turned to the widow.

"Well, Sister Mason, if you don't mind, I'll just show Brother Hopkins the study, and then you better g' 'long over with us t' supper."

With the fine courtesy of one trained to the parsonage, she excused herself; the old banker went on:

"I b'lieve you said he was t' have the use of the study?"

The Widow Mason was only too well used to the crisp curt ways of Simon Colin. She turned to the young preacher.

"Brother Hopkins, I don't want you to feel that you are to have merely the study. My home is your home. Please feel free to use all of it or any part of it."

The young preacher bowed very low, and turned to the banker, who led the way up the stairs with as much authority as if he owned the place—which, in reality, he did.

The study, with its writing desk and leather easy chair, with its shelves and shelves of books, showed that its late owner had been a man of studious habits and apparently scholarly attainments. The cozy neatness of it bespoke with equal positiveness the taste and care of the woman who had kept his house in order.

A large double window on the south flooded the study with light and afforded a beautiful view of the yard, the road, the wide bottoms, with the silver fringe of the river rimming the farther edge. An east window added to the cheerfulness.

An immense apple tree grew by the east window, thrusting its stout branches so close as to almost brush the panes. Through its opening blossoms and half sprung leaves enough of the day remained to catch a view of the old banker's two or three acres of park-like orchard that lay between the parsonage and the red-roofed cottage, with the waters of Eagle Run loitering along under the blossoming trees.

The young preacher stood at the window and gazed out over the orchard, aromatic with promise, green with its thick mat of bluegrass, white under the trees where the blossoms snowed down.

The banker slapped him on the shoulder. He must have been deeply absorbed in the spell of the place, with its quiet and repose, for he started and laughed nervously.

"I must have been dreaming."

The old man tossed a hand toward the window.

"Not s' bad, is it?"

"It is very beautiful—the trees and grass, with that little branch loitering along and rafting the apple blossoms away to the river."

"I 'lowed y'u'd like it." The old man rubbed his long bony hands together in a sort of grim satisfaction. "My daughter fools away hours and hours in that seat yonder under the big maple by the spring. I 'low ther' ain't a bird comes by she can't mock."

The preacher looked at him curiously, half sternly.

"Took a right smart pile t' fix it up like that. Money wasted, I tell 'er. We'll go across that way t' the house, if y'u like."

"It would please me greatly."

The momentary sternness had left the eyes behind the spectacles, the jerky precise voice had resumed its effusive drawl.

When they came down, Texie and Jack had already gone out into the yard. Mrs. Mason was standing in the door, talking to them.

The gray-haired gentlewoman turned to the preacher.

"Brother Hopkins, won't you please run over a few minutes after supper? I have so longed to talk with a minister since—since—"

"It is a minister's duty to go where his people call him," he said, in a voice pitched to reach the ears of the others, as it might have seemed. "I shall be very pleased to come."

He bowed himself out and joined the half impatient banker on the door step.

"Come on," the old man called to the others down the walk, "we're goin' across the orch'id, Brother Hopkins 'lows he'd like to."

The girl turned back, with barely a perceptible nod to the woodsman; a nod that was almost as much a part of her as her dimples—a nod so tiny that it seemed hardly to get beyond her eyes, yet it could have set Jack Warhope to a journey around the world. He turned and followed her.

There was no gate between the banker's park-like orchard and the parsonage yard. The fence had to be climbed. When they reached it the preacher offered his hand to the girl, who, to the amazement of the woodsman, took it and allowed him to lift her down—a concession that meant much to the Flatwoods.

It was the very thing they had talked about—laughed about—on Black Rock barely half an hour before. The thought drew his eyes up to the commanding battlements of the headland. Enough of the afterglow of sunset fell from the west to bathe its stark pinnacles in a giant blush of dull bronze.

The ways of a woman! The man brought his eyes back to the grass at his feet and absently tramped along with the others.

At the bridge over Eagle Run—merely a huge foot log broad-axed flat along the top—the girl allowed the preacher to assist her again, and the woodsman was treated to his second surprise. He had seen her, hundreds of times, skip across that log as sure-footed as a squirrel.

The path beyond led past the big maple with the rustic seat beneath the shelter of its far-flung branches. At its roots a spring gushed up, lapping the white pebbles of the tiny gutter it had worn for itself on its way to Eagle Run. The girl ran on ahead to the spring, the others gathered around her and stood listening to the purr of the water washing against the pebbles.

"Whispering Spring," she said simply, raising her eyes to the preacher. "Jack named it that. He can think of s' many names f'r things. He's a poet, I guess."

The woodsman fidgeted. The preacher glanced toward him, but made no comment.

"My brother, Ken, use' t' tell me the fairies come down out of the cliffs at night t' dance around Whispering Spring, and I b'lieved him—I b'lieved everything he told me them days—and I use' t' watch f'r the fairies."

She looked up at the preacher; then back into the spring.

"Do you b'lieve in fairies?" She asked the question as if she hoped he did believe in them.

He glanced down at the reflected face in the water.

"Yes; there's a fairy peeping into the spring right now."

The old banker grunted; the woodsman turned to the face behind the huge spectacles. It was the first thing the preacher had said that caught his interest.

The girl was so entirely an unspoiled creature of the woods that she let the preacher see how much the neat compliment pleased her. With the color tingling over her face, she sprang over the gnarled roots of the great maple and ran a few steps up the path to the edge of the yard, paused and then hurried on. The preacher looked after her in his peering way, while the woodsman strode up the path and overtook her at the kitchen door.

"I'll run over and do the chores, and then come back," he said.

He walked on a little way and then came slowly back. The girl, just going into the kitchen, seemed to know that he had turned—seemed to know that he would turn back. With her hand on the door

(Continued on page fourteen.)

Preceding Chapters of "The Red Lock"

SYNOPSIS.

"Ken, Texie, Jack." These three names, carved one above the other, appear high on a pinnacle of sandstone at the tip of Black Rock, among the cliffs that wall three sides of the little village of Buckeye, in the Flatwoods valley of the Wabash. In a secluded pocket of the rock is a tiny bed of yellow orchids, not yet in bloom, planted by Jack Warhope for his girl chum, Texie Colin. Below lies a farmstead, that had been laid out on a scale much more elaborate than was usual in the Flatwoods, but nothing had been finished. Outlined among the weeds and brambles lies the extensive foundation of the farmhouse. Back of this stands a mite of a log cabin, where doubtless a man had housed while dreaming his unfinished dream of house and barns and happy homestead. At the very beginning of the fulfillment of those dreams, the man, Jack Warhope's father, fell in a battle with the Seminoles, and, when Jack was 12 years old, the mother died. Then it was found that Simon Colin, a hard-headed, domineering old man, Texie's father, held a mortgage on all the Warhope property. He foreclosed and had Jack "bound out" in service to him until he should become of age.

The names on the sandstone had been written seven years before, the day Kenneth Colin, Texie's brother, left for college. For two years after his departure he wrote regularly. Then, suddenly, the letters ceased. Later from the president of the college the boy attended came news of how Ken had killed a man and run away from school, leaving many debts. That was five years ago and no word has been received since.

It is May time and Jack and Texie have met at the tiny flower garden among the rocks. It lacks but 10 days of Jack's 21st birthday, when he will be free. Jack is happy in the prospect, but together he and Texie are thinking of Kenneth and his waywardness.

"Jack——" she hesitated; "do y'u s'pose it could be the red lock that made Ken act like 'e did?"

The question was so at variance with the man's trend of thought that he was a long time considering it.

"It ain't the red lock," he finally answered in his slow way, "it's the drop of blood that come along with it. F'r that matter, though, every man gits a bad drop 'r two out of the past. But them bad drops can be overcome, if a man bucks ag'in 'em. The trouble with Ken was it didn't 'pear like he wanted t' buck ag'in' his."

"The 'curse of Colin,'" was the girl's musing comment. "F'r hundreds of years—ever sence the days of 'Red Colin,' the old sea pirate—it's be'n breakin' out in the family every few generations. It alw'ys worried Ken that it broke out on him. I've sometimes thought it would 'a' be'n better if he'd never 'a' found out the meanin' of that red lock—that it was the 'curse of Colin'——"

Half the village was usually gathered about the broken porch of Zeke Polick's general store to see the stage come in. Simon Colin had once been Zeke Polick's partner, but now followed the business of lending money and collecting rents. Half the Flatwoods was under mortgage to him. His office was in the store building and he carried his wealth back and forth every day between his cottage, where he kept his safe, and the store.

On the evening of this particular day in May the crowd was even larger than usual, for the new preacher was expected. He had been a classmate of Ken's and was now one of the teachers and preachers in the very college where Ken went.

The stage drew up and one passenger alighted, a tall young man wearing a full beard, neatly cropped—the new preacher, the Reverend Caleb Hopkins, without a doubt—quite the oddest array of satchels and umbrella, patent leather boots and high hat, stiff neck stock and enormous spectacles, that had ever invaded the Flatwoods.

He appeared nervous and peered this way and that through his heavy, amber-tinted glasses. Only Jack Warhope noticed that beneath all the paraphernalia the young preacher was possessed of a very capable body, tall and strong. He was warmly greeted by the villagers.

The reception over, Texie urged Jack to accompany them home to supper, whispering: "We'll get him to tell us about Ken."

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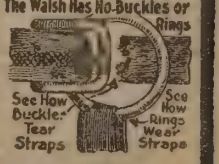
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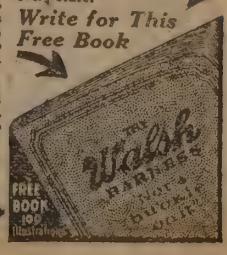

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Farmers' Union Meets

The annual convention of the Washington Farmers' union is being held in Spokane this week. A feature of the convention is the presentation of the plan of the organization to market the wheat of its members under a cooperative contract and to sign up a large acreage that is not now being marketed cooperatively.

Among other matters on the program are the annual address of State President J. Q. Adams and the presentation of a report on the recent national convention by State Secretary A. D. Cross, who was a delegate to the national meeting.

On the evening of December 11 members of the Farmers' Union Egg and Poultry association met for a general consideration of the work and future program of this new organization. D. F. Mitchell, president of the association, presided at the meeting.

A meeting of the board of directors of the Washington Wheat Growers' association is being held also this week at Spokane in order that producers who are members of both the farmers' union and the wheat growers may meet with the board and consider matters of administration that affect them.

Reports of these meetings will appear in future issues of The Washington Farmer.

President Addresses Congress

(Continued from page one.)

would help to reduce acreage.

Systems of cooperative marketing created by the farmers themselves, supervised by competent management, without doubt would be of assistance, but they can not wholly solve the problem. Our agricultural schools ought to have thorough courses in the theory of organization and cooperative marketing.

Diversification is necessary. Those farmers who raise their living on their land are not greatly in distress.

By reason of many contributing causes, occupants of our reclamation projects are in financial difficulties, which in some cases are acute. Relief should be granted by definite authority of law empowering the secretary of the interior in his discretion to suspend, readjust and reassess all charges against water users.

This whole question is being considered by experts. You will have the advantage of the facts and conclusions which they may develop. This situation, involving a government investment of more than $135,000,000, and affecting more than 30,000 water users, is serious. While relief which is necessary should be granted, yet contracts with the government which can be met should be met. The established general policy of these projects should not be abandoned for any private control.

Highways and reforestation should continue to have the interest and support of the government. Every one is anxious for good highways. I have made a liberal proposal in the budget for the continuing payment to the states by the federal government of its share for this necessary public improvement. No expenditure of public money contributes so much to the national wealth as for building good roads.

Reforestation has an importance far above the attention it usually secures. A special committee of the senate is investigating this need, and I shall welcome a constructive policy based on their report.

The world has had enough of the curse of hatred and selfishness, of destruction and war. It has had enough of the wrongful use of material power. For the healing of the nations there must be good will and charity, confidence and peace. The time has come for a more practical use of moral power, and more reliance upon the principle that right makes its own might. Our authority among the nations must be represented by justice and mercy.

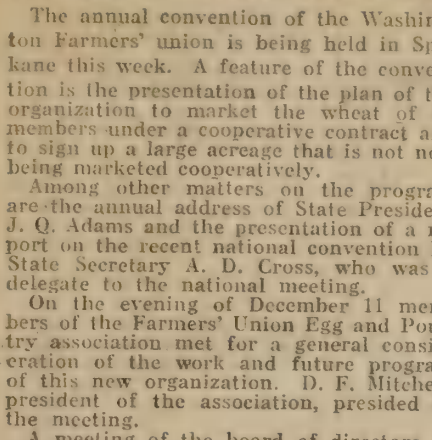
It is necessary not only to have faith, but to make sacrifices for our faith. The spiritual forces of the world make all its final determinations. It is with these voices that America should speak. Whenever they declare a righteous purpose there need be no doubt that they will be heard. America has taken her place in the world as a republic—free, independent, powerful. The best service that can be rendered to humanity is the assurance that this place will be maintained.

Armour Hearing Is On

A hearing is being conducted this week in Spokane by an examiner of the federal trade commission on the question of whether or not the purchase several years ago of the E. H. Stanton packing plant at Spokane by Armour & Co. constituted a violation of the federal law prohibiting restraint of trade. The commission some months ago ruled that the ownership of the plant by Armour was in violation of this provision and that the plant should be disposed of to a competitive purchaser.

The Stockmen's club of Spokane approves the fullest investigation of the Armour-Stanton deal and expresses confidence that the hearing will demonstrate the coming of Armour's to Spokane has not restricted competition or tended to create a monopoly, believing that any attempt of the federal trade commission to compel Armour & Co. to dispose of their Spokane plant will work an irreparable loss to live stock producers of the Inland Empire by taking away from the city its largest purchaser of live stock and distributor of meat products.

Have you glanced over the farm bargains on the "Want Ad" page?



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2 cups Sperry Drifted Snow Flour	1 tablespoon butter
2 teaspoons baking powder	½ cup sugar
½ teaspoon salt	1 egg
¼ teaspoon nutmeg	½ cup milk

[*Note:* All measurements are level and flour is sifted once before measuring. One-half pint measuring cup is used.] Cream butter, add sugar and well-beaten egg. Sift all dry ingredients and add alternately with the milk. Turn on to a floured board, roll out to half an inch thick; cut into inch-wide pieces about eight inches long, then fold in the center and twist. Allow to stand a few minutes to stiffen the dough, then fry in hot fat until a golden brown, turn to cook on the other side, drain on paper. When cold, dredge with powdered sugar mixed with a little cinnamon.

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DRIFTED SNOW FLOUR
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Mail this coupon to Sperry Flour Co., Dept. T, Sperry Bldg., San Francisco.

Please send me, without cost, the Sperry Cook Book.

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LIVESTOCK AND DAIRY

Tankage

A Part of the Growing Hog's Return

Tankage is a valuable addition to the growing hog's ration and when left out the gains will be less rapid and will be more expensive. This fact was clearly brought out in a feeding trial recently completed by J. T. Alexander of Chehalis, who fed out two pens of hogs during the last four months. The experiment, which was completed early in November, was outlined by R. G. Fowler, county agent of Lewis county.

The animals were run on clover pasture during the feeding period and the only difference in the ration was that lot No. 1 received 10 per cent tankage in the barley ration, while lot No. 2 received no tankage. The tankage was cut to 5 per cent during the last month of the feeding period.

Lot No. 1—10 hogs: Barley, 3871 pounds; tankage, 361 pounds; initial weight, 571 pounds; average, 57 pounds; final weight, 2013 pounds; average, 201 pounds; average daily gain, 1.45 pounds; total, 1442 pounds; feed per 100 pounds gain, 293.4 pounds; grain cost per 100 pounds gain, $5.48; pasture per 100 pounds gain, 68 cents; total per 100 pounds gain, $6.16.

Lot No. 2—11 hogs: Barley, 4062 pounds; initial weight, 561 pounds; average, 51 pounds; final weight, 1843 pounds; average, 167 pounds; average daily gain, 1.17 pounds; total, 1282 pounds; feed per 100 pounds gain, 316.8 pounds; grain cost per 100 pounds gain, $5.22; pasture per 100 pounds gain, 68 cents; total per 100 pounds gain, $5.90.

In estimating the feed values, barley was valued at $33 per ton, tankage at $85 per ton, and clover pasture, 1 cent per day per animal.

The results obtained in the experiment vary slightly from other feeding trials inasmuch as the tankage lot might have shown a higher average daily gain. Lot 1 made an average daily gain of 1.45 pounds, while lot No. 2 made only 1.17 pounds per day. At 8 1-2 cents per pound selling price lot No. 1 brought $13.60 more than lot No. 2.

The value of good clover pasture in feeding swine is often lost sight of by feeders. Experiments at different stations have shown that an acre of clover will make 600 to 750 pounds of pork in one season, and this point should not be overlooked in producing pork at present prices.

Mr. Alexander, in discussing this demonstration, states that he is satisfied that tankage is a valuable adjunct to the ration in feeding pigs, but doubts the value of feeding it at the last of the feeding period. He also feels that these two lots would both have made larger gains had they been shut up in a feed lot the last four weeks of the fattening period.

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The Holstein-Friesian Association of America

230 East Ohio Street, Chicago, Ill.

HOLSTEINS

Squash as Feed

By JERRY SOTOLA,

Department of Animal Husbandry, State College of Washington.

Will you please tell me if raw squash is injurious to any kind of stock and if the squash seed is of any value as feed? Should squash have the rind removed before feeding to animals? L. W.

Grandview, Wash.

The squash is not injurious to live stock, but, on the other hand, may be classed as an excellent succulent feed. It is extremely watery, averaging about 85 per cent moisture. The dry matter of the squash is higher in feeding value than the dry matter of grains, like corn, wheat or barley, and the seeds are free from any injurious effect to animals when they are fed in quantities found in the entire fruit. In foreign countries the seed is often dried, ground and then fed to live stock without injurious effect if fed in moderate quantities. It is their extreme richness in fat that sometimes causes indigestion if the seeds are fed in large quantities. They are rich in both fat and protein, containing slightly over 30 per cent of these nutrients on the moisture-free basis.

Experiments with dairy cows viewed in a conservative way show that five to six pounds of pumpkins or squashes, when cut, will replace one pound of hay and that two and one-half pounds of cut squash replaces one pound of good corn silage.

A cow will consume with relish from 30 to 50 pounds of cut pumpkins or squashes per day, but such a feed should be fed instead of silage rather than with it because it is so bulky and watery.

Chopped pumpkins or squashes can be fed to fattening pigs with success when fed in connection with corn or wheat. Some years ago pigs were fattened successfully at the Oregon experiment station on skim milk, corn meal and pumpkins. It was demonstrated that cooking of pumpkins does not increase their feeding value. Since squashes and pumpkins are so similar in composition the results apply to both feeds with only slight variations. Some Colorado reports tell of cases where pigs were fattened on raw squashes and meat had an undesirable yellow color.

Pumpkins and squashes should be fed in the late fall or early winter, since they do not keep well because of their high moisture content, and growing them in too large quantities can hardly be considered good economy, unless they can be consumed in a short time.

Feed for Dairy Cows

By E. V. ELLINGTON, Head Department of Dairy Husbandry, Washington State College.

Can you give me any information on feeding cull apples to milk cows? How many can be safely fed at a time and what is the food value? B. T.

Walla Walla, Wash.

Experimental work which has been done with apples indicates that they have about 40 per cent of the value of corn silage for milk production. They contain slightly more dry matter than roots, the chief nutritive constituents being the sugars. Apples are very palatable and are relished by cattle. Care must be taken, however, to supplement apples with liberal amounts of richer foods, because the low amount of nutrients contained in apples will not be sufficient to maintain a normal milk flow. In other words, if apples were made the principal food, the cow could not eat enough of them to provide sufficient nutrients necessary to produce a large amount of milk.

Apples occupy the same place in the ration as roots or silage in that they provide succulence, and there is no property in them that will produce injurious results to the cow.

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Almost always the so-called poor milker is unproductive because of some sluggish condition of the genital or digestive organs. If these functions are impaired the milk flow is quickly reduced.

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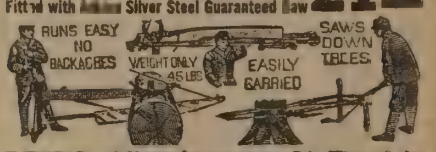

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Glance over the bargains on the "Want Ad" page

Have you glanced over the farm bargains on the "Want Ad" page?

Must Get Rid of the Surplus

Wheat Committee Favors High Tariff, Export Commission

Surplus is one of the things that has always knocked down the price of farm crops. Dairymen, for instance, have figured that if they can take care of their surplus they can secure a fair price, under normal conditions, for that which the current market demands. To solve the problem, dairy organizations have established plants in which to manufacture or process their surplus milk and have created marketing agencies to sell it apart from the immediate home demand.

Come now the wheat growers, bankers and business men of Washington, with the proposition that if the surplus wheat produced in this country can be disposed of separate and apart from the usual market a reasonable price can be obtained for the balance of the crop.

On this ground, the committee, headed by State Senator F. J. Wilmer, banker and farmer of Rosalia, last week at its meeting in Spokane, voted in favor of the creation of a government export commission to market all of this troublesome surplus in foreign countries, taking a loss if necessary and taxing the entire wheat crop of the country enough to pay the loss. A plan somewhat similar has since been recommended to the president by Secretary Wallace of the department of agriculture in his annual report.

Since the adoption of the recommendations of the Wilmer committee there has been discussion among wheat men and even members of the committee as to whether or not the committee's plan would, if adopted, actually result in hard and fast price-fixing. Chairman Wilmer of the committee, in a letter after the adoption of the recommendation, emphasizes that the problem centers around getting rid of the surplus, such disposal to be effected by sale abroad at the foreign price, the loss to be met by a tax on all the wheat produced. "Will it not be well for us all to get behind this idea and leave the details to be worked out in congress?" asks Mr. Wilmer in his letter.

The plan as adopted by the Wilmer committee follows:

The Plan.

Section 1. Tariff schedules to be provided high enough to cover the elevation of the domestic price of wheat and wheat products to its normal, or prewar relationship with other prices.

Section 2. A government export corporation or commission to be created which (a) calculates, using department of labor index, what prices wheat and wheat products should bring to restore the prewar ration, and (b) announces its readiness to buy at that figure.

What fixes prices? Take wheat, for example; the grain trade is willing to buy at any figure which insures its ability to resell at the handler's usual margin of profit. Willingness and ability to buy at the proper price level will establish the domestic price.

Should there be a surplus, such quantities of wheat as may have been bought would be resold on the domestic market. If a surplus over domestic needs exists this would be sold in orderly fashion abroad, at such prices as it will command.

Section 3. Costs and losses: Wheat and wheat products protected in this manner would pay its pro rata share of such costs as are incurred in the operation to sustain the domestic price at its proper ratio with other prices and such losses as occur in sales abroad.

For example: If the sales abroad of 140,000,000 bushels of wheat out of a crop of 700,000,000 bushels that move in trade it is necessary in any one year to sustain the domestic price, and such a sale is at a loss of 50 cents a bushel below the domestic price, the loss would be $70,000,000 to be collected as a tax from the 700,000,000 bushels. That would mean a tax of 10 cents a bushel to finance an operation that lifted the domestic price of wheat 50 cents a bushel over what it would have been had the foreign market been permitted to fix the home price.

If the world price rose so the domestic price would, without assistance, be nearer its proper level place in relation to other commodities, then the margin of protection afforded under the corporation would shrink. The central idea is to put and keep wheat prices in the same relationship with other prices, that they had prior to the war. It is not price fixing; the price would fluctuate along with other commodities, but no longer would wheat prices stand at one low level, while protected industry and labor held general prices at a far higher level.

Section 4. Methods: (a) The corporation or commission would operate with cooperative marketing organizations established dealers and through the usual marketing channels: (b) a revolving fund would need to be provided by appropriation, to be replenished by wheat taxes in one of the two following ways: either a unit tax would be placed at the outset of the season to create a revolving fund to finance the operations, or the corporation or commission would operate on the revolving fund appropriated for an entire season, which would be replenished by a tax on the succeeding year's crop of wheat.

Several other methods of solving the wheat farmer's problem were submitted, either by members of the committee or by others who attended the open sessions. Absolute price-fixing by congress was urged by no one and practically no expressions of favoring this plan were heard. Cooperative marketing took a sort of secondary place in the consideration, though vigorously urged as a means of backing up and making more practical the export commission plan as adopted.

Prominent among the recommendations was one made by C. M. Rader of Walla Walla, who urged the creation of a government corporation to buy and sell sufficient wheat to govern the price of the entire crop.

Another plan was offered by W. V. Moore, a farmer of Quincy. He favored a nationwide agreement among wheat farmers to sell no wheat at a price less than 50 cents a bushel under the November 1 quotation. In order to prevent dumping at such time as this price was reached, under his plan, it would be provided that no farmer should sell more than 10 per cent of his wheat during any one month.

Walter J. Robinson, manager of the Washington Cooperative Wheat Growers' association, who had just returned from Washington, D. C., where he appeared before the recent tariff conference to urge increased tariff on wheat, declared to the committee that no plan could be put through congress without a long, hard campaign, as eastern representatives and senators do not realize the position of the wheat farmer or understand his problems or their relationship to the general industry of the country in which these eastern men are more directly interested. He said they looked upon any assistance to the wheat growers as a subsidy to be paid out of the national treasury rather than to be paid by the wheat farmers themselves. Mr. Robinson declared that, while cooperative associations were essential to the success of any orderly wheat marketing program, in his opinion the proposed export commission is the only hope for relief from the present unfair position in which the wheat grower finds himself.

The committee making the recommendations was authorized at a meeting of farmers, bankers, marketing experts and representatives of farm organizations at Colfax, Whitman county, a few weeks ago. That meeting authorized Senator Wilmer to appoint the committee and serve as its chairman.

THE WALLACE PLAN.

The proposal made by Secretary of Agriculture Wallace to President Coolidge goes further and recommends that the export commission handle surpluses of other farm crops in similar manner. The Washington committee definitely rejected a proposal to have the commission dispose of other crops than wheat. Secretary Wallace would also have a tariff on any American crop of which there was an exportable surplus sufficiently high to equalize the equitable home price and the

(Continued on page twelve.)

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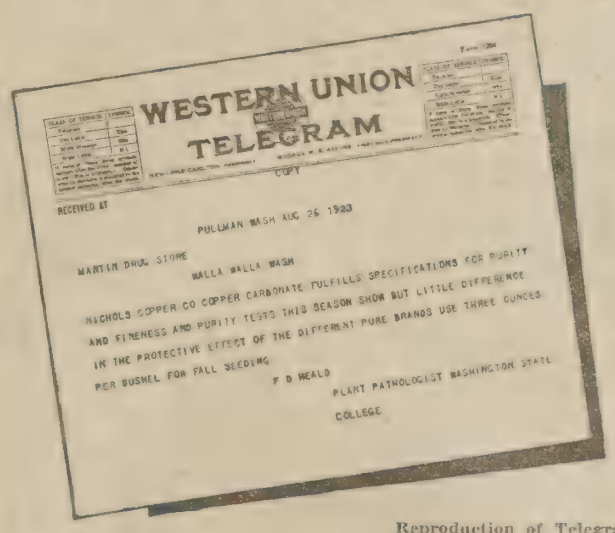

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F D HEALD

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POULTRY AND RABBITS

Thurston Hatchery

Twenty-one incubators have been ordered by O. B. Gregory of Olympia for the Thurston county accredited hatchery, which will be ready for operation the coming season. Mr. Gregory, who is to have charge of the hatchery, says that the plant will have a capacity of 13,500 chicks at one filling.

The association members have listed 1450 breeding hens, from which they expect to produce a minimum of 40,000 chicks in the accredited hatchery. Practically all of these chicks will be bought back by the members of the association, and consequently the standard of the breeding stock in the county will be raised when the pullets come to maturity. Orders have already begun coming in to the hatchery, a total of 18,000 chicks having been bargained for. Mr. Gregory stated that he did not expect to be able to supply the demand for chicks next spring.

Practically all of the eggs supplied to the hatchery will be from flocks which will have been inspected by some one authorized to do this work by the state college extension service. One pen from which 700 eggs have been contracted has a yearly record of 280 or better. The males used in this pen are from the experiment station flock at Puyallup, the dam of which produced record-breaking pullets, and the dam of the sire was also a high producer.

The dam of another cockerel in the association has a 309-egg-record, the bird being a straight Tancred bred cockerel. His ancestors for five generations have produced over 300 eggs a year. At present all of the high classed cockerels are from pullets that have produced more than 250 eggs. The standards of the organization require that all breeders must be at least 18 months old and cockerels must come from dams with yearly records of 250 eggs or better. The state rules permitted the use of cockerels from hens of 200 eggs or better.

A Million Hens

(Continued from page three.)

By storing these processed eggs during the season of high production, glutted markets have been avoided and prices maintained much more favorable than before the association was formed. "The association stored 22,000 cases of eggs during the year and, although we do not realize the same profit on them that is usually made on storage eggs, we can well afford to do it, since we can, in this way, help govern the price of fresh eggs," says Sales Manager Wills.

Storage eggs also include what is known as egg meats. This term is applied to eggs which are broken, put into containers and kept at a temperature of some 20 degrees below freezing. Eggs with cracked or dirty shells and oversized or unshapely eggs are broken for storage in this form. They are marketed largely to restaurants and bakeries.

Feeding Stations.

Every poultryman has a problem in disposing of his cull pullets, cockerels and mature birds that have outlived their usefulness as egg producers. The association has solved this problem for its members by establishing feeding stations at five of its plants where these birds are collected for market, fitted, killed, dressed and frozen for market. This fitting could be done at home, but again uniformity is being sought and better results are obtained where the birds are fed the same mixtures and are prepared for market in such way as to permit of proper grading. Much of this dressed poultry is shipped in this frozen condition to the New York market, thus preventing an abnormal supply and consequent low prices on the home market. For the first eight months of this year the returns from the sale of dressed poultry exceeded $148,000.

The association also prepares feeds for its members. These feeds are made in mills operated by the organization, the necessary grain being purchased in carload or even larger lots.

Association Grows.

The Washington Cooperative Egg and Poultry association has grown steadily during the six years of its life in spite of the usual opposition with which cooperative movements have to contend. The year membership contract includes a clause which permits a member to withdraw if notice is given between October 1 and 15 of any year. Comparatively few members have taken advantage of this provision. In fact, during October of this year eight more poultrymen joined the association than withdrew during the 15-day period specified, which necessarily covers all withdrawals for the entire year. Those who withdraw are in most cases located in districts where local conditions make it impractical to market their eggs through the association as satisfactorily as they can handle their own product. Remoteness from the nearest association plant is the principal ground for such withdrawal.

The Washington Cooperative Egg and Poultry association is a member of the Pacific Egg Producers, Inc., usually referred to as the "P. E. P." This organization coordinates what are known as the "Big Five" associations, namely the Washington association, the Southern Poultry Producers of Los Angeles, the Poultry Producers of San Diego, the Central Producers of San Francisco and the Pacific Cooperative Poultry Producers of Portland. The P. E. P. maintains an office in New York, in charge of J. A. Barber, as general sales manager, whose duty is the marketing of the eggs shipped from the associations on the Coast.

CULLS NEIGHBOR'S FLOCK.

L. H. Pomeroy of the Vera community, Spokane county, culled a flock of 225 birds for C. H. Moore of Greenacres. A total of 129 birds were culled out of the 225 and put in a coup by themselves for five days.

At the end of the period it was found that the culled birds had laid no eggs, while the remaining 96 hens had laid their usual number. Mr. Pomeroy was granted a culling certificate by W. D. Buchanan, extension specialist in poultry, as the result of good work accomplished at a culling school. It is the policy of Mr. Buchanan to teach poultrymen how to cull, and when they pass a good examination they are granted certificates.

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The department editors of this paper are anxious to be of service to you. Do not fail to write to us if they can be of help to you.

ORCHARD AND GARDEN

Almond Growing

Requires Warm Climate and a Moderate Winter

By O. M. MORRIS,

Head Department of Horticulture, State College of Washington.

There recently appeared in the Associated Press some articles encouraging the planting of almond trees in Washington. Almond trees have been planted in several different sections and in a few districts have come to fruit and promised well. One of the districts where this was developed on a large scale was practically wiped out in the December freeze of 1919. This experience should cause any one considering the planting of almonds on a commercial scale to hesitate and consider seriously the type of tree and its adaptability to the district.

The almond, like the peach, does best in warm climates of medium winter temperatures. It requires ordinarily for its best development medium high summer temperatures and the plant is not able to endure temperatures much below zero without more or less injury. The blossom buds are more easily winter killed than are those of the peach. Any district where apple or pear trees have shown indication of serious winter kill should not undertake the growing of almonds.

The plant has the peculiar habit of being easily driven into a dormant state by ordinary frost and drough and responidng quickly to mild weather during the winter. During these spells of mild weather in the winter the buds swell rapidly and are killed by the cold following this period of mild temperature. The blossoms appear about the same time that the peach blossoms appear and are usually as easily killed by late spring frosts. Some varieties are more tender to late spring frosts than are the common varieties of peaches. After the blossom has dropped the fruits will often endure distinct frosts without serious harm. Any district that has any need for orchard heating work to protect apple blossoms in the spring or in which apple trees have suffered from winter injury should avoid planting more tender fruits. There are probably a few protected and favored small localities in which almonds might be grown with profit. These districts are usually especially favored situated adjacent to bodies of water or are protected by hill slopes that give them especially favored opportunities.

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Smoke Cloud

Of Small Advantage in Protecting Against Frost

A smoke cloud is of small advantage in retarding radiation of heat in an orchard on frosty nights. This conclusion was reached by the weather bureau of the United States department of agriculture after a series of experiments at Edgewood arsenal, Maryland. Investigations were carried on jointly by the weather bureau and the chemical warfare service of the army to establish, if possible, the feasibility of this method of frost protection.

There seems to be a conviction in the minds of many who have had to do with smoke screens, such as were used during the war to hide the movement of troops, that orchards and tender vegetation could be protected from frost by this means. It has been thought that a chemically produced smoke cloud would furnish a cheaper cleaner and perhaps more effective frost protection than is obtained from burning crude oil or other fuels in small heaters.

In the experiments a field was covered with dense smoke by burning white phosphorus on nights when conditions favored frost. The temperatures were carefully measured under and in the smoke and also in a near-by field free from smoke.

Results showed that while the smoke cloud decreased the rate of cooling about one-half, it had little effect on the air temperature, probably because of an interchange between the air under the smoke and that outside. The cost of maintaining a dense smoke cover over the field by burning white phosphorus, which was the most economical material available, ranged from $125 to $376 per hour for a 40-acre orchard or $3.15 to $9.40 per acre per hour; whereas the average annual cost of protecting lemon trees by the heater method is known to be about $79 per acre with an average of 16 heatings per year, or $5 per acre per night. The phosphorus is difficult to handle safely, as it ignites at 113 degrees Fahrenheit.

The experiments confirm previous conclusions that the most efficient and economical method of frost protection is to heat the lower layers of the air by burning some form of cheap fuel.

Squash Storage

A feeling that squashes are a product difficult to preserve in storage causes many farm families to go without this excellent vegetable throughout the fall and winter season. Squashes are not difficult to keep when a few essential points are observed.

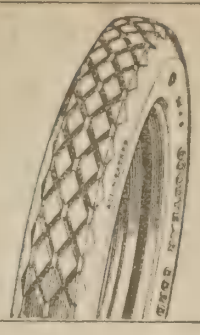
Bruises in one form or another cause more loss of squashes than any other single condition. Extreme care should be taken to avoid breaking the skin or crushing the meat during any part of the process of handling. Only mature squashes are valuable and immature squashes are very difficult to preserve. Some amateur growers make the mistake of breaking the stem from the squash rather than breaking or cutting it from the vine, leaving it all on the squash. When the stem is broken from the squash it leaves exposed meat which readily falls a victim of decay, probably causing the loss of the entire vegetable.

It is not wise to pile squashes up in storage. On the other hand, it is a good plan to arrange shelves for them if inadequate floor space is available so that they may lie in one layer, preferably not touching each other, at least not crowded. It is also a good plan to provide a thin layer of straw or other soft packing upon which they may lie to avoid possible bruising. Storage quarters should be dry.

Many make the mistake of thinking that the squash needs a cold storage room. The truth is that it will survive the winter months better if its quarters are comparatively warm. In fact, some go so far as to recommend that it be placed about the chimney or near the furnace, where the temperature is warmer than in the more distant parts of the cellar or basement. Too much warmth, however, is not good.

FIND IT IN THE DARK.

A place for every tool and every tool in its place is a great saver of time.



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GOODYEAR

New Crop Book Offers Valuable Information

Results of Years of Study and Experiment to Be Published by Lilly's in Washington Farmer, for Preservation in Book Form—Indispensable as Reference for Farmers and Gardeners

In 1885, the company now known as The Chas. H. Lilly Company was founded in the city of Seattle and during the years of development of the Pacific northwest, it has been closely in touch with the agricultural progress of this region. One of the important departments of its business has been the raising and distribution of seeds, and in connection with this it has maintained extensive testing grounds and carried on a large amount of experimentation in the planting and growing of crops.

A number of years ago, because of the many questions asked of them, particularly by people who came from eastern and middle states, where climatic and cultural conditions were entirely different, the idea occurred to them to issue a publication answering some of these and giving useful information about crops. The first issue of what is known as Lilly's Crop Book resulted from this, but it was only a four-page folder, in which were given answers to some of the most common questions, chiefly about the growing of some of the leading vegetables.

This has grown with each of its ten revisions. New material has been added until it has grown to a volume which is credited by authorities as the most valuable set of instructions available to the Pacific northwest grower of vegetables, grains or flowers.

Now, it is announced all this collection of information, with the results of their most recent experiments has been re-edited by experts, with a view to making it as complete and yet as concise as possible. It contains invaluable information for farmers on the problems of growing vegetables and grains in this region, arranged in such a form as to be convenient and easily consulted.

In order that it may be given wide circulation in this state, and come into the hands of as many farmers as possible, Lilly's have arranged for its publication soon in the Washington Farmer. It will be printed in a regular issue of this paper but in such form that it can be detached and made into a neat, convenient book of 24 pages.

Readers of the Washington Farmer are urged to watch for this issue of Lilly's Crop Book when it appears and to preserve it for reference all through the year.

(Advertisement)

The department editors of this paper are anxious to be of service to you. Do not fail to write to us if they can be of help to you.

Must Get Rid of Surplus

(Continued from page nine.)

foreign price so as to prevent importations to counteract the disposal of the American surplus.

Secretary Wallace urges further development of the cooperative movement as a necessary support for any system that may be worked out. He declares absolute government price-fixing would work to the ultimate disadvantage of the producers, since it would lead to increased production with correspondingly increased exportable surplus, thus adding to the farmers' problems.

In part the secretary says in his report:

"The objective to be attained is to secure for wheat and other agricultural products an exchange value approximately equal to what it was before the war. As has been said often, one of the chief causes of the agricultural depression is that farm commodities are relatively far cheaper than before the war. The price of wheat in dollars at terminal markets is not far from prewar prices in dollars, but a bushel of wheat on the farm will buy much less of the things farmers need or desire than before the war. The end sought, therefore, is to put farm products on a price plane comparable with the price plane of other commodities.

"If farmers could control their production as does organized industry, or if they could exact a price for their labor as does organized labor, unusual action by government might not be demanded so urgently. It is just as well to keep in mind that both industry and labor are beneficiaries of government action and that such action during the war and the two years following has added not a little to the farmer's difficulties.

"It is well to remember also that our population is growing rapidly and that before many years there will be a home demand for even more of farm products than we are now producing. If during this period of agricultural distress we permit production to be shrunk to present needs by driving farmers from the land and into the cities, we shall be under the necessity of reclaiming at large expense the productive land which is now being abandoned. And if we should experience one or two years of short crops while this process is going on, the consuming population will find itself compelled to pay prices for farm products which will impose upon it a burden comparable to that under which the farmer has been groaning."

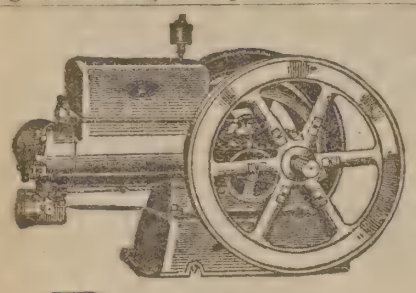
Egg Association Active

D. F. Mitchell, president of the Farmers' Union Cooperative Egg and Poultry association, with headquarters at Spokane, says that the product of over 50,000 hens is now being received by the association for cooperative marketing. He reports that poultrymen are signing up and sending in their contracts voluntarily. One day recently one producer signed up 600 hens and another 500. The association received from its members on one day recently 100 cases of eggs, the largest amount on any day so far. They represented a cash value of over $1200, prices at the time ranging from $12 a case for pullet eggs to about $15 for standards.

The association is marketing the bulk of its product locally, but is shipping some. An effort is being made to establish a market in Wallace and other mining centers of northern Idaho. Some shipments have already been made to that market.

LATE GRAPES UNDESIRABLE.

In the northwestern part of the state it is undesirable, as a rule, to plant the later varieties of grape, as the fruit does not mature every season, unless a gravelly location and other purely local conditions favor early maturity.



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WHITE COLLIE PUPPIES FOR CHRISTMAS delivery. Urbandale Farm, Oakley, Idaho.

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AMERICAN LADY, 28, FINE EDUCATION, dark hair, eyes, would marry farmer under 50, white, good habits; kind, home-loving. Send $50 for ticket, etc. Daisy Kester, Gen'l Del., Portland, Ore.

ANYONE KNOWING PRESENT ADDRESS of Wilber A. Stone, a carpenter, will confer a favor by notifying a close relative. Address J. S. Foreman, 152 N. Center st., Casper, Wyo.

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WHO WANTS A HOUSEKEEPER? 65; PREFer place where there is but one in family; good cook; neat and clean; must have reasonable wages. Box 262, Forest Grove, Ore.

SITUATIONS WANTED—Male 21

FRUIT GROWER, FIFTEEN YEARS' EXperience; capable of managing every detail of orchard work, wants employment. Boise valley preferred; best of references. William Carey, Route 2, Boise.

SCHOOLS AND COLLEGES 26

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GOOD QUALITY, MEDIUM SIZED ITALIAN prunes, 100 pounds, $7, unprepaid; 25 pounds, $3.25, postpaid in 4th zone; 9-pound bag, $1.30, express prepaid; satisfaction guaranteed. Fred Kubin, Salem, Ore.

FISH—4 LBS. SMOKED SALMON, $1; 4 LBS. Alaska salmon bellies, $1; 4 lbs. black cod, $1; 3 lbs. best codfish, $1; delivered by mail. Coffin Fish Co., Seattle, Wash.

ALMONDS, SOFT SHELL, 7 LBS., ROYAL apricots, 5 lbs., seedless raisins, 4 lbs., all for $3.60, delivered; satisfaction or money back. P. S. Vawter, Arbuckle, Calif.

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ALFALFA-SWEET CLOVER HONEY, PREpaid, second zone, 3 10-lb. pails, $5; 60 lbs., $8.30; two cans, $14.50, not prepaid. Harry Fisher, Prosser, Wash.

KING CLOVER'S ALFALFA-SWEET CLOVER honey; 60-lb. can, $7.50; two cans, $14.50; 60-lb., prepaid, second zone, $8.29. King Clover, Sunnyside, Wash.

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EXTRACTED HONEY—1 60-LB. CAN, $7.50; two, $14.50, collect; 3 10-lb. pails, $5, prepaid, third zone. Wells D. Rose, Sunnyside, Wash.

HONEY—FRESH ALFALFA-SWEET CLOVER honey; one 60-lb. can, $7.50; two cans, $14.50. A. L. Traner, Touchet, Wash.

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ALFALFA HONEY, SIXTY POUNDS, $7.50; two cans, $14.50, not prepaid. Skovbo, Hermiston, Ore.

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TOBACCO — KENTUCKY'S PRIDE; EXTRA fine chewing; 10 pounds, $3; smoking, 10 pounds, $2; 20 pounds, $3.50. Farmers' Club, Mayfield, Ky.

BEES PAY—INSTRUCTION BOOKLET FREE, with prices, supplies, queens, nuclei and pkg. bees. Ela Spencer Apiaries, Sawtelle, Calif.

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CERTIFIED WHITE LEGHORN QUALITY chicks from selected free-range, heavy-laying, utility hens, mated to double pedigree cockerels with authentic trapnest records. Our breeding flocks are inspected and accredited by the Sonoma county farm bureau. Safe arrival and full count of live, vigorous chicks guaranteed. Booking orders now for the spring season of 1924 delivery. Send for catalogue and attractive prices. Must Hatch Incubator Co., Inc., the world's largest electric hatchery, 445 Seventh st., Petaluma, Cal.

"FRESHLAID" WHITE LEGHORN CHICKS for 1924 will produce results. Thirteen years hatching of real chicks. High record males, vigorous, mature females, unlimited free range, a chick producing proposition hard to beat. We send out chicks that will make you a permanent customer. Discount on large orders. World's largest electric incubator. Free catalog. Freshlaid Farm, Colfax, Wash.

WHITE LEGHORN BABY CHIX OF UNUSUAL value, from especially well culled hens mated with full pedigreed males. Prices, per 100: January, $16; February, $15; March, $14; April, $12.50; May and June, $12; 100 per cent live, strong chix guaranteed. We are accredited by the Sonoma county farm bureau. The Pioneer Hatchery, 422 Sixth street, Petaluma, Calif.

ACCREDITED CHICKS — ALL OUR CHICKS for 1924 will be from accredited flocks mated with certified cockerels sired by hens with 225-egg record. A limited number of chicks from cockerel sired by our $1000 champion cockerel and our world's record pen of hens. Write for special prices for those who order early. Queen Hatchery, 1430 1st ave., Seattle, Wash.

"HENACRES" BABY CHICKS FOR 1924—Booking orders now. Early orders get delivery when wanted. We never have enough February, March or April chicks to meet the demand. Strictly high grade chicks at common chick cost. $22 per 100; $200 per 1000. Free catalog. "Henacres," Box A, Prosser, Wash.

BABY CHICKS—YOU GET THE BEST FROM successful breeders, using nothing but eggs from their own trapnested stock. Order them from the Carnation W. Leghorn Farms. My 16 years' experience in breeding enables me to give you entire satisfaction. Ernest W. Raush, Carnation Poultry Farms, Kent, Wash.

WHY DELAY?—PLACE YOUR ORDER FOR 1924 chicks with the White Hatchery, the hatchery with a reputation for good chicks. Safe arrival, full count guaranteed. Member Accredited Hatcheries, Sonoma county, "A" and "AA" stock. Price right. Send for catalog. White Hatchery, Petaluma, Calif.

S. C. WHITE LEGHORN CHICKS, 100 PER cent live, delivery guaranteed; 20 per cent books order. 100, $16; 500, $75; 1000, $140, postpaid; hatch only eggs from my own flock; no lights; trap records to 292. Absolutely only one grade. Catalog free. Roy S. Hands, B614, Cottage Grove, Ore.

TRAPNESTED WHITE LEGHORNS, HOLLYwood and O. A. C. stock. We offer 75,000 chicks, 25,000 hatching eggs, 5000 pullets. 11 years at the business. Satisfaction guaranteed. Booking orders now. Send for price list. Inwood Leghorn Farm, Corvallis, Ore.

BABY CHIX—S. C. W. LEGHORN; VIGOROus, heavy laying hens, mated to exp. station cockerels from 250 to 285 egg dams; all free range stock; $20 per hundred. Member Washington Accredited Hatchery association. L. G. Swinney, Spanaway, Wash.

PREPAID—WHITE LEGHORN CHICKS, OREgon Agricultural college stock; the famous egg producers; $16 per 100; prices on quantities. Only 10 per cent deposit. Safe arrival strong, husky chicks guaranteed. Russell Poultry Yards, Corvallis, Ore.

BEST QUALITY CHICKS AT MONEY-SAVING prices—100 per cent live delivery guaranteed. White Leghorns, Reds, Barred Rocks, White Rocks, Black Minorcas, Anconas. Write today for price list. Salem Chickeries, Salem, Ore.

ORDER ANCONA BABY CHIX EARLY, FROM prize stock; great layers of pure white eggs; easy keepers, small eaters. Full description in catalog on request. Brainard's Ancona Hatchery, 8332 46th ave. So., Seattle, Wash.

THE POEHLMANN HATCHERY FOR BETter quality W. L. chix from selected free range hens mated with double pedigree cockerels. Literature and price list sent on request. 610 Main st., Petaluma, Calif.

WHITE LEGHORN BABY CHIX FROM flocks mated to cockerels sired by hens with 250 to 285 egg record; $20 per 100; hatching eggs, $1.50 per setting. Surlay Poultry Ranch, W. L. Grider, Route 3, Kent, Wash.

1924 WHITE LEGHORN CHICKS FROM FAmous egg strains; Corvallis bred; low price, high quality; enlarged capacity to care for large orders as well as small. Oregon-Corvallis Hatchery, Corvallis, Ore.

LARGE, ENGLISH WHITE LEGHORNS, WINter laying strain; bred to lay, and sure do. Chicks, 100, $18; choice cockerels and yearling cocks, $5 each. Mrs. M. L. Russell, Route 3, Meridian, Idaho.

WHITE LEGHORN BABY CHICKS FROM MAture hens, mated to male birds with sire's dam's records of 252 to 316 eggs; $18 per 100; $160 per 1000. D. A. Gillette, R4, Yakima, Wn.

ANCONAS—BACKED BY OFFICIAL CONTEST records and splendid list of winnings in the west's leading shows. Booking chick and egg orders. Oscar Dunlap, Junction City, Ore.

SPECIAL PRICES ON GUARANTEED DAYold pullets; fall and winter delivery. Write for particulars. Eureka Hatchery, Petaluma, Cal.

SUPERIOR WHITE LEGHORN BABY CHICKS at very low prices for 1924 delivery. Write the Rio Linda Hatchery, Rio Linda, Calif.

BABY CHIX FROM TANCRED AND EXPERIment station strain W. Leghorns. Wax's Poultry Farm, Kent, Wash.

25,000 TANCRED WHITE LEGHORN CHICKS, prepaid, 14c each. Beverly Egg Ranch, Leona, Ore.

Turkeys.

PRIZE WINNING MAMMOTH BRONZE TURkeys; large boned and beautifully bronzed. Hens, $10 and up; toms, $15 and up. Urton's Farm, Genou, Mont.

THE BIG BONED NARRAGANSETT TURkeys, 30-lb. toms, 25-lb. hens, 1923 hatched, for sale. Mrs. C. C. Dillon, Warsaw, Mo.

22 YEARS A SPECIALTY BREEDER OF M. B. turkeys; prize-winning stock. Mrs. Frank Browning, R. 1, Nampa, Idaho.

MAMMOTH BRONZE TURKEYS, LARGE, well developed toms and hens. Joseph M. Loomis, Cherry Grove, Ore.

MAMMOTH BRONZE TURKEYS, PRIZE winners; unrelated stock. Mrs. Leo Coffin, Route 1, Eagle, Idaho.

MAMMOTH BRONZE TOMS, $10. MRS. WM. J. McMonigle, Yelm, Wash.

(Continued on the following page.)

POULTRY—Turkeys (Continued) 174

MAMMOTH BRONZE TURKEYS FROM NEW certain stock from Massachusetts and Missouri. Toms, $10 to $25; pullets, $8 to $10. Mrs. H. D. Moore, R1, Box 21, Hubbard, Ore.

MAMMOTH BRONZE TURKEYS—LARGE boned, well marked young hens and toms, $6 and $10 each; May hatched; toms, 24 lbs. Mrs. Dolly Hose, Sterling, Idaho.

GIANT BRONZE TURKEYS—SWEEPSTAKES at state fair; Los Angeles breeding and exhibition birds, with size, vitality, color. M. M. Roman, Planada, Calif.

PUREBRED MAMMOTH BRONZE TURKEYS, prize winning stock. Hens, $8 to 10; toms, $10 to $15. Order early. Mrs. K. Tontz, Beaverton, Ore.

PUREBRED MAMMOTH BRONZE TURKEYS (giant strain); hens, $5; toms, $7; satisfaction guaranteed. Mrs. J. R. Mulkey, St. John, Wash.

THOROUGHBRED MAMMOTH BRONZE TURkeys toms, $7; purebred Toulouse geese, $3.50 and $4. Mrs. Floyd Angstrom, Creston, Wash.

GIANT BRONZE TURKEYS FROM PACIFIC International winning strain; circular free. Herbert Stoneberg, Route "B," Eugene, Ore.

MAMMOTH BRONZE TURKEYS—CHOICE OF 500; sires, 45 lbs.; hens, $6 to $8; toms, $10 to $20. Harry Smith, Coupeville, Wash.

PUREBRED GIANT BRONZE TURKEYS, choice breeding stock; early hatched. Mrs. J. F. O'Neil, Riverside, Wash.

PURE BRONZE TURKEYS; PRICES RIGHT; satisfaction guaranteed. Arthur Britain, Winlock, Wash. Route 2.

TURKEYS — THOROUGHBRED GIANT Bronze of real merit. J. Lewis Johnson, Box 69, Eugene, Ore.

GIANT STRAIN PUREBRED MAMMOTH Bronze turkeys. Mrs. C. R. Lowery, Route 2, Boise, Idaho.

MAMMOTH BRONZE TOMS, EXCELLENT breeders. Mrs. Peter Aschenbrenner, Ferdinand, Idaho.

BOURBON RED TURKEYS, $8 AND $6; TOULOUSE geese, $3 each. Mrs. Wm. Emery, Macleay, Ore.

PUREBRED MAMMOTH BRONZE TURKEYS, toms, $7; hens, $5. D. A. Roby, Creston, Wash.

MAMMOTH BRONZE TURKEY TOMS, $8. Amanda Erb, Hubbard, Ore., R2, Box 86.

EXTRA LARGE BRONZE TURKEY TOMS, $10 and $15. Mrs. Don Whittig, Boise, Idaho.

GIANT BRONZE TURKEYS; TOMS, $10; PULlets, $5. V. McKimmy, Melba, Idaho.

PUREBRED MAMMOTH BRONZE TURKEYS. Mrs. S. L. Maltby, Rogerson, Idaho.

Miscellaneous Poultry.

IMPERIAL PEKIN DUCKS, PRIZE WINNING, long bodied, heavy kind; choice young drakes, $3; eggs and baby ducklings; low prices. Mammoth Bronze turkeys, toms, $8 to $12. H. L. Moody, Parkland, Wash.

JERSEY BLACK GIANTS, MARCY STRAIN, descendants Madison Square garden winners; good layers, good rustlers, hardy and giants. Write for prices. R. H. Wallace, Carkston, Wn.

PULLETS—CHOICE W. L. PULLETS, APRIL hatch; husky, free range birds of Hollywood strain; heavy laying stock; ready for the laying pens; $1.85 each. Pulletpens, Prosser, Wash.

HUNTS BARRED ROCKS, UTILITY COCKerels from the best egg producers, Imperial Ringlets, both matings. Prices right, satisfaction guaranteed. W. A. Hunt, Lebanon, Ore.

PURE BARRED ROCK COCKERELS; good laying strain. Also a few Buff Orpington cockerels. Write to Mrs. A. A. Nafziger, Salem, Ore. R7, Box 151.

APRIL HATCHED ROSE COMB AND SINGLE Comb Black Minorca cockerels; bred for exhibition and utility. Oakley Durham, Polson, Mont.

THOROUGHBRED FAWN INDIAN RUNNER ducks and Barred Rocks; male and females, $1.50 up. C. A. Muths, Route 1, Salem, Ore.

JERSEY BLACK GIANTS, YOUNG STOCK FOR sale, and two-year-olds, guaranteed purebred. E. M. Chambers, Box 601, Bovill, Idaho.

SINGLE COMB REDS, SHOW BIRDS. BREEDers write for prices. Peter Jessen, Harbor Heights, Magnolia Beach, Wash.

BARRED ROCK COCKERELS, IMPERIAL ringlets; good laying strain; price, $5, $7, $10. J. H. Prutes, Boardman, Ore.

USED INCUBATORS AND BROODERS, Queens, Cyphers, St. Helens. Hi-Quality Poultry Ranch, Yelm, Wash.

S. C. BROWN LEGHORNS, PEDIGREED stock. Write your wants to E. H. Rosenkranz, Colfax, Wash.

BARRED ROCK COCKERELS, HIGH PRODucing hens, O. A. C. strain. Chas. Halford, Lebanon, Ore.

PRINTING FOR POULTRY MEN. EMPIRE-Pacific Printing Co., Auditorium bldg., Spokane.

FOR SALE—ONE FOUR-YEAR-OLD PEAcock. Price $25. Clair Donker, Aumsville, Ore.

ALLEN'S ROCK AND LEGHORNS, WIN, LAY and pay. Write D. W. Allen, La Conner, Wn.

PUREBRED BUFF ORPINGTON COCKERELS, $3; pullets, $2. H. M. Cade; Okanogan, Wash.

PRIZE WINNING BARRED ROCK COCKERels. C. H. Murrey, Medford, Ore.

WHITE WYANDOTTE COCKERELS, $2 EACH. Fred Hoffman, Albion, Wash.

POULTRY AND LIVE STOCK WANTED 175

WE GUARANTEE TO PAY THE HIGHEST market price for your poultry and live stock. Owing to the constant changes in the market we are unable to quote prices in this paper from week to week. We will furnish tags and prices when you are ready to ship. Write us what you have to sell. Prompt returns. John Lewis & Co., Spokane, Wash.

DOLLARS FOR YOUR EGGS—WE PAY THE top market prices for your eggs and poultry. Daily cash remittances. McClintock-Trunkey Co., produce department, Spokane.

WE PAY TOP PRICES FOR YOUR LIVE OR dressed veal, hogs and poultry. Your check by return mail. Shipping tags on request. M. & J. Packing Co., Spokane.

TOP PRICES PAID FOR CREAM, EGGS, poultry, turkeys, geese, ducks. Inland Products company, Second at Cedar, Dept. E, Spokane, Wash.

LIVE POULTRY WANTED — WE REMIT promptly at market prices. Commercial Creamery Co., 1327½ Railroad, Spokane, Wash.

WE WANT YOUR TURKEYS, GEESE, POULtry and eggs; highest prices. Hotchkiss Produce company, Spokane.

WANTED—200 TURKEY HENS; PAY HIGHest market price. Sunnyslope Hill, Grand Dalles, Wash.

FARMERS' WANT ADS

This is the farmers' "want," "sale" and "exchange" department for small advertisements of farmers, including live stock and poultry.

Advertising rates for ads running 1 to 3 times, 10c per word per insertion, with a special rate to Farmer subscribers, as follows: Ads running 4 to 12 times, 9c per word per insertion; ads running 13 times or more, 8c per word per insertion.

All commercial and land advertising, 10 cents per word per insertion. Open also to nonsubscribers.

In using these columns advertisers must observe (1) No advertisement will be accepted containing less than 10 words per insertion. (2) Every word, number and initial, including name and address, must be paid for. (3) New advertisements, changes of copy or cancellations must reach general office, Spokane, Wash., 10 days in advance of publication date. (4) Cash must accompany order.

Above rates include insertion in The Washington Farmer, The Idaho Farmer and The Oregon Farmer, which constitute the Pacific Northwest Farm Trio, 40 Review building, Spokane, Wash.

POULTRY AND LIVESTOCK WANTED 175 Continued.

SHIP YOUR POULTRY AND EGGS TO THE Washington Meat & Poultry, Spokane, Wash.

LIVE STOCK 177

FOR SALE—ALL REGISTERED STOCK; twenty Shorthorn bred cows and heifers, four Shorthorn bulls; Poland China boars and gilts, Chester White sows, to farrow soon; O. I. C. boars of serviceable age. A few gilts, all at farmers' prices, to sell quick. Elton Webb, Halfway, Ore.

FOR SALE OR EXCHANGE—PUREBRED registered Guernsey bull, Mildred's Topsy Boy, two nearest dams average milk, 16,182 lbs.; fat, 772.8 lbs. Age 5 years; daughters now milking; gentle and easy to handle. Grange Warehouse Co., Oso, Wash.

REGISTERED SHORTHORN BULLS OF quality and breeding; red, white or roan; polled or horned; of serviceable age or younger; priced to sell. Wm. Mulhall, Buena, Yakima county, Wash.

FOR SALE—FIVE HEAD REGISTERED Guernsey bull calves, nicely marked, from high producing cows. Priced at $50 each for quick sale. Kineth Farms, Coupeville, Wash.

DUROC PIGS, $15 EACH; REGISTERED Great Orion Sensation breeding, either sex. Order now, they won't last. Marella Farm, Hagerman, Idaho.

MAY ROSE PUREBRED GUERNSEYS, BOTH sexes; calves and bred heifers, at prices farmers can pay. Noble Bros., Bow, Wash.

PUREBRED, BIG TYPE POLAND CHINA boars, ready for service; two gilts, weaned pigs. J. K. Jorgensen, Dietrich, Idaho.

FOR SALE — CHESTER WHITE BOARS. Write for prices. Booking orders for bred gilts. H. S. Curtis, Palouse, Wash.

HIGH CLASS DUROC JERSEY SWINE. Young stock for sale; bank references. Dimick Stock Farm, Hubbard, Ore.

FOR SALE—PUREBRED POLAND CHINA pigs, White Wyandotte cockerels. Fred M. Schmidt, Trout Lake, Wash.

DUROC-JERSEY SWINE, BOTH SEXES FOR sale; booking orders for bred gilts. Stadacona Farms, R1, Spokane.

BRED HAMPSHIRE EWES AT BARGAIN prices, also twenty ewe lambs. J. G. S. Hubbard & Sons, Monroe, Ore.

REGISTERED O. I. C. HERD BOAR, FARrowed April 4, 1922. Price $50. S. J. Bendtsen, Timentwa, Wash.

CHOICE DUROC JERSEY SERVICE BOARS, open and bred gilts; priced to sell. Geo. De Bok, Oregon City, Ore.

WANT 12 POLAND CHINA SOWS, MED. OR large type, short legs, bred. Write Geo. H. Johnson, Gold Hill, Ore.

MILK GOATS—REGISTERED SAANENS AT prices that will please you. Ferd. H. Dietzel, Portland, Ore.

DUROC JERSEY PIGS, $5 EACH. MAMMOTH Toulouse geese, $6 each. W. D. Good, Mt. Vernon, Wash.

APRIL DUROC GILTS, REGISTERED, PRIZEwinning stock, $25 each. Arvid Johnson, Plaza, Wash.

FOR SALE—9 REGISTERED GUERNSEYS; 2 bulls and 7 females. Robert McClay, R8, Salem, Ore.

HAMPSHIRE BOARS, PRIZE WINNERS; cheap for quick sale. E. O. Green, Monroe, Wash.

MILK GOATS, TOGGENBURG BRED DOES, $20 to $25; bucks, $30. A. Teal, Falls City, Ore.

REG. SHROPSHIRE AND HAMPSHIRE rams. Write McK. Edwards, Valley, Wash.

FOR SALE—90 HEAD PUREBRED HAMPshire ewes. Wm. Sturges, Jerome, Idaho.

HEREFORD BULLS FOR SALE OR EXchange. Frank Roberts, Westport, Wash.

EXTRA FINE REGISTERED O. I. C. PIGS. E. H. Thieman, South Prairie, Wash.

MILK GOATS, BRED DOES, $10 TO $25. FANnie Branson, Dallas, Ore.

HAY FOR SALE 209

ALFALFA, GRAIN HAY. TIMOTHY AND straw; guaranteed quality; prompt shipment. Prices upon application. Richard Nyman, Walla Walla, Wash.

HARNESS and SADDLERY 189

SEND FOR FREE HARNESS AND SADDLE catalog today; cut out the middleman, buy direct from the manufacturer. Lowest prices in the west; satisfaction guaranteed. Established 1881. Write Pierce Harness Co., Dept. T, Spokane, Wash.

MONEY TO LOAN—Real Estate 234

THE FEDERAL LAND BANK OF SPOKANE makes 5 per cent loans in any county in Oregon, Washington, Idaho or Montana. See Secretary-treasurers of Farm Loan Associations. A. W. Cauthorn, director, 762 East Burnside, Portland, Ore.

HOTELS 300

WHITE'S HOTEL AND RESTAURANT, ROOMS $1 and up; special weekly rates. Stevens and Sprague. Right on the corner; 5 minutes from all depots. In the heart of the business district, Spokane.

JOB PRINTING 372

CHRISTMAS AND NEW YEAR'S CARDS, LETter heads, business cards, wedding announcements and invitations, circulars, sales bills and other kinds of printing. Peterson & Ross Printers, 815 Main ave., Spokane, Wash.

WEDDING ANNOUNCEMENTS AND INVItations, catalogs, booklets, high school annuals, letter heads, envelopes, cards, butter wrappers, etc. Union Printing Co., 412 First ave., Spokane, Wash.

TANNING 425

ANY KIND OF HIDE TANNED WITH HAIR on, or for leather. Fur and taxidermy work done to order. M. R. Monr Co., 521 Sprague, Spokane, Wash.

TANNING (Continued) 425

WE WILL TAN YOUR COW OR HORSE HIDE for robes or coats, and guarantee our work. We are custom tanners, manufacturers and taxidermists. Write for prices. Spokane Fur Tanning Co., 7 Pine st., Spokane.

TAXIDERMISTS 426

DEER HEADS AND BIRDS MOUNTED, HIDES tanned and made into rugs and robes. Withers Bros., 913 Sprague ave., Spokane.

PATRONIZE AN IDAHO TAXIDERMIST—"The best in the northwest."—O. V. Jenkins, taxidermist, Boise, Idaho.

FURRIERS 429

FURS MADE TO ORDER, REPAIRED AND remodeled. A. L. Kish, Boise, Idaho.

KODAK FILM DEVELOPING 472

FREE ENLARGEMENT WITH 75C ORDER high gloss print. Spokane Film Co.

FILMS DEVELOPED FREE—KODO, THE PIcture King, 815 Stevens, Spokane.

MATERNITY HOMES 497

MATERNITY HOSPITAL; STRICTLY PRIvate; doctor in attendance; prices reasonable. Mrs. Elizabeth Peel, matron, W1324 Broadway, Spokane.

BUSINESS OPPORTUNITIES 516

1-3, POSSIBLY 2-3 INTEREST IN FIRSTclass incorporated hardware; $3500 cash, balance terms. James Calkins, Nampa, Idaho.

BUILDING MATERIAL 588

TACOMA SASH & DOOR CO., 15TH AND Dock, Tacoma, Wash. Direct selling means direct saving. These prices demonstrate: Chicken house sash, 20"x23," 75c; other sizes in stock. Chicken house skylights, 36"x40," glazed, $1.95; western Washington experiment station recommends this size. Sash and doors correspondingly low priced. Prompt delivery, careful filling of orders guaranteed. Catalog No. 1 is yours for the asking.

TO PATCH A HOLE OR BUILD A HOME use Perfection Plaster Wallboard. Easily handled with hammer and saw; fireproof, waterproof. Western Wallboard Co., Seattle, Wash.

SEEDS 620

CHOICE ALFALFA SEED, 21C, 23C LB.; choice red clover, 23c, 25c lb.; choice alsike clover, 16c, 18c lb. Veazie Seed Co., Jerome, Idaho.

HUNGARIAN VETCH, APHIS RESISTANT, hardy, superior forage crop; 50 lbs. postpaid, $3.50. Murphy's Seed Store, Albany, Ore.

BUY YOUR YELLOW SWEET CLOVER SEED, now 15 cents pound. Cloyd Clark, La Grande, Ore.

NURSERY STOCK 621

RELIABLE TREES AND PLANTS—PRUNES, apples, pear, cherry, peach, apricot, grafted walnut and filbert trees, gooseberries, currants, etc., at attractive prices for early orders. Send your want list today for quotations. Benedict Nursery Co., 185 E. 87th st. N., Portland, Ore.

NURSERY STOCK, ALL KINDS—GRAFTED walnuts, filberts, prunes, peach, apple, pear, cherry, etc. Berries, etc. We sell direct—we save you money—we supply the best. Send right now for catalog. 34 years in business. Carlton Nursery Co., Carlton, Ore.

IMPROVED FRENCH PRUNES, ITALIAN prunes, apple, cherry, pear, peach, franquette grafted walnut and filbert trees. Order direct and save agents' profit. Fruitland Nursery, 161 South 14th st., Salem, Ore.

TREES—NOW BOOKING MAIL ORDERS AT reduced prices for limited time only. Apples, pears, peaches, nut trees, prunes, cherry, small fruits, etc. Live agents wanted. Lafayette Nursery Co., Lafayette, Ore.

PLANT ISLAND BELLE GRAPES, THE BEST commercial grapes of the northwest. Write for prices and directions how to grow them profitably. E. H. Urban, Box 777, Bremerton, Wash.

NURSERY STOCK—PRUNES, WALNUTS, FILberts, fruit trees of all kinds, gooseberry and small fruits. Buy direct and save 50 per cent. Brooks Nursery, Lafayette, Ore.

TREES—CHERRY, PEAR, PRUNE, APPLE, walnut, filbert. Mazzard cherry seedlings. Prices based on production costs only. Homer R. Brixey, McMinnville, Ore.

NURSERY STOCK SOLD DIRECT TO PLANTers; apple trees a specialty; no agents employed; can save you money. Write for prices. Lawson Nursery, Gates, Ore.

FILBERT AND WALNUT TREES, THE BEST paying crops for the northwest. Write for prices on the different grades. Villa Nurseries, Route 1, Portland, Ore.

STRAWBERRY PLANTS—SIXTEEN VARIEties. Asparagus and Munger black caps. Prices low. Brigg's Fruit Ranch, Olympia, Wn.

FARM LANDS FOR SALE 651

GET AN IRRIGATED FARM IN SUNNY Southern Alberta, and assure yourself of a steady income. Favorable climate, rich soil and ample moisture mean good crops every year; low priced land; easy terms. Alfalfa, corn, wheat, oats, barley, vegetables, small fruits, etc., all yield heavily. Wonderful country for livestock. An opportunity to make a real attractive farm home near railways, town, good schools. Write for descriptive booklet to the Irrigation Council of Alberta, 12 Provincial building, Lethbridge, Alberta.

WILL SACRIFICE FINE 600-ACRE RANCH at Yelm, Washington; 280 under irrigation; land adjoining selling up to $100 per acre; all stock, machinery and equipment included; house, barn, goat shed, 2 large chicken houses and other outbuildings; worth at least $36,000, will take $20,000; retiring, reason for selling; don't fail to at least investigate. C. W. Boost, owner, 606 Grand ave., Portland.

$5800—TWENTY ACRES; GOOD BUILDINGS, springs, orchard; $4300 cash. Sarah Gibbs, Route 3, Boring, Ore.

$8500—SIXTY ACRES, NEAR SCHOOL; creek; 25 cleared; $6500 cash. Edward Koeble, Route 4, Aurora, Ore.

FARM LANDS FOR SALE (Continued) 651

IRRIGABLE FARMS FOR SALE OR RENT—Farming is profitable on irrigable land in Southern Alberta, because the soil is fertile, the water supply is ample and the climate is favorable, crops are therefore practically sure. All kinds of livestock thrive. Whole or partly irrigated farms can be bought at prices ranging from $12 to $30 an acre, plus irrigation costs, or can be rented on favorable terms, with an option to purchase later. Near towns, railways, markets, schools. Get further information from the Irrigation Council of Alberta, 12a Provincial building, Lethbridge, Alberta.

20 ACRES CULTIVATED VALLEY LAND; 3½ acres berries, small house, large chicken house, all outbuildings; a real berry and poultry ranch; $1600; terms. 80 acres fine land; 45 cultivated, balance pastured; 8-room modern house, all outbuildings; plenty fruit; 8 cows, some young stock; fine team, all machinery. A real farm; $7800; terms. Chas. D. Edwards Co., Centralia, Wash.

CLEARED MEADOW LAND; FINE FOR POtatoes, poultry, berries; few feet to paved highway, near several thriving towns; half mile to railroad, store, sawmill, schools; $100 per acre in 5, 10 and 20 acre tracts. Easy down payment, balance long time, 6 per cent. The finest land in Western Washington at the price. Full information from Carter, MacDonald & Miller, 208 Columbia st., Seattle, Wash.

HAY AND STOCK FARM OF 1000 ACRES, 50 miles northeast of Spokane; about 450 acres meadow in timothy, clover and oats, balance timbered pasture, with good grass; extensive buildings and good water. Price $65,000, payable one-fourth cash, balance in annual installments. Might consider some trade. Oregon Mortgage Co., Spokane.

200-ACRE STOCK RANCH; 120 CULTIVATED; five-room bungalow, three springs, water piped to house, barns, garden; outlying range surrounds place; good opportunity; must sell account of age; price reduced to seventy-five hundred; federal loan four thousand; improvements worth six thousand. A. E. Moore, Central Point, Ore.

WONDERFUL FILBERT, WALNUT AND broccoli land; river bottom and bench; range land accompanying, sixteen hundred acres; good road, highschool; near; sell all or subdivide; prices right. Your opportunity. Inquire owner, T. B. Davis, Glide, Douglas County, Ore.

BIG OPENING SALE OF YAKIMA VALLEY farm land, under an assessed state and government approved irrigation project; best, deep soil; close to town and good roads. Price $25 per acre and up. Very easy terms. Western Lands, Inc., owners, 918 Green bldg., Seattle.

ON PUGET SOUND—12 ACRES, WITH BEACH frontage; spring water; good soil; partly cleared; plenty of wood; near clam and oyster beds; good fishing and hunting. Price $1075; terms. Charles Somers company, Alaska bldg., Seattle.

BIG LUMBER COMPANY LAND SALE—IN Skagit county; 40-acre tracts, $1400; $200 cash, balance easy. Lots work for the settler. Splendid district, roads, schools, towns, information free. H. C. Peters, 726 3d ave., Seattle.

SELL YOUR PROPERTY QUICKLY FOR cash; no matter where located. Particulars free. Real Estate Salesman company, 501 Brownell, Lincoln, Neb.

320 ACRES, NEAR CALGARY, ALBERTA, 4¾ mi. from station; 170 broken; 46½ bu. wheat this season; nearly new land, $32. O. H. Woods, Airdrie, Alta.

FINEST CHICKEN RANCH IN STATE; reasonable terms. Owner, Route 3, Box [illegible], Tacoma, Wash.

FAILING HEALTH COMPELS ME TO SELL 5-acre poultry ranch; fully equipped; modern improvements. C. Dimmick, Gig Harbor, Wash.

200-ACRE IDEAL FRUIT AND POULTRY farm; 8 acres bearing orchard, irrigated. Price $5000; $2000 cash. Joe Wheeler, Trinidad, Wn.

126-ACRE DAIRY RANCH; IN FINE LOCAtion. For particulars write A. W. Bowen, Morton, Wash.

BARGAINS IN YAKIMA VALLEY LANDS. A. B. Capps, Grandview, Wash.

FARM LANDS—Wanted 654

NO COMMISSION — SELL YOUR FARM through Washington Farm Bureau Exchange, represented in 45 states. Lists of farms for sale by owners mailed free. 312 Lindelle bldg., Spokane, Wash.

HAVE INQUIRIES FOR NORTHWESTERN farms, spring delivery. Describe fully, state lowest price. R. A. McNown, 310 Willson bldg., Omaha, Neb.

WANTED—TO HEAR FROM OWNER HAVING farm for sale; give particulars and lowest price. John J. Black Chippewa Falls, Wis.

IDAHO AND WASHINGTON LAND BOUGHT sold and exchanged. Describe fully, stating price. David P. Weir, Spirit Lake, Idaho.

FARM WANTED, IMMEDIATELY—SEND particulars. Mrs. Roberts, Box 70, Roodhouse, Ill.

WANTED—TO HEAR FROM OWNER OF land for sale. O. K. Hawley, Baldwin, Wis.

FARM WANTED FROM OWNER ONLY—SEND full particulars. Ray Smith, Maplewood, Mo.

IRRIGATED LANDS—For Sale 663

OPENING OF THE NEW WHITESTONE IRrigation district—8000 acres of irrigable land. This project was constructed under the direction of the Department of Conservation and Development of the State of Washington. Adapted for diversified farming, livestock, dairying, poultry and fruit growing. A picturesque location in the foothills of the Cascade range, Okanogan county, Washington. Write for free picture folder, giving full details. E. C. Leedy, general agricultural development agent. Great Northern railway, Dept. 109, St. Paul, Minn.

FARMERS AND STOCK MEN—THE COLUMbia irrigation district has several tracts of irrigated lands of various sizes, in the famous Kennewick valley, with plentiful water supply. The district wishes to get these tracts into the hands of good farmers who will put them to work, and will make very low prices and long terms to such men. No speculators need apply. One tract 580 acres, especialy suitable for stock or dairy ranch. Write the secretary, Columbia Irrigation District, Kennewick, Wash.

THIS FARM IS SHOWING A GOOD PROFIT—$7000 income this year; 131 acres; close to Yakima; good water rights; excellent buildings; well equipped; good dairy herd. Good terms. Western Lands, Inc., Owners, 918 Green building, Seattle.

FARMERS ON SEQUIM, WESTERN WASHington irrigated land are universally prosperout. Write us. Washington Colonization company, Sequim, Wash.

FOR SALE OR EXCHANGE 703

160 ACRES GOOD LAND; 100 IRRIGATED; near Eureka, Mont.; for sale or trade for part irrigated foothill ranch or California land. Chas. R. Morse, Shoshone, Idaho.

The Red Lock—*The New Serial*

(Continued from page six.)

casement she waited for him to speak.

The man glanced out over the orchard; up the side of the cliffs; along the timber line that bearded them; came back to the eyes. The inquisitiveness had lessened; the roguishness deepened.

"You let 'im—lift y'u——!" he muttered.

With an odd, hard little laugh she darted in at the kitchen door.

CHAPTER V
Three Candles

THE last flare of sunset had followed the Wabash out under the rim of the west by the time Jack Warhope had finished his chores. Barely a memory of the day that had gone played up above the forest line far down the river, and the serene night was already beginning to polish up its stars, when he came back along the orchard path to the red-roofed cottage.

From the porch at the front of the house, as he paused at the side gate of the east yard, came the drone of the banker's voice, broken occasionally by the preacher's precise, jerky sentences.

Warhope listened a moment. The money lender was talking about a quarter-section that he had foreclosed on the day before. The woodsman had heard many an hour of that talk. With a shrug of his shoulders, he pushed the gate open and walked around to the kitchen door.

With a step that the woods had made light as a falling leaf he slipped in and stood motionless. The portly, pudgy form of Mrs. Curry, the housekeeper, was bent over the cook stove, busy with the supper—a meal to which she was doubtless giving the highest touches of her art, since the new minister was to be a guest. Mrs. Curry had a reputation to maintain.

The flit of a shadow and the clink of dishes in the adjoining dining room told the grinning intruder that Texie was "settin'" the table. For such an occasion there would be a white cloth, the best silver would be out, and there would be three candles instead of one.

The clink of the dishes ceased and the girl appeared in the doorway between the two rooms, a big apron hiding the bit of ribbon at her belt, her cheeks the redder from the heat of the kitchen. Seeing Jack, she paused, tried to look severe but failed.

"Now look at that!"

Mrs. Curry straightened, and exclaimed: "Big Jack! Mercy, how you can slip up on a body."

"Put 'im t' work, Mis' Curry. We don't 'low no loafers, do we?"

The housekeeper in reply was interrupted by a misbehaving skillet and she turned back to the stove.

The girl was carrying a large water pitcher. She handed it to the man and nodded toward the outdoors. He well understood that nod. It was not the first time that he had been so "invited" to bring the water from the spring.

As he turned to go he glanced back over his shoulder at her; motioned guardedly with his finger; jerked his thumb toward the spring and stepped outside.

The girl glanced toward Mrs. Curry, raised a finger in feigned caution and tiptoed after him. Once out in the yard, she unexpectedly flashed past him and darted toward the spring. He caught her at the roots of the big maple, and coaxed her for a delicious moment down on the rustic seat.

Supper was on the table, and Mrs. Curry had called the two men in off the porch, when that pitcher came back from the spring.

The woodsman set it down by the housekeeper's plate and took his place with the others. The banker dropped his hands in his lap, nodded toward the preacher and bowed his head.

The traditions of the Flatwoods called for a long and sonorous grace—a sort of sermonette—when the preacher was a guest, but the new minister seemed never to have heard of any such tradition. The grace he said was so short, so direct and concise, yet so beautiful in thought and diction that the banker looked at him in pleased surprise when it was over.

But for all the expectation aroused by the beautifully worded grace, it soon became apparent that, unlike most of his brethren of the cloth, the new minister was not a talkative man. Once or twice he spoke of his many travels in a way that caught the wide-eyed attention of the girl across the table from him, but for the most part he sat in dignified silence and listened respectfully to the banker.

For the matter of that, it was about all he could do—listen. The old man had one subject that he talked on—his business. He monopolized the hour with it; filled the preacher full of it; crowded out all other conversation, and mortified his daughter.

Supper over, there fell a moment of silence—the delicious breath of repose that almost always follows the evening meal in quiet country homes. The old money-lender sat marking on the table cloth with his fork, as if mapping out the boundary lines of other quarter-sections that he hoped to have the chance to foreclose on soon.

The girl seized the favorable moment—the first that had come—and leaning forward, said: "Now, Mr. Hopkins, tell us about—my brother—Ken. I've be'n wishin' all evening t' ask y'u."

Her father stopped marking on the table cloth and sat very still; the housekeeper crossed her knife and fork on her plate, as the Christians of Spain used to do in the days of the Moorish domination; the woodsman let his thoughts revel in the faultless profile of the girl's face. The preacher caught the wistful look in her eyes—the subdued eagerness of one who could not resist the desire to ask, yet dreaded the answer. He fumbled his napkin.

"Really, Miss—Colin, there is very little to tell. Your—brother was the—ah—most puzzling psychological problem that I ever tried to solve. He could have been one of the most brilliant scholars the institution ever turned out. He literally drank up everything the college had to give, and that without apparent effort—as the desert drinks the dew. His penmanship; his drawing; his command of English—very remarkable. I was his roommate and classmate, and yet I never saw him apply himself seriously to study. I don't think he did. And that was probably his limitation—learning came too easy to him. It can, you know."

He stopped, as if he had no more to say; stared at his napkin and folded it with careful precision.

"The president's letter said that—that——?"

The girl seemed unable to finish the question, but the preacher guessed what she wanted to know. He again fumbled his napkin, unfolded it, and looked around the table. It was an embarrassing moment.

"With all due respect to you, his family"—he glanced at Mrs. Curry and the woodsman—"and friends, though I would rather not speak of it at all, and should not do so, only that it is my duty as your minister to tell you the truth—Kenwood Colin was a very severe trial to the college authorities. His talent for learning was equaled only by his talent for mischief. Yet, wild as he was known to be, nobody thought that he would ever have forgot his father's name. He was deeply in debt before his very clever forgeries were even suspected, much less detected.

"Then came his sensational killing of a gambler over a card game, and his subsequent escape somewhere into the great underworld of the city. Since that, nothing more seems to have been heard of him."

There was a moment's silence. The girl leaned forward; her lips apart; her eyes wide.

"Pore Ken!" she said softly. "He couldn't he'p bein' what 'e was. It was the—red lock."

The preacher raised his spectacled eyes up from his plate and stared at the girl curiously.

"Red lock——?"

"Didn't you know 'e had it?"

The preacher looked his bewilderment.

"Then please, please, don't mention that you know it! Please, dont' ever! I 'lowed you knowed, bein' his room mate, or I wouldn't 'a' told. He was that 'shamed 'e had it, and alw'ys kep' it combed under so's it didn't show. Nobody in the Flatwoods but us and—Jack, and an ol' hunter we call Uncle Nick, knowed 'e had it."

The banker had been staring at the table cloth. He lifted his face.

"The 'curse of Colin,'" he commented thoughtfully. "He was a sea pirate in the days of Queen Elizabeth. 'Red Colin,' they called 'im. Looks like his blood would 'a' run out b' this time, but it hain't. Every three 'r four generations it shows up, gener'ly one child in a family with a lock o' hair as red as fire. Nobody would think a lock o' hair and a drop o' blood could set a child back hundreds o' generations t' what ol' 'Red Colin' must 'a' be'n, but it does.

"The minute I saw that red lock on Ken, I knowed 'e was doomed. I've licked 'im and reasoned with 'im and prayed over 'im—but I knowed all the time it wouldn't do no good. That's the main reason I sent 'im off t' the kind of a college I did—where ther' ain't nobody much but preachers a-runnin' it. He didn't like t' go t' that kind, but I hoped bein' throwed amongst men like that might head off what I knowed was in 'im."

The preacher leaned back in his chair; dropped his hands in his lap.

"Permit me to say," he observed in his jerky fashion, "that was as grave a mistake as you could possibly have made."

"Mebbe so," the old man answered. "But the devil 'imself couldn't 'a' coped with that boy."

The preacher seemed on the point of making some forceful reply or other; apparently reconsidered it; sat silent.

The old man beat the tines of his fork on the table; gazed absently at a candle, reached over and snuffed it.

"Ain't it strange," he went on, "how the past fangs the present—the past with its sins and blunders and imperfections? Now there's Texie, cradled in the same arms and nursed at the same breast, and she's as different f'om Ken as sunshine is different f'om the wo'st storm that ever wrecked the woods."

He picked up the fork, scraped into a heap some crumbs that lay about his plate; scattered them again.

The money-lender lay sprawled on the floor, in one hand an open letter, in the other an empty envelope.

The preacher put his napkin by. "Heredity plays many a queer trick," he said in a tone of finality.

In the silence that followed the old banker took the bunch of still unopened letters from his pocket, laid it on the table and began to sort them. The preacher looked around the room and, noticing the night at the windows, rose.

"If you will please excuse me, you remember I promised to run over to the parsonage for a few minutes, and Mrs. Mason probably retires early."

The others rose and gathered about him in polite protest, but the preacher insisted. Mrs. Curry picked up a candle and led the way into the sitting room, while Texie brought his tall hat from a rack in the corner. He took out his handkerchief, flicked away a speck of dust from the shiny crown of it, and stood gazing about, peering through the open door to the right into the room where the banker kept his safe and papers; into the bedroom at the left where the old man slept; past the fireplace and through the open door to the parlor, as if impressed—possibly amused—by the novelty of a Flatwoods home.

His eyes, searching the walls, came at last to the portrait of a woman, framed in gilt and hung above the fireplace.

The girl followed his gaze.

"My mother," she said softly. "Seven years ago she left us; the very year—Ken went off t' college."

"She had a serene face," the preacher putting his handkerchief back in his pocket as he turned away. The banker crossed the floor, picked up a key from the mantel and unlocked the door leading from the porch to the parlor.

"I 'lowed I'd better show y'u where y'ur room is b'fore y'u go, so's y'u'll know how t' git in if we're in bed when y'u come back. We Flatwoods folks turn in purty early."

He took the candle that Mrs. Curry was carrying and led the preacher in across the parlor to the spare bedroom opening from it on the east, where the two satchels and umbrella had already been carried.

"I 'low this might be called a preacher's room, purt nigh. Ain't nothin' but preachers slep' in it hardly sence it was built."

The old man chuckled as he led the way back to the porch, closed the parlor door, locked it and handed the key to the preacher.

Before leaving to keep his appointment the young minister turned to the housekeeper and peering into her genial face as if he had to strain his study-tired eyes to see at all said:

"This has been a most enjoyable evening. If all Flatwoods women are such wonderful cooks, I don't imagine many of them die single."

A blarey laugh exploded somewhere in the top of his throat and brought a gleam of white teeth through the heavily bearded lips.

He stopped a moment on the step and fumbled the tall hat.

"Miss—Colin, won't you please accompany me as far as your—ah—Whispering Spring and show me how to get a drink?"

The darkness hid the flush of color that played up into the girl's face. She glanced at the woodsman; turned to the preacher and followed him down the steps.

The big woodsman stood looking after them, stirred by an unfamiliar emotion to see Texie walk away into the dark with another man. Mrs. Curry and the banker went back into the house.

At the spring the preacher suddenly grasped the girl's hand in both his own, and held it with the same fervid eagerness he had shown that evening in front of the postoffice. She suffered her hand to remain slightly longer than before, then gently withdrew it.

"Miss—Texie—you will grant me the privilege of calling you by your first name, will you not?"

She did not answer.

"Your—brother, my—room mate, was very enthusiastic about his pretty sister. But even he did not do you justice. You are——"

He stopped abruptly, stared past her into the night, as if groping for words to clothe a thought unusual with him. The look of a tired student came slowly back to his face, and his shoulders drooped as if weary with bearing the burdens of others. Mumbling a further word or two he turned from her, crossed the foot-log with mincing step, and passed on through the orchard toward the parsonage.

The girl listened until there came the creak of a board as he climbed the fence, then walked back up the path and sat down on the porch step.

Words were never too plenty with the woodsman, even in his most fluent moments. He leaned against a post and looked down at her. She seemed busy with her thoughts. The silence was so deep that the clink of the dishes, as Mrs. Curry put them away, and the crinkle of the old banker's letters, as he sat reading them at the head of the dining room table, carried to them out on the porch. The lap of Eagle Run, pitching under the bridge at the River road, came up out of the park-like orchard and across the yard; the hoot of a distant owl boomed down out of the woods.

The man roused himself from the spell of the silence; stepped off the porch and sat down by the girl's side.

"What d' y'u think of him?" she asked.

It was characteristic of the woodsman that he should answer by another question. He ran his big hand up along the porch post and stared out into the dark.

"What d' you?"

The girl laughed—a contented little laugh like the lilt of the happy water at the bridge.

"Oh, I think he's——"

There came a groan from the dining room, and the sound of a heavy fall. They sprang up and dashed into the house, just as Mrs. Curry ran in from the kitchen. The money-lender lay sprawled on the floor, in one hand an open letter, in the other an empty envelope.

The girl darted across the room and bent above the shrunken figure.

"Jack——! Jack——!"

"Texie, no, don't be flustered. It's jist another one o' them faintin' spells. He'll be all right in a minute."

There was calm reassurance in the level gray eyes, in the big hand he dropped upon the girl's bowed head. He raised the old man in his great arms and laid him on a sofa at the side of the room.

Mrs. Curry had hurried back to the kitchen for cold water and cloths, and Texie was urging Jack to run for the doctor, when the old banker opened his eyes; stared around him in blank surprise; tried to rise; seemed astonished that he couldn't.

"Doctor!"—he panted hard for breath. "Who wants a doctor. It's jist another one o' them fainty spells. Look there——!"

He held up the letter. The girl glanced at it carelessly; then with a quick exclamation turned it toward the woodsman. And thus holding it between them they read it slowly, word by word.

"Somewhere in New York, May 2.

"Simon Colin, Buckeye, Ind.

"Sir: I caught a fellow with a card up his sleeve and called him. He beat me on the draw, and here I am. This girl here says I can't last till the ink's dry, and I'm not doubtin' her. She's always played

(Continued on page nineteen.)

FAMILY CIRCLE

ALICE W. BARLAND
EDITORIAL CONTRIBUTOR

Experience Letters

Dear Mrs. Barland: Will you please print in THE FARMER how to take the stain of raw linseed oil out of linen?

Your different remedies and recipes have helped us many times. A. W. C.

Dear A. W. C.: Linseed oil after it dries in is hard to remove, but perhaps some of the bright women who read this page will tell us how to do it.

Dear Mrs. Barland: Our family have been subscribers to THE FARMER for a good many years and have had many helpful suggestions from your page, so am asking for more information.

We are to shut up our house for the winter and possibly until next May and would like to know what to apply to our stoves so they will not rust. The climate here west of the Cascade mountains is very damp and everything made of iron rusts badly. MRS. P. M. R.

Dear Mrs. P. M. R.: Make a mixture of two-thirds boiled linseed oil and one-third coal oil and apply it carefully to all parts of your stoves and I think you will avoid the damage by rust. Leave your oven doors open. Go over a second time, if it seems necessary, with the mixture. A. W. B.

Dear Mrs. Barland: I have been a reader of THE FARMER for years, but have never had the courage to write. Since you have asked us to tell of our camping trips, I will tell you of mine.

How many of you have ever been to Hood's canal, which is located about 50 miles southeast of Olympia, Wash.? We went there several times the last summer and we certainly had a lovely time digging little rock clams and also butter clams, which we like better than the razor clams, which are found down on the ocean beaches.

My husband, who is a logger, has to work all week days, but when he would get home on Saturday nights I would have lunch enough put up to last all day Sunday and we would take the children and get into the car and go for our outing to the canal. Leaving home about 7 in the evening, we would arrive at the camping grounds about 10 o'clock and it is surely a beautiful ride.

We live in a small town which has two stores, a postoffice and our church. My husband works for the logging company, who employ 1200 men; the mill runs with two shifts, day and night.

Washington. MRS. J. C. M.

Dear Mrs. Barland: This is an answer to a question by "A Happy Sister" as to what goats are good for.

Milk goats are the poor man's friend and take the place of the cow. The milk is excellent for invalids and has saved the lives of many babies.

Goat's milk is very much richer than the milk of a cow and has a delicate flavor. In butterfat it is much richer than the cow's milk and makes good butter and fine whipped cream for cakes. It makes the finest of Swiss cheese, though the cream doesn't rise as fast as on cow's milk. Swiss cheese sells at $1 a pound and the goat's milk sells here (Eugene, Ore.) at 50 cents a quart. There is not near enough to supply the needs of the sick. It is so easily digested that the most delicate babe can digest it.

The goat will eat all kinds of weeds and kill them out and they will eat small brush and so are useful in clearing land. The male kids make excellent meat.

The goat carries her young five months, less two weeks, and is bred the same as a cow. She brings from one to three kids at each kidding.

I have one doe that brought me four kids in 11 months. She gave very nearly six quarts of milk a day. The Samman and some others breed only in the fall, but I prefer the Nubian, as they can be bred at any time of year. They also give far the richest milk of any breed known and have a furry coat instead of coarse, scraggy hair. The milk goats don't require so much of a fence as do the mohair breed. A good goat sells for from $50 to $150. MRS. IDA WALKER.

Eugene, Ore., 1989 Franklin boulevard.

Family Circle Girls

Dear Mrs. Barland: In seeking for new subjects to discuss on our page I recall that we have discussed about everything from the value of an education to "puppy love." It has made quite a mixture and has left a somewhat hazy idea of things in my mind.

In an honest effort to suggest some new subjects I think of the inexhaustible subject of better Christmas presents for fewer friends. Then what do you think of a discussion on ways to help others, to the end that all love-sick youngsters may forget their troubles in dealing out happiness to others, and thereby become just happy boys and girls again. Let us discuss the question, "What Can I Do for Others?" It is a question absolutely endless and we certainly can be helped by the answers given to the question.

Do you particularly enjoy writing letters? Do you write interesting letters? There are a great many sick boys and girls in various hospitals who would like very much to get a long, interesting letter to read and think about. Many have no relatives to write to them.

I have written many letters to these children and I hope they enjoyed reading them as much as I did writing them, for it is lots of fun.

Are you a wall flower? Many of us are and there seems to be no remedy for it. Suppose you try to help the wall flowers to have a better time at parties. Spend a few minutes talking to them. Make a little effort to cultivate their acquaintance and perhaps you will find them quite interesting. Ten chances to one they are just needing a little friendly attention to bring them out into the merry circle. Try it, boys and girls; you will at least be sure of making friends of them.

Let us not spend so much time thinking what can be done for us, but give more thought as to what we can do for others. I am sure we can make this old world a better place in which to live.

Idaho. Z. B.

Dear Mrs. Barland: In a recent number of THE FARMER I read an article about girls and boys going to high school. I am longing to go, but my father doesn't believe in an education; he says about the time I finish my schooling I'll get married.

What would you do in a case of this kind? Thanking you for advice, I am one who is longing for an education.

My Dear Girl: I always dislike to go against the opinions of parents, but in this case I must say that I think any parent who discourages a girl from going on with her education, for the reason that she may possibly marry soon after leaving high school, has a wrong idea altogether as to the value of an education.

The happiest marriages I have ever happened to know about have been between young people who became acquainted either in high school or in college. Suppose a girl does marry soon after she leaves school, that is all the more reason why she should have had that training.

The old idea that a wife and mother has no need for an education is entirely out of date among the best and deepest thinkers.

The more knowledge of a useful kind a woman has the better she should manage her home and the better mother she is able to become.

I would try to have a teacher take up the matter with your father and it may be he may be brought to see that you will be better able to manage your life if he sends you to high school. Your friend,

A. W. BARLAND.

A good old Friend

Remember the good old-fashioned mustard plaster Grandma used to pin around your neck when you had a cold or a sore throat?

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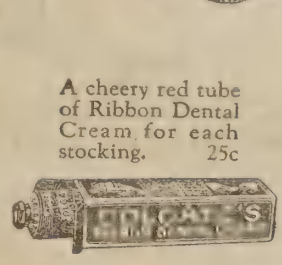

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Glance over the bargains on the "Want Ad" page.

High Points in News of the Week

Elsewhere in this paper is a digest of the first message of President Coolidge to congress. Congress met early last week, but for three days failed to organize because of differences between the regular republicans and the so-called progressive republicans over matters of rules and regulations in the house of representatives. Reorganization of the senate has not yet taken place, that body beginning the session with Senator Cummins of Iowa, president pro tempore, in the chair formerly occupied by Mr. Coolidge as vice president. In the house 17 so-called republican progressives refused to vote for Congressman Gillett of Massachusetts for speaker until agreement had been reached between members of the regulars and the progressives over matters of rules governing the operations of the house. This agreement being entered into, Congressman Gillett was elected by a vote of 215 to 197 for Congressman Garrett, the democratic candidate. Following organization of the house both houses met in joint session to hear the president's message. A large number of bills were then introduced and both houses adjourned until Monday of this week out of respect to the late President Harding and members of congress who have died since adjournment of the previous session.

Among the measures of importance that have been introduced are the following: Continued restriction of immigration; amendment to the transportation act so as to restore the powers of state railroad commissions and to repeal the rate and consolidation sections; prohibiting the appointment of members of congress to federal positions within two years following their retirement from office; deportation of aliens who violate the prohibition laws; a preliminary draught of the treasury department's tax-reduction bill as approved by Secretary Mellon and President Coolidge.

* * *

Announcement of the candidacy of President Coolidge for the republican nomination for president in 1924 was made Sunday night by Frank W. Stearns of Boston, who is known as his closest personal and political friend.

William M. Butler, republican national committeeman for Massachusetts, also a close personal and political friend of Mr. Coolidge, it was stated, will act as the president's personal representative in the campaign.

* * *

Second only to the opening of congress and the delivery of President Coolidge's first message, political interest centers in the election in England last week. Premier Stanley Baldwin was reelected to his seat in parliament, as were also former Premiers Lloyd George and Asquith. Nevertheless, neither the protectionist program of Mr. Baldwin nor the liberal programs of Lloyd George and Asquith were indorsed. The conservatives, headed by Mr. Baldwin, will have 259 members in parliament, the labor party 185, the liberals 148 and other parties 10. This results in a situation in which no party has control. Whether or not Premier Baldwin will resign in view of the fact that his protection platform has been defeated, together with six members of his cabinet who failed of reelection, is problematic, though his early resignation is considered probable. In such event, it is believed that the king would ask J. Ramsay MacDonald, labor leader, to form a cabinet, the labor party being second in strength. The possibility exists that the leaders of the several parties will join together and agree upon the formation of a coalition cabinet.

* * *

Secretary Work of the department of the interior stated last week that a new policy of administration of reclamation projects must be adopted, if abandonment of many projects is to be prevented. He gives figures covering 28 projects to show wherein estimates of the reclamation service on cost of development have been far below the actual cost. The cost of the 28 projects was originally estimated at $93,435,000, but up to June 30 of this year nearly $142,000,000 had been expended upon them. The original estimate of acreage to be irrigated was over 3,000,000, while the amount actually irrigated in 1922 was only 1,200,000 acres. The total amount unpaid by water-users on construction, maintenance, operation and water rentals on June 30 was over $132,000,000. The original estimate of cost per acre for all the area of the 28 projects was $30.57; the actual cost per acre on land actually irrigated up to June 30 was $117.94.

* * *

The tariff commission has reported findings from investigations showing that while the people have been paying from $8 to $11 per hundred pounds for sugar the total cost of it laid down in New York or other Atlantic coast cities has been a little more than $5, meaning that the sugar trade has been making enormous profits.

* * *

Senator Gooding of Idaho has introduced a bill in congress to create a $300,000,000 government corporation to handle wheat, a minimum price of $1.50 a bushel for No. 1 northern spring wheat being provided.

* * *

Five Mexican states are reported to be in rebellion against the central government under President Obregon.

* * *

Secretary of War Weeks is asking congress to enact a special measure permitting General Pershing to remain in active army service owing to his wide experience in military affairs. General Pershing will, under existing law, automatically be retired when, in 1924, he reaches the age of 64 years.

* * *

Another earthquake was reported from Japan recently. While considerable damage was done, the severity of the disturbance was insignificant compared to that of the great quake in September.

A VAST IMPROVEMENT.

Chimneys were first introduced into England only 700 years ago.

U.S. ARMY Goods Sale

Here's your opportunity to buy army goods by mail. Study these prices. You can't beat them.

U. S. A. sheep lined 42-inch coats..... $11.95 $11.95

U. S. wool O. D. breeches, reclaimed	$1.95
U. S. A. wool O. D. coats, new, 36 to 42, special	$1.95
U. S. marine coats, 34 to 44, at	$1.95
Six-buckle arctic overshoes	$2.45
O. D. wool serge shirts	$3.45
Full length wool pants, 30 to 36 waist, only	$2.98

WE PREPAY ALL POSTAGE—Give size and color desired. Make orders payable to J. B. Robinson.

WRITE FOR BIG PRICE LIST FREE

U.S. Army Supply Store
1310 Pacific Ave. Tacoma, Wash.
Reference: National Bank of Tacoma, Dept. T.

Farm Business and Markets Outlook

(Continued from page five.)

good cows and heifers, $3.50@4; fair to medium cows and heifers, $3@3.50; canners, $1.50@2.25; bulls, $3.25@4; light veal calves, $8@9; heavy veal calves, $6.50@8; stockers and feeders, $4@5.25.

Hogs—Prime mixed, $7.25@7.50; medium, $7@7.25; heavies, $4.25@6.50; fat pigs, $6.25@6.75; stockers and feeders, $5@6.25.

Sheep—Prime lambs, $9.25@10; fair to medium, $8.50@9.25; yearlings, $6.50@7.50; wethers, $5.50@6.50; mutton ewes, $3@5.

The Grain Market.

PORTLAND, Ore., Dec. 8.—Wheat—Hard white, Bluestem, Bart, soft white, western white, $1; northern spring, 97c; hard winter, western red, 96c.

Today's car receipts—Wheat, 121; flour, 8; corn, 3; oats, 2; hay, 9.

SEATTLE, Dec. 8.—Wheat—Hard, soft and western white, Big Bend Bluestem, $1.01; hard red winter, soft red winter, northern spring, western red, 99c.

Yesterday's car receipts: Wheat, 58; corn, 5; rye, 1; flour, 8.

Grain futures: Wheat—Bluestem, Bart, soft white, western white, December, January, $1; northern spring, December, January, 97c; hard winter, December, January, 96c; western red, December, 96c.

Hay—Unchanged.

WALLA WALLA, Dec. 8.—Bluestem, 89c; Club, 87½c; Turkey red, 85c.

DAVENPORT, Wash., Dec. 8.—Bluestem, 81c; Gold Coin, 81c; Club, 81c; northern spring, 79c; Turkey red, 79c.

COLFAX, Wash., Dec. 8.—Red, 80c; white, 82c. Oats, $28 ton; barley, $25.

DAYTON, Wash., Dec. 8.—Club, 85c; red, 82c.

LEWISTON, Idaho, Dec. 8.—Red, 79c; white No. 1, 81c.

RITZVILLE, Wash., Dec. 8.—Bart, 83c; red, 80c; Fife, 80c.

Hay and Feed Grain.

SPOKANE, Dec. 8.—Wheat—Feed wheat, $36 ton. Oats—$38 per ton; rolled, $40. Corn—$45 per ton; cracked corn, $47 per ton. Barley—$33 per ton; rolled, $40. Bran—$27 per ton. Bran and shorts—$28 ton. Shorts—$32 ton.

Hay—Alfalfa, $20 ton in ton lots, delivered.

PORTLAND, Dec. 8.—Millfeed—City delivery prices: Mill run, $29 per ton; middlings, $41; scratch feed, $48; rolled barley, $42@44; cracked cron, $47; rolled oats, $43.

Hay—Buying prices f. o. b. Portland: Alfalfa, $17@18 ton; cheat, $13.50@14.50; valley timothy, $19@20; eastern Oregon timothy, $20@22; clover, $14@15; oats, $15@16; oats and vetch, $15.50@16.50; straw, $8.50 per ton.

General Produce.

PORTLAND, Dec. 8.—Butter—Cubes, extras, 45c lb; prints, parchment, wrapped box lots, 49c; cartons, 50c. Butterfat, 50c, delivered Portland.

Eggs—Buying prices, white hennery standards, 43c; mixed color standards, 40c. Selling prices, Front street: Selects, 49@50c; candled ranch, 46c; pullets, 38c; storage white, 38c; association selling price, cash at store, extras, 48c; pullets, 38c.

Cheese—Price to jobbers, f. o. b. Tillamook: Triplets, 30c; longhorns, 31c; loaf, 30c per lb.

Poultry—Hens, 16@22c; springs, 20c; ducks, 15@18c; geese, young, 15c; turkeys, live, fancy, 25c; dressed, fancy, 30@32c.

Dressed meats—Veal fancy, 14@14½c; pork, fancy, 9½@10c per pound.

SPOKANE, Dec. 8.—Poultry, live weight—Hens, 4 lbs and over, 18c; light hens, under 4 lbs, 12c; springs, 16@20c; old roosters, 8c; young geese, 15c lb; spring ducks, 16c lb.

Fresh ranch eggs—$10@12; fancy poultry farm, $13; pullet eggs, $10.50@11.

Butterfat, 49c.

SEATTLE, Dec. 8.—Eggs—Select local ranch, white shells, cases included, 47c per doz f. o. b. Seattle; mixed colors, 45c per doz; pullets, 29@30c per doz; common, 29c per doz; cases returned to shippers, 1c less; do to country stores, f. o. b., 45c per doz, loss off; eastern Washington and Idaho, subject to candling, 45c per doz.

Butterfat—F. o. b. Seattle: A grade, 52c per lb; raw milk, $2.30 per cwt.

Poultry—Hens, 4½ lbs and up, 23@24c per lb; do over 3½ and under 4½ lbs, 17@18c; per lb; springs, 2 lbs and heavier, 20c per lb; do 1 to 2 lbs, 28c per lb; hens, 3 to 3½ lbs, 15@16c per lb; do dry picked, 2c above live; fryers, roasters, 2½ lbs and up, 20c per lb; capons, live, fat, 6 to 10 lbs, 30c per lb; do dry picked, fancy dressed, 34c per lb; old roosters, 12c per lb; Belgian hares, 3½ lbs and heavier, live, 14c per lb; do dressed, 18c per lb; geese, fat, live, 16c per lb; do dressed, 20c per lb; spring ducklings, 3½ lbs and heavier, 17c per lb; turkeys, fat, dry picked, 12 lbs and heavier, 30c per lb; do 8 to 15 lbs, 28c per lb; do live, 25c per lb; squabs, large, dressed, $4 per doz; pigeons, $2; guineas, live, $8 per doz.

Hides, Pelts, Wool.

PORTLAND, Dec. 8.—Hides—Salted hides, all weights, 4c; green hides, all weights, 3½c; salted bulls, 4c; green bulls, 3s; salted or green calf, 10c; salted or green kip, 7c; hair-slipped hides and skins, half price; flint dry hides, 9c; dry salted hides, 5c; culls and damaged, half price. Horse hides, green or salted, each $1; colt hides, each 25c; dry horse with tail and mane on, 50c.

Pelts—Flint dry sheep pelts, long, 20c; flint dry sheep pelts, short, 10c; flint dry sheep pelts, pieces, 10c; flint dry shearings, each 5@10c; dry salted pelts, 15c; salted pelts, longs, each $1@1.50; salted pelts, short, each 50c@$1; salted goats, long, $1@1.50; salted goats, short, each, 50@75c; dry goats, long, per lb, 12c; dry goats, short, each, 10@30c; goat shearings each, 5@10c.

Mohair—Long staple, 30c per lb; short staple, 20c lb; burry, 15c lb.

Cascraa bark—Peel 1922 or older, 12c; new peel, 1923, 11c per pound.

Tallow—No. 1, 4½c; No. 2, 3½c lb; grease, 2½c lb.

Oregon grape root—Per lb, 4c, delivered Portland.

Hops—1923 crop, 18@23c lb.

Wool—Valley wool, fine, 28@30c; medium, 28@30c; coarse, 25@27c; Cotswold and braid, 20c; matted, 15c; eastern Oregon, 28@33c.

Range of Live Stock Prices for Week Ending December 8

CATTLE.	Chicago.	Spokane.	Portland.	N. Salt Lake.
Choice and prime heavy steers (1100 lb. up)	11.00@12.85			
Good heavy steers	9.75@11.50			
Medium heavy steers	8.00@10.35			
Common heavy steers	5.65@ 8.35			
Choice and prime light steers (1100 lb. down)	11.25@12.75			
Good light steers	10.10@11.50			
Medium light steers	8.15@10.35	6.50@ 7.25	6.50@ 7.50	7.00@ 7.65
Common light steers	5.50@ 8.35	4.25@ 6.75	4.25@ 6.50	4.00@ 7.00
Common to choice butcher heifers	4.75@10.90	3.00@ 4.75	3.00@ 5.00	2.85@ 4.75
Common to choice butcher cows	3.35@ 8.00	2.75@ 4.25	2.50@ 4.00	2.00@ 4.50
Bologna and beef bulls	3.25@ 6.50	3.25@ 4.00	2.75@ 4.00	2.50@ 3.50
Canners and cutters, cows and heifers	2.25@ 3.65	1.50@ 2.25	1.50@ 3.00	1.00@ 2.00
Canner steers	3.25@ 5.50			
Medium to choice light veals	7.25@ 9.75	8.00@ 9.00	8.50@ 9.00	6.00@ 7.00
Common to choice heavy veals	6.00@ 9.50	6.50@ 8.00	4.00@ 8.50	4.50@ 6.00
Common to choice feeders (750 lb. up)	5.50@ 7.65	4.00@ 5.25	5.00@ 5.50	4.00@ 6.00
Common to choice feeders (750 lb. down)	4.50@ 7.65			
Common to choice stocker cows and heifers	3.00@ 5.00			2.50@ 3.50
HOGS.				
Top of market	7.40	7.50		
Bulk of sales	6.50@ 7.30	7.10@ 7.25		
Heavy (250 lb. up)	6.75@ 7.35	6.50@ 7.25	6.00@ 6.50	5.75@ 6.50
Medium (200-250 lb.)	6.65@ 7.35	6.75@ 7.25	6.50@ 7.00	5.75@ 6.50
Light (150-200 lb.)	6.50@ 7.20	6.65@ 7.50	7.00@ 7.50	6.10@ 6.75
Light lights (130-150 lb.)	5.75@ 6.95	6.00@ 7.25		
Smooth packing sows (250 lb. up)	6.40@ 6.95	5.50@ 6.25	5.00@ 6.50	5.00@ 6.00
Rough packing sows (200 lb. up)	6.15@ 6.65	4.00@ 5.50	4.00@ 5.00	
Medium to choice pigs (130 lb. down)	5.00@ 6.50	6.25@ 6.50	6.25@ 7.00	
Stock pigs		6.00@ 6.25	6.00@ 6.75	6.00@ 6.75
SHEEP AND LAMBS.				
Medium to prime lambs (84 lb. down)	11.00@13.50	9.50@10.00	10.00@11.00	10.00@11.00
Culls and common lambs	9.00@11.50	8.50@ 9.50	7.50@10.00	
Medium to prime yearling wethers	8.00@11.50	6.50@ 7.50	6.00@ 9.00	6.50@ 7.25
Medium to prime wethers	5.25@ 9.50	5.50@ 6.50	5.50@ 7.50	
Common to choice ewes	4.00@ 7.50	3.00@ 5.50	3.50@ 6.50	5.50
Canner and cull ewes	1.25@ 4.00			
Feeder lambs	11.00@12.75			10.00@11.00

What It Costs To Make the Wheels Go Round

Electric light and power companies, being engaged in the business of generating and selling electric energy, are constantly making every effort to locate new industries in Washington, to use their output.

The cost of power is, however, not the determining factor in securing these new industries. The U. S. Census Bureau made a survey of over 275,000 industries which shows that the cost of power is on the average only 2.8% of the cost to produce the manufactured article. This is only 28 cents on an article costing the manufacturer $10.00.

However, there must always be sufficient power to take care of new industries. This is provided by the companies in maintaining at all times a reasonable surplus. Over-development in advance of the needs of the district would result in higher rates to the present consumers to take care of the idle investment.

We are cooperating with every community in the state to obtain new industries.

NORTHWEST ELECTRIC LIGHT AND POWER ASSOCIATION

F-10

Bits of Fun for Everyone

A Vivacious Engine.

An engineer was giving evidence in a case in which a farmer was suing a railway company for damages resulting from the death of a cow which had been run into by a train.

The farmer's lawyer was heckling the engineer, and kept reverting to his pet question, which was:

"Now, tell me, was the cow on the track?"

At last the engineer became angry, and answered the question:

"Well, if you want me to tell the real truth, the cow was bathing in the stream the other side of the track. But the engine saw her, leaped off the rails, dashed over the bank, and landing right on top of the cow, strangled her to death without a word."—Milwaukee Journal.

No Luxuries.

There's a fruit grower up near Rialto, who put his two children in the summer school at San Bernardino. Just a few days after their names had been listed a book agent called on him and said:

"Now that your children are going to school, you ought to buy them an encyclopedia."

"Encyclopedia? Be darned if I do! Let 'em walk like I did," was his retort.—L. A. Times.

Good Diplomacy.

A guest of a small southern hotel was awakened early one morning by a knock on his door.

"What is it?" he called drowsily without getting up.

"A telegram, Boss," responded a negro's voice.

"Well, can't you shove it under the door without waking me up so early?" the man asked irritably.

"No, Suh," the darky answered, with his mind on a tip, "it's on a tray."—Selected.

Latest High Class Patterns for the Home

Please order the patterns you desire at least two or three weeks before you wish to use them. Desiring to obtain the latest high-class patterns for its readers, THE FARMER has made arrangements to have them sent direct from the east, and under present mailing conditions it takes about that time for them to reach you.

4607. Lady's Dress. Cut in 7 sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. For a medium size 2 5-8 yards of 54-inch material will be required. The width at the foot with plaits extended is two yards. Price 10c.

4601. Girl's Dress. Cut in 4 sizes: 6, 8, 10 and 12 years. A 10 year size requires 2 5-8 yards of 32-inch material. Price 10c.

4307. Lady's Dress. Cut in 7 sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. A 38-inch size requires 4 5-8 yards of 40-inch material. The width of the skirt at the foot is 2 3-8 yards. Price 10c.

4591. Miss' Dress. Cut in 3 sizes: 16, 18 and 20 years. An 18-year size requires 3 1-8 yards of 54-inch material. The width at the foot of the flounce is 2 1-4 yards. Price 10c.

4283. Child's Set of Short Clothes. Cut in 4 sizes: 6 months to 1 year, 2, 3 and 4 years. It requires 1 5-8 yard for the dress, 5-8 yard for the drawers, and 1 1-8 yards for the petticoat, of 36-inch material, for a 2 year size. Price 10c.

4584. Lady's Apron. Cut in 4 sizes: Small, 34-36; medium, 38-40; large, 42-44; extra large, 46-48 inches bust measure. A medium size requires 4 1-2 yards of 27-inch material. Price 10c.

4583. Lady's Blouse. Cut in 6 sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. A 38 inch size requires 2 1-2 yards of 40-inch material. Price 10c.

4580. Child's Play Suit. Cut in 4 sizes: 2, 3, 4, and 5 years. A 2 year size requires 2 1-4 yards of 27-inch material. Price 10c.

4281. Negligee and Boudoir Cap. Cut in 4 sizes: Small, 34-36; medium, 38-40; large, 42-44; extra large, 46-48 inches bust measure. A medium size requires 3 1-4 yards of 32-inch material. The cap requires 1-2 yard. Price 10c.

4587. A Practical Under Garment. Cut in 4 sizes: Small, 34-36; medium, 38-40; large, 42-44; extra large, 46-48 inches bust measure. A medium size requires 2 3-8 yards of 36-inch material. Panel of embroidery requires 1-2 yard 9 inches wide. Price 10c.

4391. Men's Shirt. Cut in 9 sizes neck measure: 14, 14 1-2, 15, 15 1-2, 16, 16 1-2, 17, 17 1-2 and 18 inches. A 15 inch size requires 4 1-8 yards of 27-inch material. Price 10c.

4605. Men's and Youths' Knickers. Cut in 8 sizes for men and youths of 28, 30, 32, 34, 36, 38, 40 and 42 inches waist measure. A 34 inch size will require 2 1-2 yards of 36-inch material. Price 10c.

Send 12c in silver or stamps for our up-to-date fall and winter 1923-1924 book of fashions.

Please fill in this order and mail with remittance to:
PATTERN DEPT., PACIFIC NORTHWEST FARM TRIO, Spokane, Wash.

Enclosed find ..... cents for which send me the following:

Pattern No..... Size..... Pattern No..... Size.....

Pattern No..... Size..... Pattern No..... Size.....

Name .....

Postoffice ..... State .....

R. F. D..... Box No..... St. No. .....

Be sure to give the pattern number and the correct size.

GHIRARDELLI'S

The doorbell ring that heralds the "unexpected guest" holds little terror for the woman who keeps Ghirardelli's Chocolate handy in the pantry. For she knows that a fragrant, flavory cup of this delicious drink (made in a minute!) is equal to *any* occasion. When friends call on you, call on Ghirardelli's!

say Gear-ar-delly

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To Earn $150 to $300 per Month

Learn Auto Tractor Engineering

We want 100 men who are willing to accept positions at above wage. No experience necessary, as we train you in very short time, as Engineers, Auto Mechanics, Electrical Experts, Truck Drivers, Chauffeurs, Salesmen, Battery, Tire Vulcanizers and Welders. Many good jobs now open. Before joining any other school it will pay you to see Hemphill's, the million dollar trade school system. We give free transfer and life scholarships to our 16 schools in U. S. A. and Canada. The largest and most practical system in the world. Write at once for free poster and list of jobs from Free Employment Dept.

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LOOK AT THE GOOD FARM BARGAINS THAT ARE OFFERED ON THE FARMERS' "WANT AD" PAGE THIS WEEK.

Aunt Nellie received the following from Margie McNielly of Ferry county, Wash., a new cousin: "Dear Aunt Nellie: I am a new cousin. I stay with my cousin and go to school. I am in the eighth grade. I am a member of the Iyega Camp Fire and will soon be a wood gatherer, the first rank."

An interesting letter was written to Aunt Nellie by Delia Anderson. This cousin lives in Snohomish county, Wash. Delia was 12 years old on September 8 and received some nice presents. We will be pleased to receive the story at any time, Delia. Delia is in the seventh grade at school. Miss Castrine is her teacher's name.

Aunt Nellie and the cousins were sorry to learn that Helen Staadt's home was burned. We are sure it must be very unpleasant. Aunt Nellie and the cousins hope that by now everything is settled again and are glad to hear that no one was hurt in the fire. Cowlitz county, Wash., is where Helen lives. She goes to school in a bus and has never missed a day at school all last year or this.

Birthday Greetings

THURSDAY, December 13—Anna Ajax, 11 years old; Miriam Harper, 9; Gerrit J. Polinder, 10; Vernon Winterstein, 11.

FRIDAY, December 14—Marjory Iva Cress, 11 years old.

SATURDAY, December 15—Esther Thierman, 11 years old.

SUNDAY, December 16—Anna Blecher, 8 years old.

MONDAY, December 17—Elsie Anderson, 11 years old.

TUESDAY, December 18—Edwin Ensley, 10 years old; Robert Franz, 9; Virginia Teague, 9.

WEDNESDAY, December 19—Reta Houghton, 9 years old; Eino Pasma, 10; Wilber Van Leuven, 10.

LETTERS WELCOMED BY AUNT NELLIE.

Among recent letters received by Aunt Nellie are those from cousins whose names follow. A few of these will be published each week in the regular edition of THE FARMER and others will appear from time to time in The Junior Farmer:

Annie Anderson, Gladys Huffman, Helen Jacobson, Annie Pollari, Bernice Bahrs, Frances Flanik, Viletha Lorang, Freeda Dittmar, Hazel Jackson, Rebecca Morris, Virginia King, Ethel Lambert, Esther Kiehn, Mabel Wigley, Agnes Raft, Dorothy Graham, Emily Haataia, Nellie Powell, Ida Long, Aldena Dippell.

Mary Enroth, Maude Warfield, Beatrice Warfield, Ruth Top, Bessie and Helen Cyran, Elizabeth Anderson, Elsie Cooper, Lois Engleson, Gertrude Hough, Grace Menke, Lorene Taylor, Alma Diefe, Pearl Fletcher, Nellie A. Roberts, Helen Tomlinson, Lydia Gradwohl, Catherine Buck, Gladys Cook, Eva Thaden, Erna Heinrich, Beulah Orcutt, Howard Tomlinson, Alice Hilliard, Mildred Hendricks, Margaret Hendricks, Thelma Cruse, Delia Anderson, Edna Gronroos, Irene Barnes, Margie McNeilly, Fern E. Hodges, Helen Schaffer, Dorothy Baldwin, Esther Weston, Juanita Arrington, Eva Cade, Stella Cade, Nadine L. Hutchens, Faye Palmer, Doris McCaskey, Marie Fuchs, Caroline Wesch, Pauline Linbrink, Reuben Heimbigner, Helen Schaefer.

BEDTIME STORIES

By THORNTON W. BURGESS.

JUMPER AGREES TO DO HIS BEST.

When Peter Rabbit and his cousin, Jumper the hare, reached the tall pine on the edge of the green forest just after jolly, round, red Mr. Sun had gone to bed behind the purple hills they found a lot of little people waiting there and more coming from every direction. Prickly Porky the porcupine, Unc' Billy Possum, Danny Meadow Mouse, Whitefoot the wood mouse, Billy Mink, Little Joe Otter, old Mr. Toad, Jerry Muskrat, Reddy Fox, Old Man Coyote, Hooty the owl, Flitter the bat, Boomer the nighthawk, Bobby Coon, Mocker the mockingbird, Stickytoes the tree toad and Buster Bear were all on hand.

"I'm not afraid of being beaten!" declared Jumper indignantly.

Not all were in plain sight. Oh, my no! Such little people as Danny Meadow Mouse and his cousin, Whitefoot, were in secure hiding places where they could see all that went on, but were themselves unseen. You see they were taking no chances with Old Man Coyote and Reddy Fox and Hooty the owl about, although Buster Bear said in his deep rumbly-grumbly voice that he would permit no one to be harmed as this was a friendly meeting. Then he growled in the direction of Old Man Coyote and he growled in the direction of Reddy Fox, and both suddenly decided that back seats would suit them best.

Jumper the hare, who is very timid and bashful, was quite upset when he found so many there to look on. He hadn't known anything about the invitations to the jumping match which Jimmy Skunk had sent out, and he was for running away at once. But Peter Rabbit pointed out to him how this would make him the laughing stock of all his neighbors. They would say that he was afraid of being beaten.

"I'm not afraid of being beaten!" declared Jumper indignantly. "If one does the best one can there is no disgrace in being beaten, not the least bit. I've never claimed to be the best jumper in the green forest."

"Very true!" exclaimed a voice. It was the voice of Jimmy Skunk, who suddenly appeared from nowhere in particular. Then Jimmy made a little speech and explained why he had arranged this jumping match. He was careful to make it clear that Jumper never had boasted. Then he made Peter Rabbit feel very foolish by telling how Peter had boasted that his cousin was the best jumper in the green forest and wouldn't believe him when he, Jimmy, had told him that he knew of at least two who were better jumpers than Jumper the hare.

"That," explained Jimmy, "is why I called this meeting, and also because I think it likely that there are others who don't know who the best jumpers are. But, of course, if you are not willing to jump, Mr. Hare, we won't urge you. But we would, we truly would, very much like to see you jump your very best, because while there may be others who can jump farther than you can, there is none who can jump prettier. Will you jump as a special favor to us?" Jimmy bowed very politely to Jumper the hare.

"Certainly, Mr. Skunk, since you put it in that way," replied Jumper the hare, bowing in return. "If it will please my neighbors to see me jump, why, of course I'll jump, and I'll jump my very best. And I won't feel a bit bad at being beaten, for I know, Jimmy Skunk, who you have asked to jump against me, and they are both friends of mine. So bring them along and we three will show the rest of you what real jumping is like."

CHEAPLY-MADE COAT HANGERS.

For the mother who does not wish to go to expense of many coat hangers for her little one's nicest clothes, here is an item.

Cut the round stick that comes in rolls of oilcloth, into pieces 10 and 12 inches long. Mitre ends of upper side, and either paint or paste white paper or muslin around them daintily. Fasten one-inch cup hooks in middle or upper side. These hooks will cost you 10 cents at hardware store, thus making the hangers cost about 2 cents each and will be a joy and help in keeping ironed garments in perfect shape. If you have several girls, make the colors different on each belonging. This encourages daintiness. MRS. J. C. D.

WHOLESOME ENTERTAINING READING
For Winter Evenings

The period of long evenings is with us again. The result in most homes is that there is a greater desire and demand for good, wholesome reading. Your state farm magazine supplies this need with entertaining fiction, an exchange of ideas and opinions, a thorough report of live happenings throughout the state, special articles on scores of important subjects, a special corner for the kiddies, and a variety of departments filled with helpful, interesting matter.

You want THE FARMER. It entertains, it informs, it instructs; and it is gratifying to know that as a result of its cooperative plan its cost is exceedingly low.

If you believe in cooperation we are confident that we can count upon your assistance during the season ahead in making our plan a success in your neighborhood as it has been in all parts of the state. What we ask is that you send in your own subscription order at least sixty days in advance of the expiration date on the label, that you include your neighbor's order with your own, and wherere your own subscription is attended to, to find at least one new subscriber for our lists.

By doing this a great deal of needless expense is eliminated and the subscribers get the benefit of every penny which is saved. Please give cooperation a little boost in your neighborhood.

Dec. 13, 1923.
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I enclose herewith $..... for a .....year subscription to
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If your subscription is already paid in advance, it will be extended from the date to which it is paid.

"I'm not afraid of being beaten!" declared Jumper indignantly.

High Testing Herds

Washington dropped to second place among the 10 western states for the average of its association-tested cows during September and Oregon and Idaho ranked fifth and sixth, respectively, but a Washington herd had the best average of any of 49 large herds reporting, and an Oregon herd the best among small herds. These leaders were the Holstein herds of J. A. Folsom, Mt. Vernon, Wash., which averaged 50.1 pounds in the Skagit county association, and of J. O. Conville, Westport, Ore., which averaged 56.1 pounds in the Columbia county association.

The highest large herd in Oregon was that of Durrer & Son of Tillamook, while the highest small herd in Washington was that of A. E. Moore of Fall City.

A small herd from Idaho, that of H. G. Gommer of Jerome, ranked second to Conville's for the entire territory, and Idaho's highest large herd was that of L. P. Linch of Weiser. A purebred Holstein from Hollywood farm was the highest individual cow in the northwest for September, and third highest for the territory. One owned by L. J. Tencknick of Twin Falls was highest in Idaho and fourth for the territory, and a grade Jersey owned by E. C. Gienger of Tillamook led in Oregon.

Pork Product Exports

The total exports of pork products for the nine months ended September 30, 1923, were 1,480,000,000 pounds, compared with 1,080,000,000 for the same period last year. This is an increase of 400,000,000 pounds, or about 37 per cent. This production of pork products in establishments under federal inspection for the first nine months of this year was approximately 6,700,000,000 pounds, compared to 5,310,000,000 pounds in the same period last year, or an increase in production of 1,390,000,000 pounds. Cold storage holdings at the end of September of this year were 678,000,000 pounds, compared with 739,000,000 pounds on the same date last year. From these facts it appears that domestic consumption of inspected pork, including lard, has increased during the nine months by more than 1,000,000,000 pounds, or nearly 25 per cent. This increase appears to be due to the general employment and remunerative wages.

More Range Cows Marketed

Range cattlemen have shown a noticeable tendency this fall to market a larger proportion of cows and heifers than usual, a survey recently made by the United States department of agriculture reveals. The increase in the proportion of female stock marketed up to October 1 ranged from 5 to 10 per cent, as compared with the corresponding period a year ago, the department says. A survey covering 26,737 cattle marketed from 12 range states during the last two weeks of September showed 56 per cent were cows and heifers, compared with shipments of 22,588 cattle from the same states during the corresponding period of 1922, of which 46 per cent were female stock.

A department report covering several hundred thousand cattle slaughtered at a great many establishments throughout the United States shows that in August, 1923, 48.29 per cent of the cattle slaughtered were females, as compared with 40.16 per cent in August, 1922. In September, 1923, 49.52 per cent were females, compared with 43.84 per cent for the corresponding month a year ago.

BERGSMA'S TWO RECORDS.

Piet Bergsma of Ferndale has made two new state records with milk from Nore Segis Prospect, a junior two-year-old, and Mt. Vernon Oregon Newman Rose. The first cow mentioned is a junior two-year-old, and won the placing by the production of 521.8 pounds of milk and 21.164 pounds of fat in seven days. This is also the second highest fat record in the state for this class. The second cow produced 574.1 pounds of milk and 19.225 pounds of fat as a junior four-year-old.

WORLD MILK RECORD.

A world record of 646.1 pounds for milk production in 7 days 10 months after calving has been credited to Steilacoom Inka Posch, the remarkable young cow in the Western Washington State hospital at Steilacoom that made 30,610 pounds of milk as a 4-year-old last spring. She was bred at the state hospital, being sired by a son of Sir Johanna Ruth Fayne, Todd & Sons' old herd sire, and out of a daughter of Sir Colantha Prilly from a 32-pound (butter) dam.

PLACED ON HONOR ROLL.

Nooksack Irma Segis, owned by H. J. Evans of Ferndale, recently won a place on the honor roll for junior three-year-olds, with 139.2 pounds of milk and 4.61 pounds of fat.

CLARK BUYS GUERNSEYS.

For foundation purposes, James Clark of Satsop, Grays Harbor county, Washington, recently purchased from O. A. Johnson of Buckley, Pierce county, five purebred Guernsey heifers, all daughters of Chicona Hannibal, and three of them bred to the Johnson herd sire. The latter is a son of Langwater Khedive, W. A. Goodin's herd sire at Cornelius, Oregon, and is out of Oregon Queen, state champion in class CC with 544 pounds of fat, second highest priced female in the recent Pacific International sale, and now the property of Troutmere farms in California.

Your Health

By Royal S. Copeland, M. D., F. A. C. S.

Some doctor friends of mine have written a fine little book about infectious diseases. It is intended to be a guide for mothers, and on this account it is filled with wise and useful suggestions which are bound to be gratefully received by every mother.

Dr. Copeland.

The authors write about the need of using a lot of water. Free use for bathing and the drinking of large quantities of water are urged upon the parent.

In all fevers poisons are formed in the body and there can be no restoration to health until these are carried away. Their presence in the body keeps up the fever and causes the symptoms of prostration which always accompany fever. The skin, kidneys and intestines are the chief organs of elimination. All these must function freely or else the poisons generated by the fever are dammed up in the tissues, to add to the misery of the sufferer. They can not act unless there is abundance of fluid to dissolve the poisonous substances. Water is the universal solvent and its free drinking will aid the organs of elimination to do their work.

You know how thirsty you are when you have fever. There is no agony much worse than thirst. Poor little babies must suffer terribly and they are unable to ask for the water they yearn to have.

The authors I mentioned think water should be given as a matter of routine—just as medicine would be administered. They suggest that when a child under one year has any infectious fever the amount of water should be from one-half pint to one pint a day. Every 15 minutes the baby should have from two to four teaspoonfuls of water. When older, three or four times as much water should be given.

There is an old-fashioned notion that water will "drive in the rash" and, somehow or other, cause disaster. This is absurd. Bathing can do no harm to anybody. Bathe the child, but be sure the bath is taken in a warm room, and dry thoroughly. No bad results can take place, no matter what the disease may be.

Frequent bathing keeps the skin clean and active. In this way the removal of the poisons is hastened.

Drinking plenty of water helps to keep the bowel contents soft, and in this way promotes the free escape of poisons.

Everybody should drink water in quantities. Everybody should bathe frequently. Cleanliness inside and out is essential to health and vigor.

The Red Lock

(Continued from page fourteen.)

square with me. I reckon you wouldn't know her inside of your little old synagogue down there in the Flatwods, but she'd be the whitest one there—except Sis.

"You've been one hell of a father to me. I've heard you pray by the yard, and I've heard cussin' that was more religious. You starved mother's life out, and you're starvin' the life out of Sis, but you didn't starve my life out, damn you. I've got a drop of ol' Red Colin in me—him that brought all this cussed red lock mess into the family. I've had my fling—and that's more than you can say, with all your money that you've wrung out of better men.

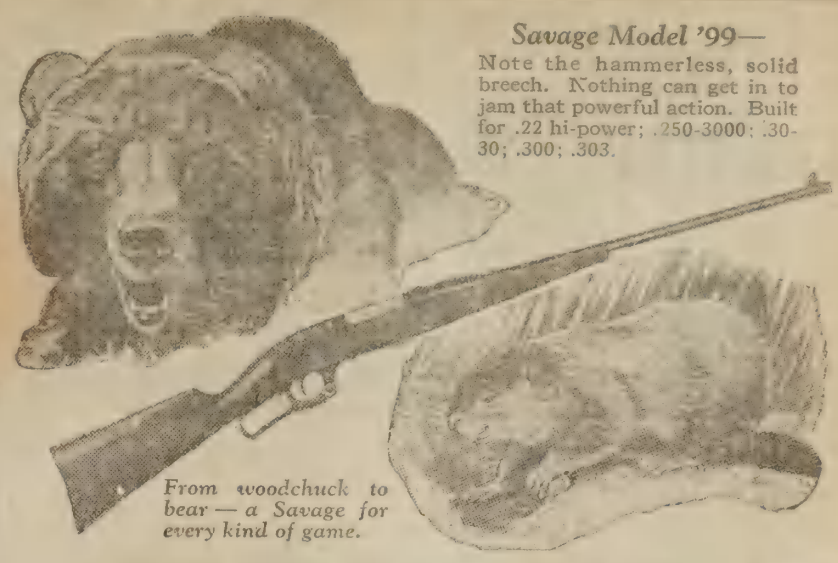
"I reckon I've got but a few minutes to live. I'd give half of them to see Sis. But if you'd come in right now, I'd try to get up and kick you out. I'm dyin' as old' Red Colin died—with my boots on. I'm expecting to meet him and you both—in hell—— KEN CO——

"P. S.—Mr. Colin is dead. He died before he could quite finish signing his name. You can see the blot where the pen fell. I am respecting his wishes and sending this letter without any street address, or other marks, whereby you might trace him. His confidence I shall never betray. I will only say that he shall have decent burial. THE GIRL."

(To Be Continued.)

COMPARATIVELY RECENT.

Passenger steam turbine ships have been in use only since 1901.



Savage Model '99—
Note the hammerless, solid breech. Nothing can get in to jam that powerful action. Built for .22 hi-power; .250-3000; .30-30; .300; .303.

From woodchuck to bear — a Savage for every kind of game.

. . . handles fast, holds steady as a rock

You can depend on the smooth, sure action of a Savage. It functions *right*.

And accuracy—the most important thing in *any* rifle. You can't beat a Savage for deadly, lasting accuracy.

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.22 hi-power. The amazing *Imp*—ideal for woodchuck, fox and wolf. Accurate at long and unknown ranges.
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.303. A hard, knockdown hitter—has dropped deer, bear and caribou for 20 years.
.250-3000. An all-around rifle. Terrific speed and accuracy make it *the* gun for mountain sheep, goats, and deer at extreme ranges.
.300. Delivers a crashing blow that will drop the great Alaskan brown bear in his tracks. Powerful enough for any American game.

And the Savage .22s—the *Sporter*—the new bolt-action repeating .22—the gilt-edge accuracy of the finest target rifle built into a sporting model. Or the slide-action, Model '14—every feature originally and distinctively Savage—sturdy and accurate.

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Savage manufactures ammunition for every Savage high-power rifle. Savage ammunition is advised for use with Savage high-power rifles. Savage is now also manufacturing other well-known cartridges. Look for the Savage Red Box.

Breeders' Department

HOLLYWOOD HOLSTEINS
Registered Holstein bull calves out of yearly record dams, excellent individuals, well marked, thrifty. By getting them young you can get better stock and for half as much money as when you buy yearlings. We have bred bulls that have sired daughters with records up to 1508 pounds butter in a year, and each of our last two herd sires has sired one or more world record daughters. Buy from the famous Hollywood herd that was the highest record large herd in the highest record C. T. A. in the United States last year. A few heifer calves suitable to mate with above bulls. A CALF OR A CARLOAD.
HOLLYWOOD FARM (Near Seattle) Hollywood, Wash.

Milking Shorthorn Bull
Dropped June, 1922. This is a young bull of much quality, sired by Foothills Corporal, grand champion Pacific International stock show, 1919, of richest milking strain, from Corporal Clay, dam Glenrose Pearl. The dam is a good producer.
$125 for quick sale.
KIRTLAND FARM, Central Point, Ore.

Imported and American Bred Jerseys
Blood lines of phenomenal production and most perfect Jersey type.
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Richly Bred Young Jersey Bulls
Sired by Gertie's St. Mawes and out of tested dams with good records.
C. F. BATES, Rt. 5, Salem, Ore.

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Heifers and bulls, offspring of the great gold and silver medal bull, Silver Chimes of S. B.
DEL PERKINS, Carlton, Ore.

Guernsey Special $125 will buy a son of Amy of Mound City, A. R., 11893.3 lbs. milk, 546.5 lbs. fat at 4½ years.
VALLEY GEM FARMS, Arlington, Wash.

Brown Swiss Stock Farm
Breeders of Brown Swiss cattle, the farmers' dairy cow. Young stock for sale.
THEO BRUGGER, Route 3, Gresham, Ore.

Pioneer Herd Hampshire Swine
10 head choice boars; 10 head of sows and gilts, backed by show records.
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Hampshire Swine We have purchased the entire herd of wonderfully bred Hampshires from Dr. H. K. Stockwell of Monroe. Boar and sow pigs, gilts and a few bred sows for sale. Double treated for cholera.
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Poland Chinas Bred gilts, one or a carload. Best of blood lines. Also fall pigs of either sex. Priced very reasonable.
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Poland Chinas That Win
Young boars, bred gilts, fall pigs for sale Satisfaction or money back.
R. J. STILLINGS, Hermiston, Ore.

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For sale—Registered spring boars and gilts, sired by grand champion boar. Also booking orders for fall pigs. Prices reasonable.
H. W. TURNER, Sunnyside, Wash.

For Sale--O. I. C. Swine
Large, smooth fellows. Price is right and the pigs are right. Write for prices.
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Can spare a carload of registered Rambouillet ewes of highest quality, to lamb in February and March. Bred for wool and mutton, Rambledale ranch.
E. R. HOBBS, Castleford (Twin Falls Co.) Ida.

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When answering advertisements don't fail to mentione this paper.

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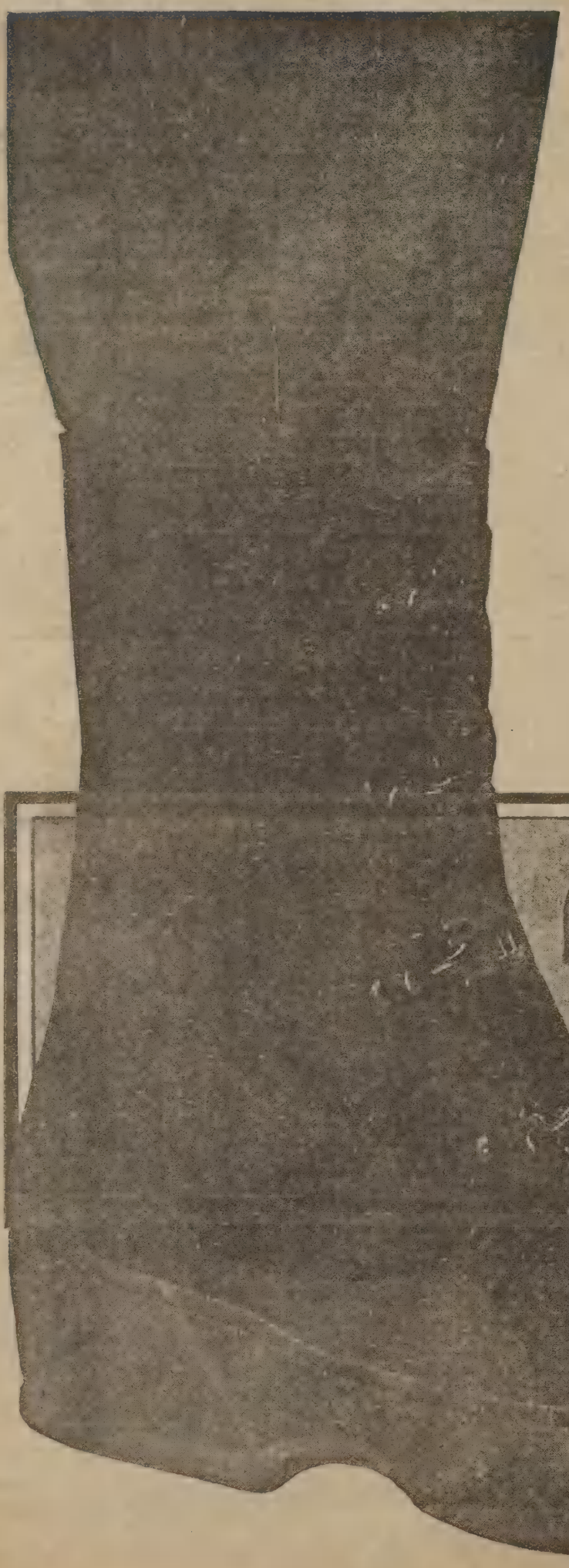

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There are lots of points of workmanship and quality about an Arctic that do not show but which mean much in wear, fit and appearance.

The Red Ball is your sure guide in buying Arctics and every member of your family should have a pair for warmth and protection.

You know when you see this mark on any kind of Rubber or Woolen Footwear that you are going to get a full measure of satisfaction and More Days Wear

There are many styles of "Ball-Band" Rubber and Woolen Footwear not shown on this page.

Write for the free illustrated booklet, "More Days Wear." In it you will see just what you need for different jobs and all sorts of weather.

In writing, please give the name of your nearest dealer.

We make nothing but footwear—
and we know how

Mishawaka Rubber & Woolen Mfg. Co.
462 Water Street **Mishawaka, Ind.**

"The House that Pays Millions for Quality"

THE WASHINGTON FARMER
ESTABLISHED 1894
SPOKANE. SEATTLE.

"My Happiest Christmas" Contest

WINS FIRST PRIZE.

I was a boy of 12 away at school, and the days were dragging toward Christmas, with no prospect of going home, when mother wrote me that there was to be a grand family reunion at grandfather's home in northern New York and that I was to come. I still remember how I whooped and hurrahed and turned handsprings!

It was snowing in proper northern fashion when we arrived that Christmas eve and were welcomed in royal fashion by our grandparents. And such a hubbub at table that first night, as fathers and mothers, cousins and aunts all talked at once, until stilled by grandpa's bowed head as he said grace!

A great fire roared up the chimney as we gathered about it, the elders chatting, with much pleasant gossip, while we six cousins popped corn or cracked the tough old hickory nuts, or roasted chestnuts in the fire. We danced and sang and hoedowned to the tune of grandpa's fiddle, whose "Money Musk" and "The Indian's Lament" were played as only he could play them.

Then we cousins, after hanging our stockings about the vast chimney, fairly fell upstairs and to bed, worn out with the excitement, and fell asleep, three abreast in the depths of feather beds, covered with grandma's pieced quilts, very likely.

Morning found us diving down the great stairway to get our stockings and empty them before the embers of the fire. Shivering we were, but happy. Finally came daylight and our tardy elders. Then breakfast, with golden piles of hotcakes, with maple sirup, and plates of crullers, which old black Katie heaped and reheaped.

Again we were before the great fire, and gifts were given, while we cousins, impatient to be out in the crisp air, took the deep-rimmed snow path to the stable, where old Bess and Dobbin whinnied as though they knew us. Snowballing, building snow men, we frolicked till crimson, then raced in to the fire, and here was grandma calling us to dinner.

Christmas dinner at grandpa's meant suckling pig, with a red apple in his mouth, four kinds of jell, three kinds of pickles, and so on, double and triple joys right through to mince and pumpkin pies, plum pudding, nuts, raisins and candy.

Neighbors came in, stepping from sleighs with a jingle, to welcome the long absent. There was more fun and dancing, while grandpa and grandma were persuaded to dance a minuet, to the utter delight of their children. And joy and gladness held sway, while the chimney roared and the snow fell softly outside!

Before we knew it, the week was almost gone, what with jolly coasting, with grandpa sometimes as starter, laughing over our spills till his cheeks were red as apples. Then, hungry always, we'd slyly hie to grandma's great cookie and doughnut jars, plumb full to overflowing, so it seems to me now. Then spicy barrels of apples were beyond, and here black Katie would catch us and shoo us away, calling us good-for-nothing boys. Tiny cousin Jim made the rounds once too often, and lay on the sofa, while solicitous aunts suggested castor oil.

Oh, how hard it was to say goodby, with grandma wiping her eyes, and grandpa's eyes, too, a bit misty! We children little guessed it to be the last home coming, as it proved to be, and so remains my happiest memory down the years.

RALPH H. BOYD.

Kirkland, Wash., R. F. D. 1, Box 81.

Prize Awards

The Washington Farmer is pleased over the fine response to its request for readers to tell of their happiest Christmas. The first prize of $5 is awarded to Ralph H. Boyd, Kirkland, Wash.; the second prize of $3 to Mrs. Earl Brittain, Inchelium; the third prize of $2 to Mrs. Marion Warren, Chesaw; and five prizes of $1 each to Mrs. Agnes Dannan, Ellensburg; Mrs. Eva J. Peck, Endicott; Selva Hanson, Vancouver; Mrs. LaRue Clark, Sumas and Ronald Marchant, Lynden.

Read these prize contest letters and you will agree with us that it is one of the happiest and most educating of Christmas features ever published by us. The Washington Farmer only wishes it had the space to give other letters in this contest which are most interesting, and wishes every one of those who entered the contest, as well as every one of our readers at large, the happiest and merriest of Christmases.

Among Her Dear Ones

WINS SECOND PRIZE.

It was the Christmas of 1915. My mother, for 30 long, hard years a widow, had finally sold the old home in Maine and come west to live with me—her baby, happily married and in a home of my own.

(Continued on page six.)

Western Washington Horticulturists Meet---Page 3

Your Health

By Royal S. Copeland, M. D., F. A. C. S.

Sometimes we meet persons who laugh at the germ theory of disease. They say it is ridiculous to think bacteria and germs are responsible for human ills.

Dr. Copeland.

It isn't surprising that some folks sneer at germs. The vast majority of accidents where wounds are made heal at once and never cause the slightest trouble.

The other day a man employed a manicurist, who was a rare variety—a careless and unclean one. Let it be said to the credit of most manicurists that, being women, they are naturally clean, neat and conscientious.

But this man met the wrong sort. She trimmed his cuticle, inflicting fully a dozen cuts, and finished her work with an unclean buffer in polishing the nails. She must have rubbed a million germs into the tissues. For from two to three days the fingers were very sore, but they didn't even fester. In a week there wasn't a sign of trouble remaining.

I know a woman who went to a very cleanly and particular manicurist, who takes great pains to keep her instruments clean. A tiny cut was followed by serious infection and a severe surgical operation.

Why did the man escape and the woman suffer?

It is largely a matter of the degree of natural resistance. The man had greater power to ward off disease. This is a somewhat mysterious quality possessed by some much more than by others.

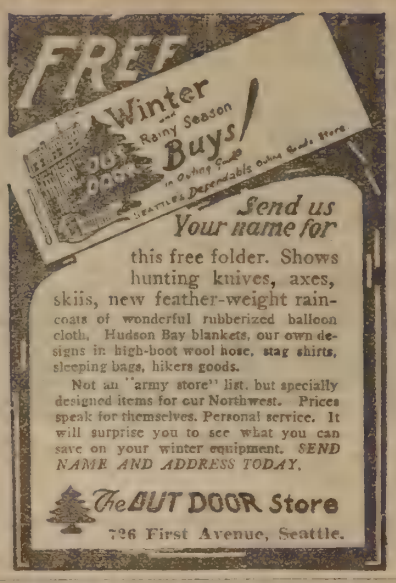
Of course, it is not entirely a matter of resistance. There are certain germs much more to be dreaded than others.

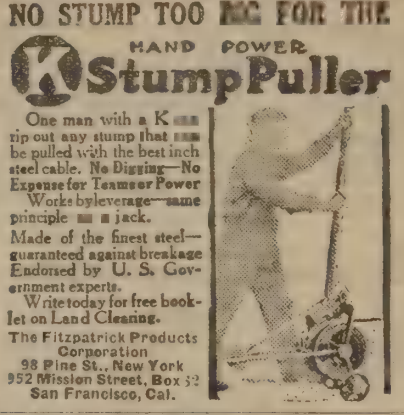
Sometimes our powers of resistance are much lower than normal. This may be due to overwork, to loss of sleep, to worry or to sickness.

We never know what particular species of germ has been forced into our tissues by an accident which breaks the skin.

You see that every injury producing a wound has in it the prospect of rather serious results, don't you? On this account you can not afford to neglect injured tissues. You may break your skin, or scrape your elbow. What should be done?

In every household and in every shop or factory there should be a bottle of iodine and a package of gauze. The injured part should not be touched with unclean hands, but with the greatest care it should be swabbed with iodine, covered with clean cotton or gauze and bandaged.





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Barcelona with Duchilly, Daviana and White Aveline for pollenizers. Send for price lists.

Full line of nursery stock.

PEARCY BROS., Salem, Ore.

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When you write to advertisers be sure to state that you saw their advertisement in this paper.

Look for this Gold Seal—round and gold colored

Buy boots once
for many years!

SERVICE OVER MANY YEARS: this, alone, is the real test of rubber footwear. Why not measure your boot values by the "season stick?"

Gold Seal footwear will successfully stand up in the grueling war against wear.

They served pioneer farmers and fishermen satisfactorily while the West was still young. They are guaranteed not to crack.

You can get Gold Seal footwear in your choice of style, weight and size at any good store on the Pacific Coast. If you are out in the weather much, you will be interested in Gold Seal Oiled Clothing, too.

We are the original and only Goodyear Rubber Company. Portland and San Francisco.

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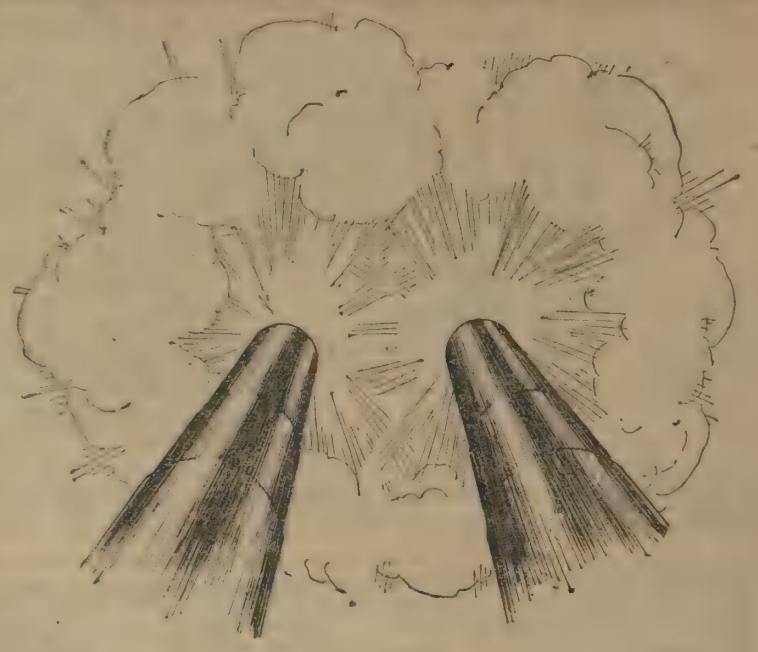

There Is, Also, a Non-Detonating
Gasoline

Note this important difference in the way gasolines explode. One kind explodes instantaneously—**detonates.**

It depends upon a single crash to pound the piston down.

Compression is limited by the tendency of such gasoline to **explode prematurely.** This means loss of power and efficiency.

It means increased vibration also, thus more wear and tear. Some explosives would work this way on guns, to the ruination of the guns.

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Union Gasoline explodes in a different way—like smokeless powder in big guns—with a progressive and sustained explosion—**non-detonating.**

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Believes in Fruit-Growing Industry

W. H. Paulhamus Declares There Never Was Brighter Prospect Than at the Present Time

By RALPH ERSKINE

The best and largest attended convention ever held in the history of the Western Washington Horticultural association was put on at Everett December 6, 7 and 8. The exceedingly complete program was a good drawing card to the crowds, which numbered 225 at the largest meeting during the three days.

The program was particularly interesting, since it included addresses on the vital subject of marketing as well as many educational papers along fruit growing lines. The display of fruit grown in western Washington, which was arranged by members of the association, gave the visitors an opportunity to study the varieties that have been recognized as the best for western Washington conditions.

The city of Everett did itself proud in making the fruit growers feel at home and went a step farther in extending an invitation to hold the convention there next year, which hospitality was accepted by a majority vote of the members attending.

Officers Elected.

The officers for the year 1924 were elected by the adoption of the report of the nomination committee, which placed George P. Stuart of Monroe in the president's chair. C. E. Fitzgerald of Ferndale was named as first vice president; Mrs. J. W. Roberts of Seattle, second vice president; R. T. Reid of Bellevue, secretary; B. A. Kilian of Birmingham, assistant secretary, and Charles W. Orton of Sumner, treasurer.

It took strong persuasion on the members' part to convince Mr. Reid he should not withdraw from the nomination, but to render his services with the help of an able assistant for another year. Mr. Reid contended that he had already served his second term in the same office and that some one else should have the honor.

The keynote of the convention was struck when Robert B. Miller of Startup gave his talk on "Forecasting the Work of the Convention." While not a member of the program committee, Mr. Miller gave much valuable assistance in getting the plans completed.

"The program this year is a radical change from what it has been in the past," began Mr. Miller, "and we are having more talks along the line of cooperative marketing. This is a subject that the fruit men as a whole do not have a chance to talk over as a body and we feel that this is a good place to thresh out such problems.

"The law of supply and demand should govern the price of the farmer's products, but we find that our fruits and other products have little value until they reach the point where they are resold to the consumer. Many of the crops are actually sold below the cost of production and it is up to the producers to do something to better their own conditions or go out of business.

"It is my opinion that we as producers can create an organization that will be as strong as the labor unions, if we will but work together with one accord along the line of cooperative marketing."

More Than One Crop.

"It is my experience that the banker is inclined to favor the man who has more than one crop to depend on," said Robert Moody of Everett, who was asked to give his views of the fruit industry from the standpoint of a banker and grower. The bank must make all loans on dependable security and they are inclined to favor any kind of stability such as is created by a system of farming that will bring in returns from more than one source. This is why we like to see a man that can raise a crop of fruit and at the same time keep a few chickens or a cow or two because we feel that he is more able to make a better living than the man who carries all of his eggs in one basket and has nothing to fall back on.

"As far as the fruit industry is concerned, I feel that it has a bright future here in the Puget Sound district. We have markets that are more stable than they have ever been before and we are putting up our surplus fruits in such a way that there is not the loss that there use to be. The barrelled fruit industry has done more to stabilize the soft fruit industry than any other plan that has been tried out and it is going to mean more money in the growers' pockets than has been the case in past years."

"Long Pruning."

An interesting explanation of the "Long or High Renewal System of Pruning" was given by Clayton L. Long, extension horticulturalist of the Oregon Agricultural college. Before he began the explanation he mentioned the value of having ideal physical conditions of the soil, since this is considered of prime importance to any system of pruning.

In the explanation of the high renewal system, Mr. Long told of the different methods that could be used in forming the frame work of the young trees and explained how each one would work on different kinds of trees. He emphasized the constant pruning of any tree to maintain the right balance and to keep the shape that is most desired for ripening and picking of fruit.

"Experiments with this system as carried on in Oregon are proving that a moderate amount of pruning is giving the best results," said Mr. Long. "If a young tree is pruned too heavily it causes a tendency toward dwarfing. A good strong tree can be had sooner and a heavy crop can be secured earlier if the tree is not pruned too heavily. It is even a good plan to leave a part of the sucker growth in order to keep enough leaf surface to furnish plant food for the season's growth. When too many limbs are removed there is a greater loss of leaf surface than the tree can stand and the result is a smaller production of fruit.

"As far as the size of the fruit is concerned, this can best be accomplished by fertilization, cultivation and thinning of the fruit. Pruning is not a profitable way to increase the size of the fruit. Another point which we proved to our own satisfaction was that heavy pruning produced the smallest increase in the size of the main trunk, while no pruning gave the greatest, and light pruning gave slightly smaller growths than did the heavy pruning."

Transportation and Marketing.

"There never was a brighter prospect for the fruit industry than there is at the present time," asserted W. H. Paulhamus, president of the Puyallup and Sumner Fruit Growers' association, who gave as his talk a "Survey of Fruit Marketing." "The growers are better able to put their fruit on the market in a way that the eastern buyers want it and there has been a tremendous call for both canned and barreled berries.

"Transportation has much to do with the marketing of our soft fruits and in many cases the entire market in one certain district depends on whether or not the refrigeration during transit is sufficient to carry the fruit without loss. Much of the loss during this last season was due to improper refrigeration for the amount of berries each car was supposed to carry. This is a problem that all berry growing districts should help to remedy. A lower minimum of fruit to each car will help in getting the fruit to its destination in better shape.

"Better grading of all fresh fruit that is shipped will also help the growers to put their berries on the market in a better condition. We are planning on having all overripe and broken berries kept out of the packages that are to go out on the fresh fruit shipments. If such a grading system can be carried out in other districts as well it would help to stabilize the fresh fruit industry, which is one of our three important means of marketing our berries.

"The cannery is another factor that handles a large part of each year's crop. Here, too, the grades play an important part and there is always a sale for high quality packs as well as another grade which takes the broken berries and those that will not stand up as whole berries after processing. The canneries have found that they can pay a price that will net the grower a fair price for his labor and investment and there are many growers who sell a large part of their crop to this market.

"The last and newest method of putting the soft fruits on the markets is the barreling method. This is perhaps the quickest way to handle berries of any kind. They are sorted over, graded and put in barrels with sugar and frozen solid, which prevents their spoiling as long as they are kept in cold storage.

"This plan has developed to an astonishing degree during the last two years and we have a report of 40,000 barrels having been shipped from the Portland territory alone. There have been many shipped from western Washington, but as yet the figures are not complete. The big jam factories in the eastern states are beginning to call for our barreled fruit because they know that we can supply them in large enough quantities to depend on."

In conclusion Mr. Paulhamus made an appeal to the growers' cooperative organizations and canners to work for a higher type of cooperation which would enable all that are concerned in the industry to sit down and work out their problems in a way that would be more satisfactory to all. This, he said, would be much better than the present plan of each man working merely for his own interests in spite of how the other fellow was affected. This would be cooperation of the highest type and would mean more money to all in the long run.

As to Cooperation.

"Confessions of a Cooperator" was the subject given to Robert Paulus, manager of the Oregon Growers at Salem, Ore., who dealt with the vital problems that are met in any growers' organization. His strongest statement was that he did not believe in cooperation as a cure-all or as an absolute corrective for serious mistakes that are made in planting crops and resulted in overproduction, but that cooperative marketing will do more than anything to relieve such a condition as overproduction will create.

"I do not favor the elimination of the middlemen, but feel that the speculative dealer should be discouraged and not be patronized by the growers except in extreme cases," said Mr. Paulus. "I do not blame the cannerymen for getting all they can for their product when they can do so, since this is just what the grower will do when he has a chance."

Soil Conditions.

Some of the sidelights on the berry industry in British Columbia were explained by H. H. Eddie of Sardis, B. C. In his talk he emphasized the importance of soil conditions, cultivation and fertilization as factors to lower the cost of producing berries. Many of the growers in Canada, he said, are finding that they can maintain the fertility of their fields by keeping some kind of stock in connection with their berries. Chickens make a good combination with any farm if the grower can give them proper management. For some of the smaller farms they manage to keep a cow and a horse and a few chickens.

The best arrangement they have found is to have one cow, a horse and a pig on a five-acre farm. This is about the right number of animals to furnish a part of humus to the crops and yet not require too much work from the berry crops. A flock of about 250 chickens is not too large to handle in connection with five acres of berries and it will supply much fertility and humus for the crops.

Strawberry Weevil.

"When the ravages of the strawberry root weevil began to be a serious question in the berry sections of British Columbia it was found that most of the growers were following certain cultural practices that were favorable to the weevil. The first thing to do then was to suggest that the growers leave the old crops that they intended plowing up, until after the weevil had laid their eggs," according to Lee W. White, district horticultural inspector for Vancouver island. "The old method of plowing the fields in June or July was one of the worst practices that could have happened, since it gave the weevil a better chance to migrate to other fields.

"The growers found that by waiting until September to plow up their older fields the weevil would not be forced to leave, but would lay their eggs, which were destroyed when the field was plowed up. The working of the soil after plowing also helped to destroy what few eggs were left.

"It is fortunate for the farmers that the weevil does not fly. If he could, it would have spread much further than it has, but we can use the barriers to prevent their spreading to other fields that are free from the pest. This, of course, is a costly method, but many of the strawberry men are finding it a practical method.

"The use of poultry is another method that has shown good results among the fields of this district and it is one of the less expensive methods that have been found. The weevil are all out of the ground soon after the crop is off and by having a flock that can be turned loose at this period, the birds will pick up a large part and in some cases most all of the weevils.

"A rotation system is also a good method of eliminating the pests and it is one of

(Continued on page ten.)

Adams Heads Farmers' Union

A somewhat smaller attendance than in years of greater prosperity for wheat growers marked the 15th annual convention of the Farmers' union of the Washington and northern Idaho division in Spokane, December 11 and 12. About 100 members of the order were in attendance. Interest in the affairs of the union was probably no less keen than in previous sessions, and in some respects was more vigorously in evidence.

A sharp division of sentiment became evident on certain policies of administration when O. T. Cornwall of Walla Walla launched a movement for the reorganization of the union, the movement being directed against the administration of President J. Q. Adams and its policies. The Walla Walla delegation comprised most of the strength of the anti-Adams movement. After a vigorous discussion of the subject from numerous angles, lasting until after midnight on the 12th, the present administration was indorsed by vote of the delegates present and President Adams and Secretary-Treasurer A. D. Cross reelected by large majorities. S. O. Pool of Wenatchee was elected member of the executive committee, succeeding E. D. Knight, and H. J. Herman of Genesee, Idaho, was reelected. These officers, together with the following hold-overs, comprise the executive committee; R. H. McMillan, Sandpoint, Idaho; A. C. Moore, Walla Walla, and Almer McCurtain, Davenport. Mr. McMillan was elected vice president.

The issue as fought out at the convention was generally understood as being between the so-called progressive element and the so-called reactionary element, with the former victorious. Incidental to the criticism of the policies of President Adams and his executive committee was an attack upon Carl S. Evans as editor of the official paper of the Farmers' union for this jurisdiction. This criticism was based on the assumption that his appointment to the position of editor indicated something of a farmer-labor program on the part of the administration. Mr. Evans is president of the Spokane Central Labor council.

At the opening of the session, President Adams delivered his annual message, in which he stressed the importance of harmony within the organization and the acceptance of responsibility for the organization's welfare by each member. Other speakers at the opening session included D. F. Mitchell of the Farmers' Union Egg and Poultry association; S. O. Pool of the fruit marketing division of the union; Carl S. Evans of the Spokane Labor council; George M. Barnhart of the Railroad Brotherhood's Cooperative bank of Spokane; E. L. French, state commissioner of agriculture; A. C. Whisler of the poultry association and the insurance department; Mayor Fleming of Spokane, who delivered the address of welcome, and Almer McCurtain of Davenport, who responded.

The Resolutions.

A number of resolutions were adopted, as follows:

Favoring abolition of tax-exempt securities;

Favoring repeal of the so-called guaranty section of the railroad transportation act;

Indorsing Senator Robert M. La Follette for chairman of the senate interstate commerce committee;

Favoring the taxing of municipally-owned public utilities;

Favoring the adoption at the polls next November of the anti-oleomargarine bill referred to the people following the last session of the legislature;

Urging the federal department of agriculture to hold hearings in the northwest on northwest wheat grades;

Authorizing appointment of a committee to investigate the advisability of the formation of a corporation to enable Farmers' union members to secure loans when desired through the federal intermediate credits banks;

Favoring the reduction of income taxes from the present normal tax of 4 per cent to 2 per cent, keeping the surtax at the present rate and restoring in revised form the excess profits tax;

Favoring the creation of a federal export commission and the marketing of American surplus wheat in a manner similar to that proposed by the American Wheat Growers, Associated;

Urging members of the Farmers' union to join the Farmers' Union Egg and Poultry association;

Favoring the formation of a state sales agency for the Farmers' union fruit department;

Indorsing the Farmers' union contract for cooperative marketing of wheat.

Urging the government to use every legitimate means, including navy equipment, to enforce prohibition.

Among the resolutions that were defeated was one opposing reclamation projects until production had been reduced to domestic needs. A paragraph in one section, urging adjustment of production to domestic needs, was stricken out before the resolution as a whole was adopted.

ERADICATING MORNING GLORY.

A simple method of eradication of the wild morning glory is being carried out by C. T. Manhart of the Selah district, near Yakima. The smothering method has been tried, but the results have not been as successful as a few hogs on the affected spot of ground and let the porkers root out the weeds.

"They go right to work and eat every bit of root they can find," said Mr. Manhart, and dig deep holes and pretty nearly stand on their heads in them to get at the pieces that they root out.

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Cows for Wheat County

Brick Burford, secretary of the Whitman County Farm Bureau, believes in the development of dairying in the Palouse section, which has heretofore been given up largely to the production of wheat. A series of dairy meetings have been held in his county, in cooperation with E. V. Ellington, head of the dairy department at Washington State college, and an initial shipment (one carload) of grade Holstein cows has been purchased in western Washington for distribution there.

Our National Dairy Interests

Our national dairy interests are rooted in some $47,000,000,000 worth of farm land, buildings, and equipment, and the average American family spend one in every $5.00 of their food budget for milk and milk products. These figures indicate how highly the American people regard the dairy cow, and they are paying more attention to her than do the Hindus, who worship her and hold her sacred. Sturdy, healthy boys and girls are the best assets that a nation can have, and since the dairy cow is the best guarantor of child health, she has been taken into a full partnership in the great business of making men and women fit. In the words of Herbert Hoover, there is nothing so important to the American public as the realization of the necessity of the proper nutrition of children and the responsibilities of the community to it.

Make Treatment Effective

"Too much attention is being paid to discover how little of any compound can be used instead of determining how effective can be made the treatment."

This is a statement in a letter from a manufacturer of copper carbonate for the treatment of seed wheat to prevent smut. The writer adds: "The wheat grower is really interested in producing clean wheat and he must use enough of any compound to get it.

The letter was written in defense of one of the so-called "20 per cent" copper carbonate dusts and set forth the manufacturer's arguments in favor of it over the so-called 50 per cent products. Official tests in this state have resulted in the announced conclusion that four ounces of the 20 per cent product is as effective in the treatment of wheat as are three ounces of the 50 per cent kind. At any rate, we are not so much interested in the controversy as in that basic principle that the manufacturer laid down in the sentence first quoted above. That principle applies to treating seed wheat, plowing, raising hogs, preparing three meals a day and to every other essential activity in life. Results are what we are after and it requires good judgment and conscientious, continued effort to get results. They are not obtained by trying to see how little work one can expend upon the job. They are not obtained by speeding through an operation that normally requires time. They are not obtained through haphazard methods or even well-thought-out methods if half-heartedly or indifferently applied.

The saving of a few cents and a few hours in the treatment of the season's seed wheat is tremendously costly if it results in unclean wheat when harvest comes. Likewise the saving of time, effort and thought frequently renders whatever labor we expend upon our common tasks ineffective, futile.

Farmers, Keep Your Pencil and Your Purse in Your Pocket

Taxes are going to come down, by heck! We know it because a slick sort of solicitor has been telling some of our folks about it. And the beauty of it is that congress is going to bring 'em down and up to this hour doesn't know a thing about it.

You see, it is this way: A certain farm paper published 3000 miles away and which circulates more or less from the stern and rock-bound shore of old New England to the cactus fields along the Mexican border is circulating a petition "to the honorable members of congress" requesting said members to lower costs of government and, consequently, taxes. There is a sizeable army of clever gents carrying the petitions around in the country towns and communities of Washington right now, signing up every unsuspecting advocate of reduced taxes that they can grab.

We used that word unsuspecting because we meant just that, for there is a string to that petition. After the solicitor has convinced you (if he succeeds) that his paper is doing you a great service by circulating this petition and signs you up, he has you coming his way, and then, with the leverage secured, extracts two of your hard-earned dollars to pay for a subscription to the national farm magazine above referred to, which magazine, being under obligation to farmers of Alabama, Kentucky, California and elsewhere, as well as to you, tells you all about how to combat the cotton boll weevil, how to grow U. S. No. 1 tobacco, how to prune orange trees and so on. All of which is no doubt delightful reading, but hardly what you would strain your eyes over after a hard day's work.

For fear some of our readers may be caught unawares, here is the wording of this petition that is going to tell congress something so new and startling:

To THE HONORABLE MEMBERS OF CONGRESS:
GREETINGS: We, the undersigned, who are directly interested in Farming and the welfare of the people, do hereby respectfully petition or request Congress through the (name of the paper appears here) to pass LEGISLATION which will CUT THE COST OF RUNNING THE GOVERNMENT BY REDUCING ALL NON-ESSENTIAL EXPENSES, ELIMINATING ALL UNNECESSARY EMPLOYEES AND VOTING AGAINST ALL INCREASES IN SALARIES.

And then there's the dotted line for your signature and address, right down to your township. There are 21 lines on the petition that we saw—room for $42 worth of signatures at $2 a chance.

Won't it jar congress to discover that folks want the cost of government reduced! Strange that nobody ever thought about it before. If it wasn't for that two bucks for an Atlantic coast paper that we don't want, blamed if we wouldn't almost sign that petition ourselves. But as it is, we'll just have to let "the honorable members of congress" struggling along in blissful ignorance of the fact that they were all elected on platforms of economy and tax reduction.

Seriously, did you ever hear of such a piece of tommyrot in your life as this idea of telling congress (at two dollars a line) that we would like to get out from under some of the unnecessary costs of government? The place to tell congress something is at the polls, and if we didn't tell 'em last time, let's hang onto our two dollars when the solicitor brings the petition around and tell 'em next election, when it will do some good.

If one of these fellows buttonholes you, our advice is to keep your pencil and your purse in your pocket.

Washington State Gleanings

County Agent E. E. Hupp announces that 71 farmers of Pend Oreille county have ordered 22 tons of sodatol, war salvage explosive offered by the government. One car will be delivered at Newport at $7.50 for 100 pounds, one at Usk for $7.80 and one at Ione at $7.95. All orders for Pend Oreille county's shipment must be in County Agent Hupp's office by January 2.

CALF CLUB BOY WINS SCHOLARSHIP.

Christopher Verstrate, Moxee calf club member, has been awarded the Union Pacific scholarship for Yakima because of his excellent standing in boys' club work. He will have his transportation and expenses paid for a short winter course at Washington State college.

BOND ISSUE CARRIED.

After a warm campaign the $2,000,000 bond issue proposed to develop the Wynooche power project was carried by a majority of 100 votes at the election here December 1, it was shown by final and complete returns. The vote stood 1092 for and 992 against. Six councilmen were elected, the only contest being in the First ward, where E. E. Wieland was elected over V. G. Skinner.

In the school election balloting W. O. McCaw and N. D. Coons were elected directors.

In the port district election W. J. Patterson was elected commissioner without opposition.

WENATCHEE GROWS PEANUTS.

From a half acre of sandy soil between two and three tons of peanuts have been harvested by a Japanese gardener at east Wenatchee. Jess Thompson, grocer, who has been watching the peanuts all summer, said:

"They have required but little water and attention except that it has been necessary to hill them. They are worth 10 cents a pound, wholesale. We are having a quantity of them roasted. Those that have been tried out are as good as the best we have seen on the market. At 10 cents a pound, with four to six tons an acre, peanuts will bring to the grower $800 to $1200 an acre."

CAPE HORN GRANGE ELECTS.

Cape Horn grange met at Stevenson recently, where a farewell dinner was served, given in honor of Mrs. Shields, the master, who is leaving this vicinity for the winter. She has been master of this grange for two years.

Election of officers was held, and the results were as follows:

Mrs. Lillie Miller, master; Mrs. H. Miller, overseer; Mrs. B. Stevenson, lecturer; E. Stevenson, steward; Sam Angelo, assistant steward; Miss Hanlon, treasurer; Ida Stevenson, secretary, and Mrs. Dell Grosso, lady assistant steward.

SUGAR BEETS PASS TEST.

That the sugar beets harvested in Kelso from the plot of ground set aside for experimental purposes under the auspices of the Kelso Chamber of Commerce made a return of better than 15 per cent in sugar content, showing that a commercial sugar beet can be raised to advantage in Cowlitz county, is the announcement made by Secretary J. W. Collins. He says that now if 5000 acres of sugar beets can be pledged in this county there is no question but that negotiations for a sugar factory to cost about $1,500,000 could be opened at once.

The beets in question were raised under the supervision of T. Y. Blanton. A carload of the product was shipped to the factory at Toppenish, where the tests were made under the direction of the Utah-Idaho Sugar company. V. W. Pettingill, field representative of the company, was in Kelso to look over the field and to give directions for the harvesting of the vegetables.

WANT MORE SUGAR BEETS.

Growers and business men in a mass meeting at Sunnyside December 1 indorsed a resolution affirming the need of the sugar beet industry in the Yakima valley and pledging assistance to the Utah-Idaho Sugar company in securing 1500 acres of beets for next year's campaign. The meeting was presided over by H. B. Miller of Toppenish, chairman of the committee appointed at a general conference held in Yakima some time ago.

Paul Kirker of the Utah-Idaho Sugar company stated that if there could be secured 1500 acres of beet land among the growers of the Yakima valley for next year the company would organize for a campaign.

There was good attendance at the meeting and among the growers who spoke were Lee Chamberlain and H. E. Nicolai. Some of the growers said that they should have a somewhat better price for their beets. Fred Arrowsmith, member of the committee, said, following the meeting, that there should be no difficulty in securing the needed acreage.

SAWDUST DYNAMITE.

Farmers of this state are permanently assured of an inexpensive blasting medium as the result of the invention of "sawdust dynamite" by Professor William M. Dehn of the University of Washington department of chemistry, says a report from Yakima.

Plans are now under way for the manufacture and distribution of the powder, at a low cost, under auspices of the Washington state grange. The grange already has approved of the product, now known as "dehnite," as part of the farmers' cooperative movement, and a company is to be organized as soon as necessary financial arrangements are completed.

Shortly after the feasibility of his new explosive for land clearing was demonstrated Dr. Dehn offered a license under his patents to the state department of conservation and development, whereby the people of the state might buy blasting powder at a state factory for approximately one-half the cost of the commercial powders now used. The bill providing for the enterprise passed the senate, but was not presented to the house and consequently failed in passage.

After the meeting of the legislature the Washington state grange inquired if the proposal made to the state might be considered by the farmers' cooperative movement. After several months of discussion by the local granges the proposal was approved by the state convention of the grange in Bremerton in August. A comparative test by a committee of the grange was made near Bothell of the new explosive along with those now in common use and it was the unanimous opinion of this committee that the new explosive was equivalent or superior to equal weights of the commercial explosives.

Plans are now under way for the pledging of the necessary finances, after which a company will be organized under the name of "Dehnite" and distribute it in accordance with the cooperative rules of the organization.

Bounty on Export Wheat

Protect the Growers by Increasing Tariff on Foreign Product

Western wheat growers are going to the president and congress with an urgent petition for relief, and that petition will be supported by many of their friends—commercial clubs in the towns, state agricultural colleges, fair and friendly newspapers and many bankers, too.

But the essential fact should be kept in mind that a majority of the American people have not our point of view. There are in congress many senators and representatives who are elected from big industrial centers where the people want cheap food. Then, there is the south, a region growing little wheat, and the big and influential corn belt of the Mississippi valley. These are formidable influences and, taking stock of them, we have felt that there was slight prospect of success for the Gooding bill to guarantee a price of $1.75 a bushel.

We believe that there is a good chance of getting a substantial measure of relief, provided the wheat growers and their friends do not go down to Washington with impossible demands. In the first place, it would not be good political policy for either the democratic or the republican party to ignore the wheat growing states in the next presidential election, and control of the next congress may turn upon the votes of these states.

President Coolidge and other leaders, both of the republican and democratic parties, express sympathy for the western wheat growers, and we believe they will help if a sound, reasonable plan can be put forward by the united wheat growers and their friends.

That plan should be devised to meet the position announced in President Coolidge's message—namely, "No complicated scheme of relief, no plan for government fixing of prices, no resort to the public treasury will be of any permanent value."

In our judgment that disposes of the Gooding plan.

We think, too, that it disposes of the "Montana plan" The gist of that plan is in Section 2, as follows:

"A government export corporation or commission to be created, which (a) calculates (using the department of labor index) what prices wheat should bring to restore the pre-war ratio, and (b) announces its readiness to buy at that figure."

That goes into direct conflict with President Coolidge's formula of "No complicated scheme of relief, no plan for government fixing of prices, no resort to the public treasury."

We believe, however—and this is the hopeful phase of the situation—that the simplified premium or bounty plan adopted at the recent conference in Portland of wheat growers, cooperative societies, bankers and representatives of commercial bodies, does not conflict with the points laid down by President Coolidge. It would not require a complicated scheme of relief; it would not be a plan for government fixing of prices; it would not require a large appropriation out of the federal treasury. This is substantially the plan, as we understand it, that is advocated by the American Wheat Growers Associated. The idea is this:

We are growing more wheat than we consume, and the surplus must be exported and sold in the open markets of the world. Although this exported surplus is only a fourth or a fifth of the total crop, the price it brings in world markets substantially fixes the price that the American wheat growers must accept for wheat consumed in the United States. So it is proposed:

1. To increase the tariff on foreign wheat, so that Canadian and other foreign grain can not come into the American markets.

2. The government to collect a tax on all marketed wheat, through railway and certified mill reports, and then, from the fund provided by that tax, pay a premium or bounty on exported wheat. The theory—and we believe it is sound—is that this plan would bring up the price of all wheat in the United States to a level with that paid for exported wheat. This would be the world price, plus the bounty. We think it would work, because millers and others needing wheat, finding that they could not get it from Canada, and finding that the growers would not sell for less than the price they could get if they exported their wheat, would be compelled to come into market and buy on the basis of the world price plus the bounty.

If, for illustration, the crop were 800,000,000 bushels and the exportable surplus 200,000,000 bushels, the government commission, by collecting a tax of 10 cents a bushel on the total crop, could raise $80,000,000 and with that fund could pay a bounty or premium of 40 cents a bushel on exported wheat. The growers' net gain, therefore, would be 30 cents a bushel.

The bounty method could be reduced to a simple basis: (1) of determining what the bounty should be a bushel; (2) of leaving the marketing of the exportable surplus to existing private agencies, and (3) of the government commission's merely paying the established bounty on the wheat thus exported out of a fund to be created by laying a tax on the entire American wheat crop.

We believe that if the western wheat growers and their friends will unite in support of this plan, and press it vigorously at Washington, it will win the support of the administration and a majority of congress. All things considered, it is the best remedy that we can see anywhere on the horizon.

This is a big, practical problem and must be solved in a practical way. It isn't just a matter of what we would like to have; it is essentially a matter of what we can persuade the administration and congress to approve.

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Fear Is a Destroyer

Both Theory and Experience Urge to Be Not Afraid

But straightway Jesus spake unto them, saying, Be of good cheer; it is I; be not afraid.—Matt. 14:27.

Fear in one form or another, directly and indirectly, takes more lives and causes the failure of more undertakings than all other causes combined. Fear weakens the will. It unsteadies the hand at the steering wheel and palsies mind and body. It makes one falter and hesitate when decision and action are necessary to safety or success.

Perhaps it was something deeper and more fundamental to life than the foregoing that Jesus had in mind when he so often urged upon his followers to be not afraid. Of that we shall not now speak, but only of the apparent consequence of fear.

In the verse quoted above Jesus was calming the fears of his disciples when he came to them walking upon the water. Peter, perhaps a little less fearful than his fellow-disciples, said to him: "Lord, if it be thou, bid me come unto thee on the water." Jesus bade him come. Then how significant are the next few verses of that interesting bit of history: "And when Peter was come down out of the ship he walked on the water to go to Jesus. **But when he saw the wind boisterous he was afaid, and, beginning to sink, he cried, saying, "Lord, save me."**

What part was fear playing in Peter's failure? The words seem to indicate that he was successfully walking on the water until he became conscious of the boisterousness of the wind, a real or imaginary danger, when he became afraid and began to sink. Was it fear that caused him to begin to sink? The words of Jesus in the next verse are suggestive of the answer. He said to Peter: "O, thou of little faith, wherefore didst thou doubt?" Was that not almost equivalent to saying, "If you had believed and not been afraid you would not have failed"?

It will be a great day when individuals and nations adopt as their governing motto the words of the psalmist: "Though an host should encamp against me, my heart shall not fear."

Light Asked on Farm Loan Board

If information coming to a number of senators is true, a timely and proper resolution has been introduced by Senator Borah. It is based on information that the federal farm loan board has created the office of fiscal agent and appointed thereto a farmer member of the board, Charles E. Lobdell, at a salary of $25,000 a year, and that there has been a general raising of salaries.

The meritorious purpose of the federal farm loan act was to help agriculture; to enable farmers to borrow money on mortgages at a reduced rate of interest. Thus far that purpose has been achieved. But if the law is to be a continuing benefit to farmers, it must be administered with sound judgment, economy and the minimum of overhead expense. If an extravagant spirit is creeping into the organization, it should be nipped in the bud. In any event, the turning on of the searchlight will do no harm.

FARM BUSINESS AND MARKETS OUTLOOK

ALTHOUGH the market has sagged in the last few days, cattle prices have advanced 25 cents to 75 cents in the last month. Receipts have expanded this week, but for three weeks nearly 30 per cent fewer cattle have been going into the market hopper than during September and October. Western rangers have practically disappeared from all markets and the supply of heavy shortfeds is much less burdensome than it was a month ago.

Much of the decline in the supply has been in thin cattle suitable for further feeding, but slaughter steers also are less numerous. On the other hand, pork remains extremely cheap, poultry is abundant and beef is by no means scarce, so that the prompt recovery in cattle prices has been gratifying. Yearling steers are scarce and reached $13 at Chicago last week. Cows and heifers have staged a more animated rally than steers. Veals are 50 cents to $1.50 above the recent low point occasioned by a glut of heavy killing calves.

Demand for prime and choice steers to furnish holiday beef is practically over and after the first of January the $12 quotation may disappear at Chicago because of the absence of such cattle from the supply.

Feeder cattle buying has been on a conservation scale during the last three weeks.

Hog Movement Near Seasonal Peak.

Over a million hogs arrived at the 11 leading markets last week, making the high water mark for the year to date. Prices sagged under the weight, dropping below an average of $7 at Chicago once more.

Prices of pork products are low, but they are resulting in rapid distribution of hog meats and lard into consumptive channels. Pork loins have dropped nearly 50 per cent since the September high point.

Industrial conditions favor the maintenance of a high rate of consumption during the next few months and exports should be large as long as hog meats and lard are on the bargain counter.

Lamb Market Absorbs Big Run.

Receipts of sheep and lambs last week were the heaviest in a month, but prices are practically the same as a week ago This probably represents a final spurt in the season's movement, otherwise killers might not have taken hold so freely.

Wool Market Strong.

The spurt in buying in the last month has cleaned up most of the accumulations of wool at Texas points and the rather large holdings in the west. Prices asked for the remainder in these sections have advanced and buying has slowed down.

Wheat Trend Indecisive.

The advance in wheat prices a week ago was short lived and most of the gain has been lost. On moderate dips, sufficient speculative support develops to prevent any severe decline, but the large quantity of wheat in commercial channels in this country, Canada and elsewhere is too much of a burden for any decided upturn.

The international market for wheat is dominated by the heavy offerings from Canada and the knowledge that a large surplus is still available in that country and that both Argentina and Australia will begin to ship generously from their new crops shortly after the first of the year. About 300,000,000 bushels of wheat have been marketed by Canadian farmers since September 1, which is a substantial increase over last year, and some estimates of the Canadian yield are being raised. This enormous movement has been absorbed rather promptly as the Canadian visible supply is only 1,000,000 bushels more than a year ago. Both the Argentine and Australian crops have progressed without mishap in the last few weeks and the exportable surpluses are still estimated at a total of around 250,000,000 bushels. Australia had an old crop surplus of 15,000,000 bushels on December 1, and there is no sign of exhaustion in the rate of exports from Argentina.

Based on the rate of disappearance to date, importing countries will require 30,000,000 to 50,000,000 bushels more wheat than they were expected to take earlier in the season. Evidently the European crop was overestimated and non-European importing countries are taking much more wheat than last year. Low prices in this country and Canada undoubtedly will stimulate domestic consumption as feed. Substantial reduction in the acreage planted in this country this fall followed by a moderate cut in the spring wheat acreage, which seems likely to take place, will reduce our crop for 1924 unless the season is exceptionally favorable. These conditions give at least a faint promise of a better price level during the next crop year than in the present one.

Receipts of corn are running slightly heavier than last year and above the average for the corresponding period in the last 10 years.

Oats are not reaching primary markets as fast as they are disappearing and reserves accumulated at terminals are being whittled down steadily. The visible supply has dropped from 20,488,000 bushels five weeks ago to 18,058,000 bushels at the present time.

Cash Grain Markets.

The range of cash grain prices for the week ending December 12 was:

CHICAGO—Wheat—No. 2 red, $1.06@1.09; No. 3 red, $1.08 3-4@1.11 1-4; No. 2 hard, $1.03 1-2@1.09 1-2; No. 3 hard, $1.04@1.06. Oats—No. 2 white, 44 1-2@47c; No. 3 white, 43 1-2@45 1-2c; No. 4 white, 41@44 1-2c. Rye—69@71 3-4c. Barley—55@81c.

Seed and Feed.

The cloverseed market is dull and prices have sagged partly under the influence of the weakness in grains.

Demand for byproducts feeds from retailers and consumers remains light.

Hay Markets Generally Firm.

Hay markets are holding rather firm on the better grades which are unusually scarce. Demand is not considered broad. Owing to high freight rates, local conditions as to supply or demand have more than their usual effect on prices. Pasturage has been available until late in the year in the southern states, reducing the demand from that section, although high prices for cotton have made southern buyers more willing to pay good prices for hay.

Sharp Decline in Eggs.

Egg prices declined sharply last week. Mild weather recently has favored production and fresh eggs have been received from sections which usually are not shipping at this time of year. Within a month a seasonal increase in receipts can be expected so that prices probably have passed the high point for this fall and winter, but the market is unlikely to go much lower in the next few weeks.

Receipts of heavy fowls are light, with demand for them active, so that prices have been firm at higher levels. The supply of turkeys, ducks and geese is liberal.

Butter and Cheese.

Butter prices lost the advance scored early in the week, but a firm undertone was apparent at the close, as receipts were well cleaned up. High prices are causing consumers to cut down slightly on their purchases, however, and reports indicate that butter production is increasing, so that prices probably will not seek much higher levels.

Cheese prices were unsettled last week and the undertone of the market was exceedingly soft.

Fruits and Vegetables.

Carlot shipments of potatoes in the last two weeks have declined about 40 per cent and are running about 15 per cent below the corresponding period last year. Eastern markets were lower last week, with midwestern centers practically steady. Northern round whites, United States No. 1, are quoted at $1 to $1.10 per 100 pounds sacked, with sacked Russets at $1.75 to $1.85 on the Chicago market. Prices are likely to strengthen during the next two months if shipments from producing sections do not enlarge again.

Carlots shipments of apples have declined about 50 per cent in the last two weeks, and in the last few days, have been smaller than at the corresponding time a year ago for the first time since the end of August. Consuming markets remain rather dull, however, with prices practically unchanged. Midwestern Northern Spies are quoted at $5.50 to $6 in Chicago, Jonathans and Greenings at $5 to $5.50, with Baldwins at $4 to $4.50. Northwestern extra fancy medium to large Jonathans are bringing $2 to $2.25 per box on midwestern markets and Delicious $3.15 to $3.35. Based on records for previous years, a further decrease of 25 to 40 per cent in carlot shipments of apples may take place in the next month or two, which may cause prices to strengthen.

LATEST QUOTATIONS.

The Live Stock Market.

PORTLAND, Ore., Dec. 15.—Cattle—Beef steers, good grade, $6.75@7.75; medium grade, $5.50@6.75; common, $4.25@5.50; beef cows and heifers, good grade, $4.75@5.65; medium, $3.50@4.75; common, $3@3.50; canners and cutters, $1.50@3; bologna and butcher bulls, $2.75@4; feeder steers, $5@5.50.

Calves—Medium to choice, 100 pounds down, $9@10; 190 to 260 pounds, $6.50@9; 260 pounds up, $4.50@6.50; culls and common, $3.50@4.50.

Hogs—150 to 200 pounds, medium, good and choice, $7.10@7.60; 200 to 250 pounds, $6.50@7.10; 250 pounds up, $6@6.50; packing hogs, smooth, $5@6.50; packing hogs, rough, $4@5; slaughter pigs, $6.50@7.10; feeder pigs, $6@7.

Sheep and lambs—Lambs, 84 pounds down, medium, good and choice, $10@11; culls and common, $7.50@10; yearling wethers, medium to choice, all weights, $6@9; wethers, $5.50@8; ewes, medium to choice, $3.50@6.50.

SPOKANE, Wash., Dec. 15.—Cattle—Prime steers, $6.75@7.25; good to choice steers, $6.25@6.75; medium to good steers, $5.50@6.25; fair

(Continued on page sixteen.)

My Happiest Christmas--Prize Contest

(Continued from page one.)

Christmas had always meant denial and sacrifice, for there were four children to be clothed and fed and kept in school. And mother worked awfully hard to keep her family together and give us an education. There wasn't much money over and above the necessities of life. And now we were all grown and married, and in homes of our own, and she could spend her money as she wanted to and do some of the things she had longed to do for such a long time. There were no taxes to be paid, no water rent, nothing except the fun of spending, where she had always had to save.

My oldest sister lived in the same town I did, married and with two small sons, but mother thought it would be more fun to have all come to my house for Christmas, and it was so decided.

For about a week mother worked on that dinner. Mince pies, cranberry jelly, pumpkin pies, plum pudding, everything in the old way. The house was fragrant with spices and all the good Christmas smells. And then the turkey, grown on my sister's ranch. And gifts!—one for every one she had ever given gifts to and for some she had always wanted to, but couldn't afford to. Cards to every one she ever knew. And how she did buy things for her children, to make up for some of the things she hadn't been able to do when we were small! Her dear old face just beamed with love and joy at being alive and well.

Christmas day came—cold and clear, with snow squeaking under the sleighs—and Molly and the boys. And every one talked a great deal, and had such fun! Dinner was duly appreciated, and then it was time for them to go, and when the house was quiet again mother drew a long breath and said, "This is the happiest Christmas I can remember since you children were all small and your father was living."

And before another Christmas she had joined that husband and father in the Big Beyond. Now, when Christmas comes, I think of that last one that she was with us, and believe it brings the happiest memory of any.

MRS. EARL BRITTAIN.
Inchelium, Wash.

In Spite of Her Dress

WINS THIRD PRIZE.

Looking back and reflecting over my Christmases, I find the one with my first Christmas tree looms up with the most pleasant memories.

I was 16. The program committee had asked me to recite. My teacher selected the piece—a long poem. When I saw it I said, "It will take me a year to learn that." But I learned it well in the two weeks.

The afternoon before I helped decorate the tree and labeled presents. Of the hundreds of packages I wrote names on, not one for poor little me! Yes, I was little for my age, and very poor; an orphan—not a relative within 40 miles of me; working for my board, going to school. As I walked home that evening I was feeling blue. I had to wear a dark dress, not new by two winters, but made over. All the other girls that were to take part in the program had told me they were going to wear white dresses. I went to the kitchen and took a good cry before I could prepare the evening meal.

A young man called, just as we were sitting down to supper, to ask if he could take me to the Christmas tree. I was so surprised, so pleased! How my heart pounded—my first beau! When I went to dress and took another look at the old green-and-plaid dress I had another cry. Then I donned it and was on my way. As we stepped into the church the sight I'll never forget. The most beautiful, dazzling sight I had ever seen! As I walked down the aisle and the young man sat beside me, the envy of all the girls, I forgot the old green dress and my red eyes. But I was soon to be reminded. I had to go up behind the curtain with nine other girls, all dressed in their nice, white dresses. I begged the committee to excuse me, but they would not. Presently my number was called. I walked out under an arch between two laden trees and faced the audience. Some one said, behind the curtain, "Now do your best!" I guess I did, for there was laughter, then tears in the crowd as I went on. When I finished, imagine my surprise when I was caught in somebody's arms and carried off the stage, saying all sorts of complimentary things in my ear, the girls hugging me and saying nice things!

I went out into the crowd, and Santa handed the presents to little girls that carried them to the persons as their names were called. How surprised I was when my name was called, not only once, but again and again! I left the church with my arms full of packages, so happy—oh, so happy!—that if I cried it was for joy; so happy and excited I could not sleep.

The next day (Christmas day) I was invited out to dinner where were all the boys and girls of my class in school and the neighborhood. I had the jolliest, happiest day of my life.

The beauty of it is, I learned it doesn't take fine clothes to make real friends and true happiness.

MRS. MARION WARREN.
Chesaw, Wash.

Faces at the Doorway

WINS A PRIZE.

As a comparison of conditions that were with conditions that are, I am attempting to tell of my most happy Christmas—one that stands out most vividly in memory's storehouse.

It is the memory of a small, rude log cabin on an infertile homestead in northern Wisconsin, near the border of the lumbering industry. Everything was crude inside and out. There were times when it even became a question as to the source of the next meal. Poverty? Yes!—from the modern standpoint. No telephones nor electric lights; no movies nor joyriding; nothing but nature and nature's God and the inner man, not necessarily unhappy because of the lack of things.

It took perseverance to acquire even the rudiments of an education under such conditions, but some way it was accomplished for the writer of this, so that in due season she took a place among the teachers. Later it became advisable to find employment a little more distant, where there could be no week-ends at home—only the Yuletide visit—for transportation had its difficulties.

This new location was in an older, settled community, with well regulated farm homes and better social conditions. How old was the writer? Well, about 22—a mere girl.

It was not possible to reach home entirely by train. A shorter way was by sleigh, a goodly number of miles of which led over a winter logging road. As time approached the Christmastide, the longing for home—the mother and father—became so intense the waiting was painful. But Christmas dawned at last and soon the cutter and bells were at the door, and the journey of 50 miles over the snow and through the woods was begun. It was an ideal day—good sleighing, good weather.

You who have been in a similar situation will understand how the sweet anticipations just tumbled over each other. There was nothing in this world that half equaled that rude, unhomelike pile of logs that sheltered father and mother. Home was wherever were father and mother.

In that sleigh were tucked away a few presents—a little better in grade, perhaps, than usual. But of what consequence were presents! They were only things! There was something better being given—a daughter's love.

But every journey comes to an end—even life's journey—and one of the dearest pictures on memory's wall is the father and mother in the doorway of that rude log cabin.

MRS. F. AGNES DAMMAN.
Ellensburg, Wash.

Wi.h Husband and Children

WINS A PRIZE.

As I look back over my 35 Christmases I believe the one a year from the last was my happiest, or it will always seem so to me.

We lived nine miles from the town of Republic. My husband carried the mail and stopped at home for his lunch at noon. So we planned I would go on into town the day before Christmas and come back with him in the evening, after he had routed his mail for the following Monday. The ride into town was dreadfully cold—quite a lot of snow on the ground, and one of those blizzard days when the cold stings your nose and chills to the very bone.

Well, we got to town about dark and I went to buy presents for the children, whom we left at home, and my husband cared for mail and horses. He had two rooms rented that he bached in, and while I did my trading he started his fire and supper and came down looking for me, whom he finally found in one of the stores.

I'll skip the washing of dishes and supper-getting, but we made short work of them, as we had nine miles to drive that night. But we got started at last, and when we reached home it was cold and snowing, with a pale moon trying to show us the way. I went into the house, while my husband put up the team. There was a nice fire burning. The children had put on a big kettle of soup. It was hot, and popcorn was on the table, with our presents that they had saved their money to buy. I looked at the children, who were all in bed, to see if they were covered and warm. Little sister was asleep on big sister's arm and they were all asleep.

Next morning there was some great excitement, as Santa forgot to mark his presents and Mrs. Santa's hands were too cold.

That doesn't seem much of a Christmas, dear friends, but my good husband never saw another, for he was killed before another year rolled by, while logging. And as I look back it will always seem the happiest, yet saddest Christmas I ever had.

Endicott, Wash. MRS. EVA J. PECK.

Snappy Old Santa Claus

WINS A PRIZE.

The day after I had come from school I ran to the Lyadells' home and heard the children discussing Christmas presents, and I made up my mind to see that they should get them.

* * *

It was Christmas eve. The night was cold but lovely, in its coat of white—not snow, but frost. A slight wind was rustling the leaves to and fro, as I was walking briskly, with heavy packs of presents under my arms.

At last the house could be seen and merry laughter heard way into the woods. My heart began to beat loudly, as the thought came of being the "Santy." I ran up the porch steps and made much racket, but dropped about two presents only; and while the children pushed and laughed to see who could get to the door first I ran around the back way and into the kitchen.

"Oh!" said Luis, the oldest, with much surprise.

"Tanta Claus!" said Robert, half in fear and half in joy.

The children were very much surprised, to be sure, but I told them. "You know, children, I'm a snappy old Santa Claus, and while you were outside I jumped from the chimney, and here I am. Now," I said, "let us all sing 'Silent Night.'"

The children quickly responded to this, and to me never had a song sounded more beautiful. SELVA HANSON.
Vancouver, Wash.

Watched for Santa

WINS A PRIZE.

Would Santa Claus never come? I had been waiting on this certain Christmas after every one else had retired, to see if just this once I could see Santa put the presents into the stockings, but it didn't seem that he was coming. There were four stockings hung up before the fireplace, which my little brothers and sisters and I had hung there, but they had gone quietly off to bed, to wake in the morning and enjoy their toys, while I had stayed up, thinking I should get to boast of seeing Santa to them.

Instead, it looked as if I were to be fooled and no Santa Claus would come.

Squeak! squeak! What was that? I heard a noise as if some one were sneaking up on me. I looked quickly about, but no one was in sight, so I resumed my former position and continued to watch. I must have fallen asleep almost immediately after that, as I began to dream a terrible dream about Santa. I dreamed that he was chasing me around and around a huge stocking, which he had filled with snakes, toads and switches and had put my name upon.

I don't know how long I continued to dream, but I finally was awakened by a terrible bump. I awoke and found I had fallen out of my chair. I looked around in surprise and found that all the stockings were full but mine. Oh, how terrible! Santa had visited while I was asleep and, having found I was such a bad boy, had left mine empty.

I began to cry and crept off to bed and cried myself to sleep, but when I found, in the morning, that my stocking was as full as the rest I resolved never to try that again. RONALD MARCHANT.
Lynden, Wash.

Money Goes a Long Way

WINS A PRIZE.

The happiest Christmas I ever had was when I was 12 years old. As there were five children at home to clothe and feed, and wages were very small those days, there was not much money to spend on Christmas presents.

We were living on a little rented farm, and we raised quite a number of chickens. A few days before Christmas my father gave me 10 young roosters and said if I sold them I could have the money for them to buy myself a dress and what other things I could get. So my 9-year-old brother and I got two gunnysacks and put the chickens into them. We had to walk and carry them about five miles to the nearest little town.

As the roads were very bad those days, and especially in the winter, we decided to walk the track. We got along well until we were nearly at our destination, when two of the roosters got away from us. Such a time we did have catching them, for there were only brush and woods all around us! But we finally caught them and proceeded on our way.

We tried to sell them at the stores, but could not, so we went from house to house until we had disposed of them all at 25 cents apiece. I now had $2.50 to spend and it was a good deal of money, I thought. I felt proud, for I never had had so much money before.

We then went to the store to do our shopping. It had been my intention to buy my dress first and then buy what I could with what I had left. I had also planned on getting each one of the family some little present, too.

As soon as I got into the store and saw all the Christmas things I forgot about my dress. I commenced looking around at all the things, and studied and figured how much I could spend on each one. But I finally got a present for each one. Maybe it would be interesting to hear what I bought for such a small amount of money, so I will tell you what I got. A shaving mug for father, a fascinator (or shawl) for mother, a rubber ball for each of my two older brothers, a small set of dishes for my little sister and a little cup and saucer for my baby brother. Besides, I got a few oranges, some candy and nuts and a few candles and also my dress. But, as I had waited until the last to get my dress, I did not have much money left. I bought some 2-cent calico to make me a winter dress. But I did not mind that, as we were satisfied with almost any kind of dress those days.

My brother and I walked home with our hands and arms full, but happy. Father and mother laughed at me for getting such a nice, warm winter dress, but they did not scold.

We had a tree put up in the front room, and then every one had to stay out until I got the tree trimmed and everything ready. As soon as I got the candles lit I called them all in. They all came in dressed up in their best, as we always did on Christmas eve. We all sang Christmas songs and then I gave each one his present and bag of nuts and candy. Every one was pleased, but I think I was the happiest of all. MRS. LARUE CLARK.
Sumas, Wash.

In the Minnesota Woods

HONORABLE MENTION.

There is one Christmas that stands out brightly in my memory. I had just finished high school and had gone to spend a few months with an uncle in northern Minnesota, where he had taken a homestead near the Canadian line. It was a place of "moskegs" and heavy timber—a land of homesteaders and log cabins.

On Christmas morning many of the settlers gathered at the little log schoolhouse, where services were held. There was no minister, but some of the older members read a few chapters from the Bible and everybody sang—and how they did sing! It seemed their voices filled that vast woodland.

After the services the bachelors—and there were many—were taken home by the different families to share their Christmas dinners.

At my uncle's home, neither goose nor turkey graced the festive board, but since he owned a band of sheep, there was roast leg of mutton, which had been boned and stuffed with dressing—a most appetizing dish. There were choice cuts of venison cooked to perfection and it was then that I tasted my first bear meat—meat of a cub bear—which I thought at the time to be a tender, juicy pork roast. Blueberry pies, cranberry sauce (small fruits of this wooded country) delicious home-made candies and countless other goodies vied for the place of honor, for there was no dearth of good things to eat.

Since my uncle's cabin was the roomiest in the country, early in the evening sleighs loaded with people—old and young—began to arrive for the Christmas dance. They came bundled in furs, for the weather was stinging cold, but it seemed that it only served to increase their gayety and high spirits. The air of the cabin was redolent with a pine fragrance and lanterns on all sides furnished a mellow glow of light. The cabin walls were beautifully festooned with boughs of red fir gathered from the woods and some sort of lovely green vine bearing clusters or bright red berries.

Two squeaky violins and a wheezy old organ furnished glorious music (or so it seemed then) for the jolliest crowd I ever saw. They danced and laughed and lunched and chatted until the first gray of early morning shone in the sky.

At the time I believed that sheer novelty had made that Christmas so delightful, but, now that passing years have given me clearer vision, I realize that that alone was not the chief reason for my enjoyment, but rather the spirit of good fellowship that permeated everything. Those men and women, living the quiet and lonely life of the woods, were hungry for companionship and whether they met to sing praises or to indulge in good, wholesome pleasure—an indefinable something—an atmosphere of sincerity, a spirit of appreciation and genuine comradship was there at its best. And with that knowledge has come the realization that no matter where or what the conditions may be, there can be no real Christmas where the true Christmas spirit is lacking.

Fairfield, Wash. AMATA MARION.

Even as a Grain of Mustard Seed—

Long ago it was written that faith, even tho small as a grain of mustard seed, could remove mountains.

Henry Ford, with unbounded confidence, has labored for more than twenty years to remove the mountain of difficulty standing in the way of modern transportation. He has sought always to give the world practical transportation at low cost.

Many have wondered why Ford products, whose remarkable value time and use have proved, can be produced, sold and serviced for so little.

It is because from forest and mine to finished product there exists a marvelous coordination of every phase of manufacture. From scores of widely scattered Ford-owned sources the raw materials are brought by Ford transportation units to Ford plants, moulded, machined and assembled into cars, trucks and tractors.

At no time is the high quality of manufacture or workmanship beyond the supervision of the builders. Unhindered by changing market conditions, Ford products are built uniformly sturdy and dependable year after year.

This unusual development of industrial economy delivers your Ford car, truck or tractor at the lowest possible cost.

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Ford
THE UNIVERSAL CAR

UNLOADING ORE AT THE RIVER ROUGE FORD PLANT

LIVESTOCK AND DAIRY

To Test Milk

By E. V. ELLINGTON, Head Department of Dairy Husbandry, W. S. C.

Is it an unusual feature for a cow to test 8 per cent butterfat? Could you give me the figures in butterfat of the highest testing cow in the state? I have a Babcock tester, but have no directions with it. Could you tell me the strength of acid to use? J. A. C. Tiger, Wash.

It is not unusual for the milk of cows of the Jersey or Guernsey breed to test as high as 8 per cent butterfat at certain times of their lactation period. Especially will they test high when the end of their lactation period approaches. It is unusual for any cow to average 8 per cent for their entire lactation period.

The highest average test for the state of Washington that we have a record of in this office was made by a Jersey cow named The Pickle of St. Mawes, owned by Carlyon & Hogg, Bellingham, Wash., who as a 2-year-old averaged 7.04 per cent during the year. In order to average this, her milk tested above 8 per cent during certain months.

The specific gravity of sulphuric acid used in testing milk should be 1.82 to 1.83. The following directions should be followed in securing an accurate butterfat test for milk:

1. Clean all glassware with washing powder and hot water and rinse with clean, hot water.
2. Secure a representative sample of milk and mix thoroughly by pouring from one vessel to another. Have the milk at 60 degrees to 70 degrees F.
3. Measure out 17.6 cc. of milk with pipette and transfer to whole milk test bottle. Be sure to get all of milk in bottle. Blow out the last drop in the pipette.
4. Always run tests in duplicate.
5. Measure out 17.5 cc. of commercial sulphuric acid with specific gravity of 1.82 to 1.83 and add to test bottle. If acid is too strong, add less. If too weak, add more.
6. Mix the acid and milk by a rotary motion of the bottle. The above amount of acids should give the desired coffee brown color, which on standing turns black.
7. Label bottle on glazed surface to facilitate identification.
8. Place the bottles in centrifugal machine so that the machine is properly balanced, and start machine slowly.
9. After attaining proper speed, continue for five minutes.
10. Stop machine slowly to prevent breakage.
11. Shake contents of bottle and add clean, hot water (180 degrees F.) until contents are brought up to the base of the neck.
12. Replace bottles in centrifuge and whirl for two minutes at proper speed.
13. Fill bottles with clean hot water (180 degrees F.) until fat column lies between the 0 and 8 per cent marks on the scale.
14. Place in centrifuge and whirl again for one minute at proper speed.
15. Place bottles in hot water bath (120 to 140 degrees F.) and leave here for five minutes. The water should come just above the fat column.
16. Measure length of fat column with the aid of a piar of dividers by placing each point at the extreme ends of the column.
17. Without changing speed, transfer one point to the zero point of the scale and other point will fall upon the division representing the actual per cent of butter fat in that particular sample of milk.
18. Record tests and color of fat column and empty contents of test bottles in stone waste jar or ground immediately, shaking bottles up and down while draining.
19. Thoroughly clean all glassware with washing powder and hot water. Rince with hot water.

VETERINARY

By DR. S. B. NELSON.

Foot Rot—My cows suddenly go lame. Their feet swell and crack from the heel through between the toes. Their feet seem hot and very sore. There is a mattery substance in the cracked places. A. A. R.
Yelm, Wash.

Your cattle are affected with foot rot, due to a bacterial infection. A simple treatment which has frequently given results is to take a small rope and draw between the claws or toes until the wound is broadened. Wipe off the blood and apply tar daily.

Caked Udder—I have a heifer that had a badly caked bag when she freshened. The inflammation has gone but there are two hard lumps about the size of an egg between the two front teats. C. B. F.
Loon Lake, Wash.

You may get pretty good results from painting the two lumps with tincture of iodine after each milking. The iodine frequently assists in absorbing growth formations of this kind.

Scours—I have a heifer that has had scours for several months. She has lost weight. R. R.
Startup, Wash.

Give the heifer a tablespoonful of listerine in a quart of water and then follow with teaspoon doses morning, noon and night. After giving that for two days, then give it twice a day and then once a day as necessary. You will possibly also find it helpful to give her a little later one ounce of compound tincture of gentian in a pint of water once daily.

Abortion—I have sold my herd milk cows because of abortion. Can you tell me how and what to use to disinfect my barns, etc., so that other cows may be brought on the place without danger of contracting this disease? Will the rain and sunlight disinfect the pasture so it will be safe after a few weeks?
Moffetts, Wash. R. V. C.

A very good way of disinfecting your stable is to clean out all the contents and litter, sweeping it quite clean; then follow by making a solution of one quart of corrosive sublimate (which is a very deadly poison) to 1000 quarts of water. Use a broom and scrub the floor, mangers and walls just thoroughly. In three or four days follow this with a similar treatment, except use a saturated solution of bluestone copper sulphate; use plenty of it. Five or six days later give the barn a through whitewashing, putting it on the floor, gutter, mangers, walls and everything. The strong sunlight will generally disinfect anything, and destroy nearly all bacteria. The rain will not.

Two-Day Dairy School

A two-day dairy school was held at Olympia December 5 and 6 with the cooperation of E. B. Stookey, the county agent, and a number of the prominent dairymen of the county.

The following men took part on the program: Robert Cowan, county agent for Grays Harbor county, spoke on the balanced ration; E. B. Stookey, on the feed value of the common feeds; T. A. Rutledge of Little Rock, told how he raised the butterfat production of his herd over 100 pounds during the last year; C. C. Aspinwall of Olympia handled the tuberculosis test; and Otto J. Hill, county cow tester, discussed the value of records in regard to the balanced ration.

GENERAL ADVERTISING.

NEW LAMP BURNS 94 PER CENT AIR

Beats Electric or Gas

A new oil lamp that gives an amazingly brilliant, soft, white light, even better than gas or electricity, has been tested by the U. S. government and 35 leading universities and found to be superior to 10 ordinary oil lamps. It burns without odor, smoke or noise—no pumping up, is simple, clean, safe. Burns 95% air and 6% common kerosene (coal oil).

The inventor, W. W. Johnson, 161 Union Ave., Portland, Ore., is offering to send a lamp on 10 days' FREE trial, or even to give one FREE to the first user in each locality who will help him introduce it. Write him today for full particulars. Also ask him to explain how you can get the agency, and without experience or money make $250 to $500 per month.—Adv.

Prevent **Blackleg** by using **Blacklegoids**

Scientifically Prepared and Tested Blackleg Vaccine in Pill Form

Consult your veterinarian or druggist. Write for free booklet on blackleg. No. 351.

Animal Industry Department of
Parke, Davis & Company
DETROIT, MICH.

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December 24 to January 8, 1924

Orders at the prices listed below will not be accepted after January 8th. Order today from this ad. Postage paid on every order.

SOCKS—army all-wool mohair, commonly called goat hair. Wears like iron, per pair **35c**
Dozen pairs **$3.90**

SOCKS—army wool, pair **25c**
Dozen pairs **$2.90**

PANTS—O. D. army pure wool, long legs; sizes 30 to 35 only..... **$2.75**

BREECHES—Army O. D. wool, government issue, brand new..... **$3.75**

BREECHES — Reclaimed, but neatly repaired **$1.95**

BREECHES — Heavy corduroy, dark color, double seat..... **$3.75**

COVERALLS—Good heavy khaki denim, well made **$2.75**

UNDERWEAR — Army 90 per cent wool, two-piece, bought from government surplus, worth much more than we are asking for it; garment.. **$1.10**

SHIRTS—Army O. D. wool, regulation double front and elbows **$2.95**

UNION SUITS— Good heavy wool **$2.50**

UNION SUITS— Good heavy wool **$2.95**

LEGGINGS—O. D. wrap, new..... **$1.00**

PUTTEES—All leather, any style, special, at **$3.45**

MITTS—Wool lined leather **95c**

VESTS—Leather, heavy muleskin sleeves, leather cuffs, heavy moleskin shell and all leather lined **$6.95**

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6-inch top **$5.25**
8-inch top **$5.75**
10-inch top **$7.95**
12-inch top **$8.95**
16-inch top **$9.95**

RUBBERS—16-inch leather top. Gold Seal brand, all sizes, brand new, pair **$4.25**

SPECIAL ON BLANKETS

ARMY O. D. wool commercial five-pound blanket, size 60x86.. **$2.95**

ARMY O. D. all-wool blankets, weights 3 to 5 pounds, size 64x86, government issue **$3.50**

All-wool, 6-pound double gray blanket, size 64x86 ..... **$6.95**

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just like lumber, and you cut it with a saw or break after scoring. It is fireproof, waterproof and won't warp or buckle. You can finish the job with calcimine, paint or wallpaper, so that it can be used for the most artistic interiors.

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WESTERN WALLBOARD CO.
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Double Your Money in Less Than a Year

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This was done by one of our purchasers. Ask about it. Raise ROOSEVELT STRAIN Mormon Foxes and you can do as well. All breeders purebred, registered, guaranteed.

UNITED STATES SILVER FOX FARMS CORPORATION
200 Hutton Building, Spokane.

Read the "Want Ad" page this week for good offers of all kinds.

POULTRY AND RABBITS

Poultry Show

By Puget Sound Association

The Puget Sound Poultry association at Seattle will stage another show this winter, January 1 to 6.

Arthur C. Smith of St. Paul has been chosen to judge the show. Mr. Smith has judged at Madison Square for five consecutive years; five years at the Chicago National; at St. Louis, Buffalo, Topeka, California State fair, Tacoma; Great Falls, Mont., and Minnesota State fair eight times in 12 years. He is a member of three standard revision committees; edited the last two Standards of Perfection and was principal author of the American Plymouth Rock Standard and Breed book.

The premiums will be 40, 20 and 10 per cent of all entry money, and in addition there will be $20 in cash prizes. There will also be a great many specials given to the third, fourth and fifth prizes, which are being donated by merchants of the city. Three $50 cups will be donated; two will be given by Seattle news publishers and one by Mayor Brown of Seattle.

An interesting feature of this year's show will be the drawing of several heavyweight fowls, a chance being given each visitor when he purchases his ticket. A similar chance will be given for a turkey which will be given away at the end of the show week. Members of the association have donated a number of lightweight birds, which will be auctioned off during the show and the proceeds given to charity.

Poultry Management

The six weeks' course in poultry management on a commercial scale offered each year at the western Washington experiment station at Puyallup, will open Monday, January 7, 1924. The work includes practice and lectures in poultry management, construction of poultry houses and equipment and the control of poultry diseases. Last year more than one hundred persons were enrolled in the school.

The students taking the course this year will have access to all flocks maintained at the station except the contest flocks.

In the contest houses will be entries from New York, Kentucky, Tennessee, Ohio, Iowa, Illinois, California, Idaho, Montana, Oregon, Washington and Canada.

Laying House

Allows 3 1-2 Square Feet to Bird

There are many commercial poultrymen in western Washington who have adopted the Shoup plan of laying house and they are finding it a practical house for this climate. L. C. Beals Jr. of Vashon, King county, has just erected a new laying house which he believes is an improvement over the Shoup house although the general features are unchanged.

The building has a capacity for 500 hens which allows 3 1-2 square feet for each bird. It is built in three sections and the birds in each division are kept apart from the others largely to even up the floor space. The advantages as suggested by Mr. Beals are:

1. The floor space is four feet wider, which allows four feet more of feed hopper and more space per bird.
2. There is an extra set of trapnests fitted to one side of the partition.
3. The drinking fount is in the center of the front section and is protected from winds and cold weather.
4. Glass ventilators are placed at the top of each section, which open both to the north and south, thus affording more perfect ventilation.
5. The roof is lower and keeps the house warmer in winter yet stays cool in summer because of the ventilators.
6. The open front is raised just 15 inches, which is just enough to keep the draft off the birds, the curtains being used only in extreme bad weather.
7. The height of the drop boards has been lowered two inches, thus making it a little more accessible to the birds since no ladders are used.
8. Glass windows at each side of the drinking fount and below the wire front afford more light on the floor.

The curtains are in sections and tacked on frames, which are stored in the feed room when not in use. The water troughs are made from caves troughing, but the water is regulated by a spring tap that trips from the weight of the water. The dropping boards are kept covered with sand to aid in cleaning. The trapnests are the Shoup type, but each section has two batteries, one under the drop boards and the other along the side of the partition.

The feed and litter carrier extends the full length of the house and can be used for the egg container and record sheets. The house is built a few feet off the ground and the bottom is boarded up, leaving only enough space between the boards for ventilation. The birds kept in this house are under the State Accredited Trapnest association and the records are kept in duplicate.

Mr. Beals has a total of from 3500 to 4000 birds on the farm and the pullets are trapped an entire year before they are placed in the laying house, from where the eggs are sold as hatching eggs. The greater part of the eggs in the spring months are sold for hatching and they go to all parts of the United States. Incubators are used and a number of chicks hatched each spring, but these are used largely to supply the increase of the flock.

WHATCOM POULTRY SCHOOL.

The third annual Whatcom county poultry school will be held at Meridian in the high school building during the three days beginning December 27. The speakers that will appear this year are W. D. Buchanan, Mrs. George R. Shoup, B. C. Young of Bellingham; A. D. Foster, D. S. McDole of the Seattle office of the Washington Cooperative Egg and Poultry association; Dr. W. T. Johnson of the Western Washington experiment station at Puyallup, and H. B. Carroll Jr., the county agent.

CARBIDE RESIDUE DISINFECTS.

That the residue left after carbide has been used for gas lighting and cooking has a value as a disinfectant is claimed by those who have used this form of lighting. One user says that he disinfects his stables and poultry houses with it and has no trouble with any of the common pests of live stock and poultry. He also uses it on his garden soil in the same manner as lime, not as a fertilizer, but as a sweetener of the soil to make available the fertility elements already in the soil.

FOR SICK CHICKENS

GERMOZONE Don't let ROUP, COLDS, CANKER, SOREHEAD, BOWEL TROUBLE, etc., take your profits. Easy to cure or prevent. "The Lee Way" Book, 64 pages, by GEO. H LEE, tells about poultry ailments, how to detect, what to do, etc. Germozone (75c and $1.50 sizes) and this FREE book at drug or seed stores, or postpaid from GEO. H. LEE CO, Omaha, Nebr.

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Vita Gland Tablets Start Hens Laying in Twenty-four Hours

Hens have glands just like humans and also require vitamines. Because they directly stimulate the organs involved in egg production the mysterious newly discovered VITA GLAND Tablets, crushed into hens' drinking water, turn winter loafers into busy layers almost over night. Science has discovered how to control egg production with essential vitamines, and gland extract that works directly on the OVARIAN or EGG producing gland of the hen. The wonderful effect of gland stimulation is shown by a simple test. Government experiment stations report that hens properly fed vitamines, etc., lay 300 eggs as against the sixty of the average hen. "Leg weakness of baby chicks due to insufficient Vitamine B," says The Official Bulletin. Also says: "Hens start laying at an average age of 139 days when fed vitamines."

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EGGS, EGGS, EGGS and fine healthy chicks, prosperous flocks without fuss or bother or drugs or expensive feeds can be had. Just drop these tablets into drinking water. So simple, to double your profits. Chickens now full of pep and life. Nests full of eggs. Summer production at winter prices. So confident are the Alexander Laboratories, the manufacturer of the original and genuine VITA GLAND tablets, that you will be amazed at results that they offer to send a free box for your own use. This is how. Send no money, just name. They will mail two boxes, each regular one dollar size, a generous supply. When they arrive deposit only a few cents postage and one dollar with postman. When your neighbor sees the wonderful increase of eggs in your nests let him have one box for a dollar and thus your box has cost you nothing. $5000 in big Kansas City bank guarantees your satisfaction or money back without question, so write today and get dozens of extra eggs this simple easy way. Write ALEXANDER LABORATORIES, 9037 Gateway Station, Kansas City, Mo.

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No Money Down!

Catalog tells all—write.

Caution! U. S. Bulletin 201 shows that vibration of the bowl causes cream waste! The Melotte bowl is self-balancing. Positively cannot get out of balance therefore cannot vibrate. Can't remix cream with milk. The Melotte has won 26 Grand and International Prizes.

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Runs so easily, bowl spins 25 minutes after you stop cranking unless you apply brake. No other separator has or needs a brake. Bowl chamber is porcelain lined.

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At a contest held recently in England, Hercules all-steel triple power stump puller pulled stumps faster than any other method. Quick work—low cost and one man does the job. Hand power in four speeds, single, double, triple and quadruple power. Easy to pull—quick winding cable, and other features. Horse Power Hercules is a complete, up-to-the-minute stump pulling outfit made. Write for prices and catalog—get my 1923 introductory offer.

$10.00 Down Easy Payments

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Comes complete ready to use

Horse Power Hercules

Glance over the bargains on the "Want Ad" page.

ORCHARD AND GARDEN

Believes in the Fruit-Growing Industry

(Continued from page three.)

the first methods that was used. We worked out a six-year rotation plan that showed good results on one of the worst infested fields we had. The crops used were strawberries the first two years, plowing the patch up after harvesting the second crop. The second year a crop of fall wheat was seeded after the land could be gotten in shape and clover was seeded in the following spring. The fourth year was a crop of hay or grain and the fifth year clover, which was plowed up and a crop of potatoes planted the sixth year.

"This plan got results in a community where the weevil had practically ruined one crop of healthy vines that had grown a good crop of fruit the year previous.

Effect of Temperature.

An interesting paper on the "Temperature as a Limiting Factor in Fruit Growing" was given by Professor O. M. Morris, head of the department of horticulture at the state college. He pointed out the fact that the trees in the northwest get a greater number of hours of sunlight than those in other sections because of our being closer to the North Pole. This helps the growth of the trees to a certain degree and it has its effect on the resultant fruit crop.

"High temperatures often cause soft fruits, which in some cases have poor flavor. When there is low humidity and high temperature combined there is more apt to be a high flavor in the fruit. Milder temperatures will sometimes cause fruit to have poorer quality, while the maximum amount of sunlight will often increase the sugar content of the fruit and therefore lower the storage qualities.

"Temperature has much to do with the condition the tree goes into the dormant period and the mild weather that is prevalent in the coastal section results in a longer growing season and less winterkill than is common in the inland states. A careful study of temperatures and their relation to fruit growing will reveal many solutions to problems that have so far been unsolved."

Home Nursery Stock.

"Prior to the war the nurseries in this county secured practically all of their seedlings from Europe because they could buy them cheaper than they could grow them at home. When they were forced to grow their own after the war began they found that it could not only be done easily, but that there was a greater percentage of the plants that would grow, when reset," according to F. A. Wiggins of the Washington Nursery company at Toppenish. "Large plantings were made in the middle west, but when it was tried in the northwest it was found that they would grow well here also.

"One of the advantages in raising seedlings at home is in keeping out all plant and insect pests that are sure to come in with the imported stock. Much damage has already been done in this regard and the result has been a state quarantine that prohibits all outside importations. The nurseries are now growing practically all of their own seedlings and are getting help in an educational way from the United States department of agriculture.

"In fact, it has been a godsend to the industry because it is giving the nurseries an opportunity to carry out investigations that would otherwise be impractical. For instance, we have found that root stalks can be started from root cuttings by simply planting short pieces in the ground. By selecting these plants we hope to be able to find a variety of pear that will be immune from blight. Other qualities are possible, even though some of them may take several years to perfect.

"As for real improvements in propagation methods, the nursery industry has made more progress in the last 10 years than it had in the previous 50 years and there is no telling what can be accompublished by consistent efforts."

Other talks were given by J. A. Scollard, president of the United Dairymen's association; D. S. McDole of the Cooperative Egg and Poultry association and Majorly, manager of the Washington State D. O. Lively, manager of the Washington State Chamber of Commerce.

Enjoyable Banquet.

One of the bright lights of the convention was a banquet given complimentary to the members by J. J. Sullivan of Everett. There were close to 100 who attended. F. W. Wiggin of Toppenish acted as toastmaster and called on the following men: W. O. Eckert of Grapeview, president of the association, T. A. Noble of the Everett Chamber of Commerce, Thomas J. Hill of the Seattle Chamber of Commerce, F. W. Graham of Seattle, Dr. E. S. Barnes, president of the North Pacific Berry Growers, and J. J. Sullivan. The last day of the convention was put on with the cooperation of the extension service of the state college, the western Washington experiment station at Puyallup, M. D. Armstrong, extension horticulturist of the state college, and Arnold Z. Smith, the county agent. Two very interesting talks were given on the subject of orchard practices by M. E. McCollam and H. D. Locklin, both from the experiment station.

The subject of disease control was well handled by Arthur Frank of the experiment station at Puyallup, and Miss Nell M. Barnett of Seattle gave the viewpoint of a fruit picker. The growers took advantage of this opportunity to ask questions during the discussions, which helped to make the talks all the more interesting.

When Pear Trees Bear

By O. M. MORRIS,
Department of Horticulture.

Please let me know through your paper the number of years it takes before the different varieties of pears bear and when they will have a full crop. J. C. S.
Edmonds, Wash.

The local environment conditions modify somewhat the age trees attain in different districts before coming into fruit production. The methods of tillage and the type of pruning given also modify this to some extent.

If Bartletts are pruned no more than is positively necessary to select the main frame work branches and give them the advantage, the trees will usually begin bearing about five years of age and will be in commercial production by the time they are 8 years old. Bosc will average one or two years later. Flemish Beauty, Winter Nellis, Clairgeau, Seckel and Le Conte will average about with the Bosc. The Anjou is usually two or three years later than the Bartlett in coming into bearing. Heavy pruning of the young trees generally tends to delay fruit production.

Wapato Fall Sown Lettuce

Although results from fall sowing of lettuce around Wapato, on the Yakima Indian reservation, have not been all that was expected this fall, some late August plantings were taken off early in November and with moderate weather it was hoped to move 18 or 20 carloads before the season closed. Some of the shipments netted growers $1 per crate of three and one-half to four dozen heads. About 150 acres have been seeded to lettuce this fall for the spring harvest, and it is expected that about the same acreage will be set next spring with plants grown indoors during the winter.

PLANNING SMALL ORCHARD.

The home fruit plat should be planned carefully and, in general, with a view to supplying fruit continuously throughout the year, either in the fresh state or canned or otherwise conserved.

SEATTLE'S home-like hotel

A famous land mark—the favorite hotel for out-of-town shoppers, business people and visitors. Noted art collection now a permanent attraction. Only a few minutes walk from all steamers, convenient to railway depots, close to shopping center.

Always a good room at a moderate price—$1 a day up.

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Hotel
SEATTLE
100% American
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THE U. S. Department of Agriculture has shown that farm equipment is one of the smallest items in the cost of farming, the yearly average being only 4 to 8% of the total.

Farm machines are sold for less money, pound for pound and quality for quality, than any other similar manufactured article. Yet in profitable farming there is nothing more important than good equipment.

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Now is a good time to inspect the condition of your machines. Most of them have been used lately. Are any of them worn out? Are some of them so out of date that it does not pay to use them? Are there new methods on the market you should be adopting? Have you been getting along without certain machines that would save you money and labor?

To help you take an inventory of your needs, we are printing the full McCormick-Deering line.

The purpose of all McCormick-Deering machines is to make farming better, easier, and more profitable for their owners. They are all useful, modern, and efficient. The Harvester Company's work of standardization has simplified the variety of lines, combining many good features in fewer essential machines. Power farming is at its best where McCormick-Deering Tractors [15-30 and 10-20] are used with McCormick-Deering machines for drawbar and belt work. They are made to work together.

We will send you descriptive material, catalogs, details as to sizes and styles on any machine or line that may need attention on your farm. Write the address below. Call on the McCormick-Deering dealer; he will always be at your service.

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Remember that whenever you say "Sperry" to your feed dealer. It is the one thing in the poultry business that never "lays down" on the job—the Sperry Spirit of Responsibility!

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We want to back you up with real help! That's why we maintain numerous service headquarters. Put your poultry problems up to us! Get the benefit of our years of practical experience, together with our laboratory and research work. No charge! No obligation! And send for the Sperry Service Bulletin, *"Why Mixed Feeds"*—written by Dr. Kaupp, a great national authority. Use the coupon—it's free!

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For Highest Prices Ship to
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kill fur animals on spot. Eighteenth season on market. Free circular when this paper mentioned.

EDMUND GOES, Station C. Milwaukee, Wis.

Glance over the bargains on the "Want Ad" page.

Poultrymen Have Chicken Dinner

Frequently the producer, the distributor and the consumer get together, but all too seldom in a spirit of harmony and concord. One evening recently, however, all three gathered about the board and sang "Blest Be the Tie that Binds," figuratively speaking.

The occasion was the first annual chicken dinner of the Farmers' Union Egg and Poultry association. The place, Spokane. The time, December 11. Eggs were not served—for two reasons: Only "boarder" hens were killed for the dinner and eggs such as those produced by the association members were worth a nickel apiece that day and the producers needed the money.

About 50 poultrymen were present, and nearly that many non-producing consumers, among the latter being President Carl S. Evans of the Spokane Central Labor council and a few ladies, members of the Spokane Card and Label league. One of the women explained that the Card and Label league was composed of those who "spend the dollars earned by members of labor organizations," and declared that they were anxious to buy the "union-made" eggs of the Farmers' Union association.

Egg Dealers Tell Why.

Present also were two Spokane egg dealers who have espoused the cause of cooperation to the extent of buying their eggs from the cooperative association. These dealers, F. H. Fuller and H. L. Shand, told those present why they used association eggs and their reasons seemed to please the officers and members of the associations: First, they could depend on the quality of the graded eggs as marketed by the association, which has put into practice the system of grading similar to that employed by the larger association on the west side of the state that has made good in a big way; second, they like to deal with an organization because it is more economical and efficient than buying here on a sort of "orchard run" basis, as Mr. Fuller expressed it; third, organization tends to stabilize supply, quality and market.

While egg production and marketing were the chief topics of the program that followed the chicken dinner, other products were represented by those present. W. J. Robinson, manager of the Washington Wheat Growers' association; S. O. Poole, manager of the fruit marketing department of the farmers' union, and Charles Waggoner, director of the Inland Empire Dairy Producers' association, were among the speakers who delivered two-minute talks.

Other speakers included Professor C. F. Cassels of the poultry department of the state college; Carl S. Evans of the Spokane Labor council; R. H. McMillan, director of the farmers' union; A. C. Whisler of the poultry association, and J. Q. Adams, president of the farmers' union. The meeting was presided over by D. F. Mitchell, president of the poultry association.

Fruit Growers Meet

Earl F. Barnhill of Wenatchee was elected president of the Washington Horticultural association at the annual meeting at Yakima last week. Other officers elected or reelected are: Luke Powell, Yakima, vice president; L. M. Hatch, Alderton, second vice president; C. L. Robinson, Olympia, secretary-treasurer; and J. S. Peterson, Omak, and C. M. Lockwood, Spokane, directors for three-year periods. The next annual meeting will be held at Wenatchee on a date determined by the executive committee. The next summer session will be held at Spokane.

Cooperative marketing was the outstanding subject of the convention, though the usual educational addresses on problems of production were heard. A comprehensive report of the convention by a staff representative will appear in a later issue of The Washington Farmer.

VITAMINES RESPOND VARIOUSLY.

The cooking of milk lessens the amount of vitamine available in it; the cooking of tomatoes does not destroy their vitamine content.

FARMERS' WANT ADS

FLORISTS E

IF YOU LOVE GLADIOLUS SEND GOOD 2C stamp and receive fine bulb to bloom for you. A dollar—25 bulbs, assorted—including one worth 50c. Harper, florist, Tacoma, Wn.

MONUMENTS F

COMPLETE STOCK. WRITE FOR DESIGNS and prices. Inland Monument Co., N1001 Monroe, Spokane.

XMAS SUGGESTIONS P

WHITE COLLIE PUPPIES FOR CHRISTMAS delivery. Urbandale Farm, Oakley, Idaho.

HELP WANTED—MALE 3

ALL MEN, WOMEN, BOYS, GIRLS, 17 TO 65, willing to accept government positions, $117-$250, traveling or stationary. Write Mr. Ozment, 208, St. Louis, Mo., immediately.

RAILWAY POSTAL CLERKS, START $133 month. Railroad pass, expenses paid. Questions free. Columbus Institute, N-5 Columbus, Ohio.

HELP WANTED GENERAL 5

MEN AND WOMEN, AGE 17 TO 30, AT ONCE to train for positions with Western Union Telegraph Co. and various railroads. Pacific Telegraph Institute, Spokane, Wash.

SITUATIONS WANTED—Male 21

FRUIT GROWER, FIFTEEN YEARS' EXperience; capable of managing every detail of orchard work, wants employment. Boise valley preferred; best of references. William Carey, Route 2, Boise.

SCHOOLS AND COLLEGES 26

EARN $110 TO $250 MONTHLY; EXPENSES paid as railway traffic inspector; position guaranteed after completion of 3 months' home study course or money refunded. Excellent opportunities. Write for free booklet G-157, Stand. Business Training Inst., Buffalo, N. Y.

FRESH FOOD PRODUCTS 51-3

NICE ITALIAN PRUNES, 50-60 TO POUND. Special 25-lb. box, express paid, $3; 100-pound bag, $5. f. o. b. Salem. Guaranteed. Larger grades quoted on request. Edw. Dencer, grower and packer, Salem, Ore. R3.

GOOD QUALITY, MEDIUM SIZED ITALIAN prunes, 100 pounds, $7, unprepaid; 25 pounds, $3.25, postpaid in 4th zone; 9-pound bag, $1.30, express prepaid; satisfaction guaranteed. Fred Kubin, Salem, Ore.

GOOD PRUNES, $5.50 PER HUNDRED. SAMple carton, 15c. Why pay more for looks? Quality counts. We also have the fancy sizes, both sweet and tart. Kingwood Orchards, Salem, Ore.

FISH—4 LBS. SMOKED SALMON, $1; 4 LBS. Alaska salmon bellies, $1; 4 lbs. black cod, $1; 5 lbs. best codfish, $1; delivered by mail. Coffin Fish Co., Seattle, Wash.

MERCHANDISE 51-5

MEN'S O. D. ARMY LONG PANTS, ABSOlutely all wool, 31 to 35 waist, $2.95; boys' all wool suits, 2 pairs pants, sizes 6 to 17 yr., $9.35; men's 12 and 16-in. pacs, solid leather, oil tanned, $6.75 and $7.50; boys' solid leather 10-in. hi-cut shoes, sizes 11½ to 6, $3.25, $3.45, $3.95, $4.50; blankets, tan, wood finished, 64x76; good weight, special, $3.75; women's Cuban heel rubbers, 1st quality, sizes 2½ to 8, special 50c pair. Farmers' Dry Goods Store, 1211 1st., Spokane. We pay postage.

SPECIAL—ONE-POUND TIN "SATISFACTION tobacco" and pipe for $1. Smoking, chewing tobacco, cigars, cigarettes and complete line of pipes. Wholesale and retail. Peter M. Jacoy, 4 Washington st., Spokane.

MERCHANDISE (Continued) 51-5

YOUR ANNUAL OPPORTUNITY—FOR QUICK disposal we offer salesmen's samples of woolen goods, underwear, hosiery, blankets, sheep-lined coats, mackinaws, leather vests, etc., at one-third to one-half less than regular prices. Our price list of sample goods is now ready. Send for it today. Minneapolis Woolen Mills Co., Dept. 23, 612 1st ave. North, Minneapolis.

HONEY 53

SEND ALFALFA HONEY FOR CHRISTMAS. Postpaid into Oregon, Wash., and Idaho; 10-lb. pail, $1.85; 3 10s, $5; 5-lb. pail, $1; 60-lb. can, $8.25. Kittitas Valley Apiaries, Ellensburg, Wash.

FINEST HONEY, FIVE POUNDS, $1; TEN pounds, $1.95, postpaid; sixty pounds, $7.50; two cans, $14.50; add transportation. Satisfaction guaranteed. Bancroft Apiaries, Hermiston, Ore.

ALFALFA-SWEET CLOVER HONEY, PREpaid, second zone, 3 10-lb. pails, $5; 60 lbs., $8.30; two cans, $14.50, not prepaid. Harry Fisher, Prosser, Wash.

KING CLOVER'S ALFALFA-SWEET CLOVER honey; 60-lb. can, $7.50; two cans, $14.50; 60-lb., prepaid, second zone, $8.29. King Clover, Sunnyside, Wash.

HAPPY HOME HONEY — ALFALFA AND clover; 60-lb. can, $7.50; two cans, $14.50; case six 10-lb. pails, $8.50. H. N. Paul, Mabton, Wash.

ALFALFA-SWEET CLOVER HONEY, 60-LB., $5.85; two cans, $11.50; 10-lb. pails, $1.45 f. o. b. Rigby, Idaho; quality guaranteed. Macdonald Co.

EXTRACTED HONEY—1 60-LB. CAN, $7.50; two, $14.50, collect; 3 10-lb. pails, $5, prepaid, third zone. Wells D. Rose, Sunnyside, Wash.

HONEY—FRESH ALFALFA-SWEET CLOVER honey; one 60-lb. can, $7.50; two cans, $14.50. A. L. Traner, Touchet, Wash.

ALFALFA HONEY, SIXTY POUNDS, $7.50; two cans, $14.50, not prepaid. Skovbo, Hermiston, Ore.

COMB HONEY, $4.80 PER 24-LB. CASE. G. I. Folsom, Prosser, Wash.

MISCELLANEOUS—FOR SALE 60

SASH AND DOORS—O. B. WILLIAMS CO., 1943 First ave. So., Seattle. Chicken house sash, 20" wide by 25" high, 80c; a dozen different sizes in stock for immediate shipment. Skylights for chicken houses, 36"x40"; price, glazed, $2. This is the size recommended by the Western Washington experiment station. We carry them in stock for immediate shipment. Sash and doors for all purposes at lowest prices. All orders receive prompt attention. Our large illustrated catalog No. 35, showing full line of building material and built-in fixtures for the home, free on request. O. B. Williams Co., Established 1899.

PIPE—GET PARTICULARS ON OUR SPEcial flue pipe, 1¼, 1½ and 2 inch. Big saving on it. We also have all sizes second-hand and new standard pipe at low prices. We also save you on roofing, belting, pumps, engines, cables, etc. Alaska Junk Co., S120 Adams, Spokane, Wash.

HOMESPUN TOBACCO—FIVE POUNDS chewing, $1.75; ten, $3; twenty, $5.25. Five pounds smoking, $1.25; ten, $2; twenty, $3.50. Send no money, pay when received. Pipe and recipe free. Kentucky Tobacco company, Paducah, Ky.

TOBACCO—EXTRA FANCY SMOKING, 10 pounds, $2.50; good smoking, 5 pounds, $1; 10 pounds, $1.50; 20 pounds, $2.75; chewing, 5 pounds, $1.50; 10 pounds, $2.75; quality guaranteed. O'Connor Smokehouse, Mayfield, Ky.

MISCELLANEOUS—FOR SALE (Continued) 60

WALL BOARD—WRITE FOR SAMPLE OF Washington plaster wall board; won't warp, won't burn. Manufactured by Washington Building Products company, 6351 E. Marginal Way, Seattle, Wash.

NATURAL LEAF TOBACCO—CHEWING, 5 lbs., $1.75; 10 lbs., $3; smoking, 5 lbs., $1.25; 10 lbs., $2. Pay when received. Pipe and recipe free. Farmers' Tobacco Union, D19, Paducah, Ky.

HOMESPUN TOBACCO—CHEWING, 5 LBS., $1.65; 10 lbs., $3; smoking, 5 lbs., $1.25; 10 lbs., $2; 20 lbs., $3.25. Recipe free. C. Scott, Sedalia, Ky.

TOBACCO — KENTUCKY'S PRIDE; EXTRA fine chewing; 10 pounds, $3; smoking, 10 pounds, $2; 20 pounds, $3.50. Farmers' Club, Mayfield, Ky.

SEND $1 AND RECEIVE 2 LBS. CHEWING or 3 pounds smoking, postpaid. Kentucky Tobacco Growers, Sedalia, Ky.

FOR SALE—100 STANDS BEES, AND SUPplies. G. V. Sumner, McMurray, Wash.

CANE FEED MOLASSES. WRITE A. A. Lewis, S151 Lincoln, Spokane.

MISCELLANEOUS. 61

OPENING OF THE NEW WHITESTONE IRrigation district—8000 acres of irrigable land. This project was constructed under the direction of the Department of Conservation and Development of the State of Washington. Adapted for diversified farming, livestock, dairying, poultry and fruit growing. A picturesque location in the foothills of the Cascade range, Okanogan county, Washington. Write for free picture folder, giving full details. F. W. Graham, Assistant General Agricultural Development Agent, Great Northern Railway, King street station, Dept. 109, Seattle, Wash.

ELIJAH COMING BEFORE JESUS. FREE book. N. Megiddo, Mission, Rochester, N. Y.

AUCTIONEERS 75

DR. KENNETH G. McKAY, GRADUATE VETerinarian, livestock auctioneer. Farm sales solicited. Colville, Wash.

MACHINERY—For Sale 93

FOR SALE, CHEAP—WELL DRILLING OUTfit, complete; also some new drilling and fishing tools. Outfit and tools at La Grande, Ore. R. A. West, Route 6, Salem, Ore.

DOLLARS IN YOUR POCKET ON OUR USED engines, wood sawing outfit, farm equipment. New sawmill outfits, etc. Fallquist Brothers, W2034 Riverside, Spokane.

AUTOMOBILES—FOR SALE 112

SEE CHEVROLET FIRST—NEW AND USED cars at prices that will surprise you; stop in or write Inland Empire Chevrolet Sales Corp., 916 2d ave., Spokane. Open evenings. Open Sunday.

AUTO ACCESSORIES AND PARTS 119

NEW AND USED AUTO PARTS, NEARLY all cars. Our low prices and prompt service will convince you. Money refunded if not satisfied. C. & D. Auto Salvage & Supply Co., 1904 Grand ave., Kansas City, Mo.

STOVE REPAIRING 128

WRITE MYER RUBENS, SPOKANE, ABOUT stove repairs, welding broken parts, nickel plating.

PATENTS 150

PATENTS, TRADEMARKS, COPYRIGHTS. Write to B. P. Fishburne, registered patent lawyer, 398 McGill bldg., Washington, D. C.

PETS—Dogs, Birds, Etc. 171

6 FOXHOUND PUPS, 4 MONTHS; 2 SIX months old, 1 three years old. Albert Dimbat, Sherwood, Ore. Route 5.

FOR YOUNG ROLLER CANARIES, IN FULL song, write Mrs. J. Wellborn, Warren, Ore.

RABBITS and HARES. 173

PEDIGREED FLEMISH GIANT BUCKS, $6 each. Clyde Cockerham, Newberg, Ore.

POULTRY—Baby Chicks 174

HALF GONE—75,000 "HENACRES" CHICKS already sold for 1924. This proves that the northwest has confidence in us and our high grade baby chicks, the product of a wonderful trap nest pedigree breeding plant, one of the biggest of its kind in the world. We have some February, early March and May chicks left at $22 per 100, $200 per 1000. Special low prices on June chicks. Safe delivery guaranteed. Send for our free illustrated catalog and circular "The Last Three Months Are the Hardest," telling how "Henacres" Leghorns won first place for September, October and November at the state egg-laying contest. Henacres, Prosser, Wash.

CERTIFIED WHITE LEGHORN QUALITY chicks from selected free-range, heavy laying, utility hens mated to double pedigree cockerels with authentic trapnest records. Our breeding flocks are inspected and accredited by the Sonoma county farm bureau. Safe arrival and full count of live, vigorous chicks guaranteed. Accredited "AA" grade chicks at single "A" prices. Send for catalogue and attractive spring prices. Must Hatch Incubator Co., Inc. The world's largest electric hatchery, 445 Seventh st., Petaluma, Calif.

"FRESHLAID" WHITE LEGHORN CHICKS for 1924 will produce results. Thirteen years hatching of real chicks. High record males, vigorous, mature females, unlimited free range, a chick producing proposition hard to beat. We send out chicks that will make you a permanent customer. Discount on large orders. World's largest electric incubator. Free catalog. Freshlaid Farm, Colfax, Wash.

WHITE LEGHORN BABY CHIX OF UNUSUAL value, from especially well culled hens mated with full pedigreed males. Prices, per 100: January, $16; February, $15; March, $14; April, $12.50; May and June, $12; 100 per cent live, strong chix guaranteed. We are accredited by the Sonoma county farm bureau. The Pioneer Hatchery, 422 Sixth street, Petaluma, Calif.

ACCREDITED CHICKS — ALL OUR CHICKS for 1924 will be from accredited flocks mated with certified cockerels sired by hens with 225-egg record. A limited number of chicks from cockerel sired by our $1000 champion cockerel and our world's record pen of hens. Write for special prices for those who order early. Queen Hatchery, 1430 1st ave., Seattle, Wash.

BABY CHICKS—YOU GET THE BEST FROM successful breeders, using nothing but eggs from their own trapnested stock. Order them from the Carnation W. Leghorn Farms. My 16 years' experience in breeding enables me to give you entire satsifaction. Ernest W. Raush, Carnation Poultry Farms, Kent, Wash.

BEST QUALITY CHICKS AT MONEY-SAVING prices—100 per cent live delivery guaranteed. White Leghorns, Reds, Barred Rocks, White Rocks, Black Minorcas, Anconas. Write today for price list. Salem Chickeries, Salem, Ore.

(Continued on the following page.)

FARMERS' WANT ADS

This is the farmers' "want," "sale" and "exchange" department for small advertisements of farmers, including live stock and poultry.

Advertising rates for ads running 1 to 3 times, 10c per word per insertion, with a special rate to Farmer subscribers, as follows: Ads running 4 to 12 times, 9c per word per insertion; ads running 13 times or more, 8c per word per insertion.

All commercial and land advertising, 10 cents per word per insertion. Open also to nonsubscribers.

In using these columns advertisers must observe (1) No advertisement will be accepted containing less than 10 words per insertion. (2) Every word, number and initial, including name and address, must be paid for. (3) New advertisements, changes of copy or cancellations must reach general office, Spokane, Wash., 10 days in advance of publication date. (4) Cash must accompany order.

Above rates include insertion in The Washington Farmer, The Idaho Farmer and The Oregon Farmer, which constitute the Pacific Northwest Farm Trio, 46 Review building, Spokane, Wash.

POULTRY (Baby Chicks) (Continued) 174

WHY DELAY?—PLACE YOUR ORDER FOR 1924 chicks with the White Hatchery, the hatchery with a reputation for good chicks. Safe arrival, full count guaranteed. Member Accredited Hatcheries, Sonoma county, "A" and "AA" stock. Price right. Send for catalog. White Hatchery, Petaluma, Calif.

S. C. WHITE LEGHORN CHICKS, 100 PER cent live, delivery guaranteed; 20 per cent books order. 100, $16; 500, $75; 1000, $140, postpaid; hatch only eggs from my own flock; no lights; trap records to 292. Absolutely only one grade. Catalog free. Roy S. Hands, B614, Cottage Grove, Ore.

TRAPNESTED WHITE LEGHORNS, HOLLYwood and O. A. C. stock. We offer 75,000 chicks, 25,000 hatching eggs, 5000 pullets. 11 years at the business. Satisfaction guaranteed. Booking orders now. Send for price list. Inwood Leghorn Farm, Corvallis, Ore.

BABY CHIX—S. C. W. LEGHORN; VIGOROus, heavy laying hens, mated to exp. station cockerels from 250 to 285 egg dams; all free range stock; $20 per hundred. Member Washington Accredited Hatchery association. L. G. Swinney, Spanaway, Wash.

PREPAID—WHITE LEGHORN CHICKS, OREgon Agricultural college stock; the famous egg producers; $16 per 100; prices on quantities. Only 10 per cent deposit. Safe arrival strong, husky chicks guaranteed. Russell Poultry Yards, Corvallis, Ore.

SUPERIOR WHITE LEGHORN BABY CHICKS from high egg-producing flocks, mated to male birds with best blood lines on the Pacific coast. Write for circular and low prices to Crystal White Poultry Farm, McMinnville, Ore.

ORDER ANCONA BABY CHIX EARLY, FROM prize stock; great layers of pure white eggs; easy keepers, small eaters. Full description in catalog on request. Brainard's Ancona Hatchery, 8332 46th ave. So., Seattle, Wash.

THE POEHLMANN HATCHERY FOR BETter quality W. L. chix from selected free range hens mated with double pedigree cockerels. Literature and price list sent on request. 610 Main st., Petaluma, Calif.

WHITE LEGHORN BABY CHIX FROM flocks mated to cockerels sired by hens with 250 to 285 egg record; $20 per 100; hatching eggs, $1.50 per setting. Surlay Poultry Ranch, W. L. Grider, Route 3, Kent, Wash.

1924 WHITE LEGHORN CHICKS FROM FAmous egg strains; Corvallis bred; low price, high quality; enlarged capacity to care for large orders as well as small. Oregon-Corvallis Hatchery, Corvallis, Ore.

LARGE, ENGLISH WHITE LEGHORNS, WINter laying strain; bred to lay, and sure do. Chicks, 100, $18; choice cockerels and yearling cocks, $5 each. Mrs. M. L. Russell, Route 3, Meridian, Idaho.

WHITE LEGHORN BABY CHICKS FROM MAture hens, mated to male birds with sire's dam's records of 252 to 316 eggs; $18 per 100; $160 per 1000. D. A. Gillette, R4, Yakima, Wn.

ANCONAS—BACKED BY OFFICIAL CONTEST records and splendid list of winnings in the west's leading shows. Booking chick and egg orders. Oscar Dunlap, Junction City, Ore.

BABY CHIX, TANCRED STRAIN; GUARANteed strong and healthy; from trapnested, two and three year old hens. G. N. Bryant, Junction City, Ore.

PERKINS SUPERIOR WHITE LEGHORNS are good Leghorns; $15 per 100; one grade and one price. Chas. L. Perkins, 1337 Burrage, Portland, Ore.

SPECIAL PRICES ON GUARANTEED DAYold pullets; fall and winter delivery. Write for particulars. Eureka Hatchery, Petaluma, Cal.

SUPERIOR WHITE LEGHORN BABY CHICKS at very low prices for 1924 delivery. Write the Rio Linda Hatchery, Rio Linda, Calif.

BABY CHIX FROM TANCRED AND EXPERIment station strain W. Leghorns. Wax's Poultry Farm, Kent, Wash.

25,000 TANCRED WHITE LEGHORN CHICKS, prepaid, 14c each. Beverly Egg Ranch, Leona, Ore.

Turkeys.

MAMMOTH BRONZE TURKEYS—LARGE boned, well marked young hens and toms, $6 and $10 each; May hatched; toms, 24 lbs. Mrs. Henry Hose, Sterling, Idaho.

GIANT BRONZE TURKEYS—SWEEPSTAKES at state fair; Los Angeles breeding and exhibition birds, with size, vitality, color. M. M. Reiman, Planada, Calif.

PUREBRED MAMMOTH BRONZE TURKEYS (giant strain); hens, $5; toms, $7; satisfaction guaranteed. Mrs. J. R. Mulkey, St. John, Wash.

THOROUGHBRED MAMMOTH BRONZE TURkey toms, $7; purebred Toulouse geese, $3.50 and $4. Mrs. Floyd Angstrom, Creston, Wash.

GIANT BRONZE TURKEYS FROM PACIFIC International winning strain; circular free. Herbert Stoneberg, Route "B," Eugene, Ore.

THE BIG BONED NARRAGANSETT TURkeys, 30-lb. toms, 25-lb. hens, 1923 hatched, for sale. Mrs. C. C. Dillon, Warsaw, Mo.

MAMMOTH BRONZE TURKEYS—CHOICE OF 500: sires, 45 lbs.; hens, $6 to $8; toms, $10 to $20. Harry Smith, Coupeville, Wash.

PUREBRED GIANT BRONZE TURKEYS, choice breeding stock; early hatched. Mrs. J. F. O'Neil, Riverside, Wash.

MAMMOTH BRONZE TURKEYS, PRIZE winners; unrelated stock. Mrs. Leo Coffin, Route 1, Eagle, Idaho.

PUREBRED CHAMPION GOLD BANK STRAIN Giant Bronze turkeys. Mrs. Frank Browning, R1, Nampa, Idaho.

YOUNG, PUREBRED BRONZE TOMS, Mammoth Toulouse geese. Emma Moehnke, Beavercreek, Ore.

TURKEYS — THOROUGHBRED GIANT Bronze of real merit. J. Lewis Johnson, Box 69, Eugene, Ore.

GIANT STRAIN PUREBRED MAMMOTH Bronze turkeys. Mrs. C. R. Lowery, Route 2, Boise, Idaho.

PUREBRED BOURBON RED TURKEYS, hardy hens, $6; toms, $7. Cora Evans, White Salmon, Wash.

WHITE HOLLAND TURKEYS, UNRELATED pairs and trios for sale. Mrs. E. D. Sitton, Carlton, Ore.

MAMMOTH BRONZE TOMS, EXCELLENT breeders. Mrs. Peter Aschenbrenner, Ferdinand, Idaho.

PUREBRED BRONZE TURKEY PULLETS, $5. Mrs. Bertha Gray, Route 2, Winlock, Wash.

EXTRA LARGE BRONZE TURKEY TOMS, $10 and $15. Mrs. Don Whittig, Boise, Idaho.

GIANT BRONZE TURKEYS; TOMS, $10; PULlets, $5. V. McKimmy, Melba, Idaho.

PUREBRED MAMMOTH BRONZE TURKEYS. Mrs. S. L. Mabry, Rogerson, Idaho.

POULTRY—Turkeys (Continued) 174

MAMMOTH BRONZE TURKEYS FROM NEW eastern stock from Massachusetts and Missouri. Toms, $10 to $25; pullets, $8 to $10. Mrs. H. D. Moore, R1, Box 21, Hubbard, Ore.

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PURE BARRED ROCK COCKERELS; good laying strain. Also a few Buff Orpington cockerels. Write to Mrs. A. A. Nalziger, Salem, Ore. R7, Box 151.

THOROUGHBRED FAWN INDIAN RUNNER ducks and Barred Rocks; male and females, $1.50 up. C. A. Muths, Route 1, Salem, Ore.

JERSEY BLACK GIANTS, YOUNG STOCK FOR sale, and two-year-olds, guaranteed purebred. E. M. Chambers, Box 601, Bovill, Idaho.

SINGLE COMB REDS, SHOW BIRDS. BREEDers write for prices. Peter Jessen, Harbor Heights, Magnolia Beach, Wash.

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PUREBRED COLORED MUSCOVEY DUCKS, trio, $7.50; pair, $5; single, $3. Park Place Poultry Farm, Nampa, Idaho.

USED INCUBATORS AND BROODERS, Queens, Cyphers, St. Helens. Hi-Quality Poultry Ranch, Yelm, Wash.

COCKERELS—WHITE LEGHORN, BIG BONE English strain; April hatch, $5 each. Mrs. Dan Jean, Hazelton, Idaho.

S. C. BROWN LEGHORNS, PEDIGREED stock. Write your wants to E. H. Rosenkranz, Colfax, Wash.

COCKERELS, BARRED ROCKS, STANDARD and bred to lay stock. Hi-Quality Poultry Ranch, Yelm, Wash.

BARRED ROCK COCKERELS, OREGON AGRIcultural College strain, $2.50. Eastburg Bros., Idaho Falls, Idaho.

R. I. RED COCKERELS, RANEY AND MEAD strains; big, fine, dark birds. Pickard Bros., Marion, Ore.

PRINTING FOR POULTRY MEN. EMPIRE-Pacific Printing Co., Auditorium bldg., Spokane.

PUREBRED BUFF ORPINGTON COCKERELS, $3; pullets, $2. H. M. Cade, Okanogan, Wash.

PRIZE WINNING BARRED ROCK COCKERels. C. H. Murrey, Medford, Ore.

WHITE WYANDOTTE COCKERELS, $2 EACH. Fred Hoffman, Albion, Wash.

WHITE ORPINGTON COCKERELS, $3. FRED Bilyeu, Lamont, Wash.

POULTRY AND LIVE STOCK WANTED 175

WE GUARANTEE TO PAY THE HIGHEST market price for your poultry and live stock. Owing to the constant changes in the market we are unable to quote prices in this paper from week to week. We will furnish tags and prices when you are ready to ship. Write us what you have to sell. Prompt returns. John Lewis & Co., Spokane, Wash.

DOLLARS FOR YOUR EGGS—WE PAY THE top market prices for your eggs and poultry. Daily cash remittances. McClintock-Trunkey Co., produce department, Spokane.

WE PAY TOP PRICES FOR YOUR LIVE OR dressed veal, hogs and poultry. Your check by return mail. Shipping tags on request. M. & J. Packing Co., Spokane.

TOP PRICES PAID FOR CREAM, EGGS, poultry, turkeys, geese, ducks. Inland Products company, Second at Cedar, Dept. E, Spokane, Wash.

LIVE POULTRY WANTED — WE REMIT promptly at market prices. Commercial Creamery Co., 1327½ Railroad, Spokane, Wash.

WANTED—GOOD BOAR, DUROC JERSEY preferred; weight 175 or 200 lbs.; state price. James Smith, Chewelah, Wash. Box 305.

BEST PRICES PAID FOR YOUR POULTRY eggs, veal and hogs; prompt remittance. Hotchkiss Produce Co., Spokane.

SHIP YOUR POULTRY AND EGGS TO THE Washington Meat & Poultry, Spokane, Wash.

LIVE STOCK 177

FOR SALE OR EXCHANGE—PUREBRED registered Guernsey bull, Mildred's Topsy Boy, two nearest dams average milk, 16,182 lbs.; fat, 772.8 lbs. Age 5 years; daughters now milking; gentle and easy to handle. Grange Warehouse Co., Oso, Wash.

MILKING SHORTHORN BULLS, SIRED BY bulls from record of merit dams; a grandson of a 13,226 lb. cow, 510 lbs. butterfat; also others equally well bred, of breeding age; priced right. C. P. Truesdell, Centralia, Wash.

REGISTERED SHORTHORN BULLS OF quality and breeding; red, white or roan; polled or horned; of serviceable age or younger; priced to sell. Wm. Mulhall, Buena, Yakima county, Wash.

DUROC PIGS, $15 EACH; REGISTERED Great Orion Sensation breeding, either sex. Order now, they won't last. Marella Farm, Hagerman, Idaho.

LIVE STOCK (Continued) 177

PUREBRED, BIG TYPE POLAND CHINA boars, ready for service; two gilts, weaned pigs. J. K. Jorgensen, Dietrich, Idaho.

IF YOU CAN USE A PUREBRED GUERNSEY bull, two years old, for $75, or a calf at $35, write Peter Erickson, Estacada, Ore.

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FOR SALE—PUREBRED POLAND CHINA pigs. White Wyandotte cockerels. Fred M. Schmidt, Trout Lake, Wash.

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WANT 12 POLAND CHINA SOWS, MED. OR large type, short legs, bred. Write Geo. H. Johnson, Gold Hill, Ore.

SPOTTED POLAND CHINA BOARS; BRED TO open gilts; fall pigs; prices right. D. E. Mitchell, Joseph, Ore.

MILK GOATS—REGISTERED SAANENS AT prices that will please you. Ferd. H. Dietzel, Portland, Ore.

DUROC JERSEY PIGS, $5 EACH. MAMMOTH Toulouse geese, $6 each. W. D. Good, Mt. Vernon, Wash.

APRIL DUROC GILTS, REGISTERED, PRIZEwinning stock, $25 each. Arvid Johnson, Plaza, Wash.

HAMPSHIRE BOARS, PRIZE WINNERS; cheap for quick sale. E. O. Green, Monroe, Wash.

REG. SHROPSHIRE AND HAMPSHIRE rams. Write McK. Edwards, Valley, Wash.

REGISTERED DUROC JERSEY BOAR, PRIZE winner. Cora Farm, R1, Garfield, Wash.

FOR SALE—90 HEAD PUREBRED HAMPshire ewes. Wm. Sturges, Jerome, Idaho.

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MILK GOATS, BRED DOES, $10 TO $25. FANnie Branson, Dallas, Ore.

HAY FOR SALE 200

ALFALFA, GRAIN HAY, TIMOTHY AND straw; guaranteed quality; prompt shipment. Prices upon application. Richard Nyman, Walla Walla, Wash.

HARNESS and SADDLERY 189

SEND FOR FREE HARNESS AND SADDLE catalog today; cut out the middleman, buy direct from the manufacturer. Lowest prices in the west; satisfaction guaranteed. Established 1881. Write Pierce Harness Co., Dept. T, Spokane, Wash.

HOTELS 306

WHITE'S HOTEL AND RESTAURANT. ROOMS $1 and up; special weekly rates. Stevens and Sprague. Right on the corner; 5 minutes from all depots. In the heart of the business district, Spokane.

FAIRMONT HOTEL—RATES $1 DAY AND UP. 319 Riverside, Spokane. Free bus.

JOB PRINTING 332

WEDDING ANNOUNCEMENTS AND INVItations, catalogs, booklets, high school annuals, letter heads, envelopes, cards, butter wrappers, etc. Union Printing Co., 412 First ave., Spokane, Wash.

TANNING 425

WE WILL TAN YOUR COW OR HORSE HIDE for robes or coats, and guarantee our work. We are custom tanners, manufacturers and taxidermists. Write for prices. Spokane Fur Tanning Co., 7 Pine st., Spokane.

ANY KIND OF HIDE TANNED WITH HAIR on, or for leather. Fur and taxidermy work done to order. M. R. Mohr Co., 321 Sprague, Spokane, Wash.

SEATTLE FUR DYEING & TANNING CO., want 10,000 skunk pelts, $1.50 to $2. 3508 Phinney, Seattle, Wash.

TAXIDERMISTS 426

DEER HEADS AND BIRDS MOUNTED, HIDES tanned and made into rugs and robes. Withers Bros., 913 Sprague ave., Spokane.

KODAK FILM DEVELOPING 472

FREE ENLARGEMENT WITH 75C ORDER high gloss print. Spokane Film Co.

FILMS DEVELOPED FREE—KODO, THE PICture King, S15 Stevens, Spokane.

MATERNITY HOMES 497

MATERNITY HOSPITAL; STRICTLY PRIvate; doctor in attendance; prices reasonable. Mrs. Elizabeth Peel, matron, W1324 Broadway, Spokane.

BUSINESS OPPORTUNITIES 516

1-3, POSSIBLY 2-3 INTEREST IN FIRSTclass incorporated hardware; $3500 cash, balance terms. James Calkins, Nampa, Idaho.

BUILDING MATERIAL 588

TACOMA SASH & DOOR CO., 15TH AND Dock, Tacoma, Wash. Direct selling means direct saving. These prices demonstrate: Chicken house sash, 20"x23," 75c; other sizes in stock. Chicken house skylights, 36"x40," glazed, $1.95; western Washington experiment station recommends this size. Sash and doors correspondingly low priced. Prompt delivery, careful filling of orders guaranteed. Catalog No. 1 is yours for the asking.

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CHOICE ALFALFA SEED, 21C, 23C LB.; choice red clover, 23c, 25c lb.; choice alsike clover, 16c, 18c lb. Veazie Seed Co., Jerome, Idaho.

NURSERY STOCK 621

NURSERY STOCK, ALL KINDS—GRAFTED walnuts, filberts, prunes, peach, apple, pear, cherry, etc. Berries, etc. We sell direct—we save you money—we supply the best. Send right now for catalog. 34 years in business. Carlton Nursery Co., Carlton, Ore.

NURSERY STOCK. (Continued.) 621

IMPROVED FRENCH PRUNES, ITALIAN prunes, apple, cherry, pear, peach, Japanese grafted walnut and filbert trees. Order direct and save agents' profit. Fruitland Nursery, 161 South 14th st., Salem, Ore.

TREES—NOW BOOKING MAIL ORDERS AT reduced prices for limited time only. Apples, pears, peaches, nut trees, prunes, cherry, small fruits, etc. Live agents wanted. Lafayette Nursery Co., Lafayette, Ore.

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STRAWBERRY PLANTS—SIXTEEN VARIEties. Asparagus and Munger black caps. Prices low. Brigg's Fruit Ranch, Olympia, Wn.

FARM LANDS FOR SALE 651

IRRIGABLE FARMS FOR SALE OR RENT—Farming is profitable on irrigable land in Southern Alberta, because the soil is fertile, the water supply is ample and the climate is favorable. Crops are therefore practically sure. All kinds of livestock thrive. Whole or partly irrigated farms can be bought at prices ranging from $12 to $30 an acre, plus irrigation charges, or can be rented on favorable terms, with an option to purchase later. Near towns, railways, markets, schools. Get further information from the Irrigation Council of Alberta, 120 Provincial building, Lethbridge, Alberta.

BIG CROPS CERTAIN EVERY YEAR ON IRrigated land in southern Alberta. Let the Alberta government send you particulars about the opportunities for settlement in the new Lethbridge northern irrigation district. First class mixed farming proposition. Excellent climate. Rich soil. Ample water. Low priced land. Alfalfa, corn, wheat, oats, barley, clover, vegetables, small fruits, all yield heavily. Wonderful country for livestock. Investigate this first. Send for descriptive booklet to the Irrigation Council of Alberta, 12 Provincial building, Lethbridge, Alberta.

BIG OPENING SALE OF YAKIMA VALLEY farm land, under an assessed state and government approved irrigation project; best, deep soil; close to town and good roads. Price $25 per acre and up. Very easy terms. Western Lands, Inc., owners, 918 Green bldg., Seattle.

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200-ACRE IDEAL FRUIT AND POULTRY farm; 8 acres bearing orchard, irrigated. Price $5000; $2000 cash. Joe Wheeler, Trinidad, Wn.

$8500—SIXTY ACRES, NEAR SCHOOL; creek; 25 cleared; $6500 cash. Edward Koeble, Route 4, Aurora, Ore.

$5800—TWENTY ACRES; GOOD BUILDINGS, springs, orchard; $4300 cash. Sarah Gibbs, Route 3, Boring, Ore.

126-ACRE DAIRY RANCH; IN FINE LOCAtion. For particulars write A. W. Bowen, Morton, Wash.

BARGAINS IN DRY AND IRRIGATED farms. Oregon Mortgage Co., Paulsen bldg., Spokane.

FARM LANDS—Wanted 654

NO COMMISSION — SELL YOUR FARM through Washington Farm Bureau Exchange, represented in 45 states. Lists of farms for sale by owners mailed free. 312 Lindelle bldg., Spokane, Wash.

HAVE INQUIRIES FOR NORTHWESTERN farms, spring delivery. Describe fully, state lowest price. R. A. McNown, 310 Wilkinson bldg., Omaha, Neb.

IDAHO AND WASHINGTON LAND BOUGHT, sold and exchanged. Describe fully, stating price. David P. Weir, Spirit Lake, Idaho.

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FARMERS AND STOCK MEN—THE COLUMbia irrigation district has several tracts of irrigated lands of various sizes, in the famous Kennewick valley, with plentiful water supply. The district wishes to get these tracts into the hands of good farmers who will put them to work, and will make very low prices and long terms to such men. No speculators need apply. One tract 580 acres, especialy suitable for stock or dairy ranch. Write the secretary, Columbia Irrigation District, Kennewick, Wash.

DAIRYING, HOGS, SHEEP, POULTRY, Alfalfa, beans, sugar beets, corn and seeds all profitable on North Side project. Good land on easy terms. Special offer for dairymen and poultrymen. R. E. Shepherd, manager, Jerome, Idaho.

THIS FARM IS SHOWING A GOOD PROFIT—$7000 income this year; 131 acres; close to Yakima; good water rights; excellent buildings; well equipped; good dairy herd. Good terms. Western Lands, Inc., Owners, 918 Green building, Seattle.

FARMERS ON SEQUIM, WESTERN WASHington irrigated land are universally prosperout. Write us. Washington Colonization company, Sequim, Wash.

SUBURBAN TRACTS—For Sale. 675

FOURTEEN ACRES SUBURBAN HOME ORchard; snap for quick sale. Owner, James Doran, Ashland, Ore.

CITY PROPERTY FOR SALE 690

$1350—HOUSE, INCOMPLETE; BIG LOT; near school; easy terms. Alice Helgeson, Lynnton, Ore.

FOR SALE OR EXCHANGE 700

160 ACRES GOOD LAND; 100 IRRIGATED; near Eureka, Mont.; for sale or trade for non-irrigated foothill ranch or California land. Chas. R. Morse, Shoshone, Idaho.

TO EXCHANGE—Real Estate 705

HAVE MOVED TO CALIFORNIA AND WILL trade hundred thirty acres land near Manson, Yakima county, Washington, for lots or other property in California; Los Angeles section preferred. Write for full details, L. W. Clark, 423 Sharon bldg., San Francisco, Cal.

A Tale of the Flatwoods

THE RED LOCK

By DAVID ANDERSON
Author of *The Blue Moon*

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SYNOPSIS.

Red Colin was a sea pirate away back when piracy was ruler of the sea, and his heart was as black as his head was red. Once in a while in the generations of his descendants a drop of his devilish blood broke out in a victim, evidenced by a lock of red hair and a nature of wickedness or worthlessness. The victim in which this story is interested was Ken Colin, brother of Texie Colin, one of the most loveable of lovely girls. Ken, Texie and big Jack Warhope, the orphan boy bound out to Texie's money-lending father, old Simon Colin, were childhood playmates, but when they had grown up Ken wanted to see the world and left the Flatwoods along the Wabash for adventure in the east.

Our story begins on the evening when the new preacher is to arrive to take the place of Minister Mason, who has just died. Jack and Texie are greatly excited about his arrival because he is from the college which Ken attended a short time after leaving home and from which, as the president of the college had reported, the boy with the red lock was expelled after he had committed a series of crimes. The new preacher, the Rev. Caleb Hopkins, had known Ken in college, and they anxiously waited further word as to the waywardness of the misguided lad. That evening after supper he told them of the misconduct of Ken.

"Then came his sensational killing of a gambler over a card game and his escape into the great underworld of the city, since which nothing has been heard of him," he told them in concluding the unhappy story.

Supper over, Mr. Hopkins went over to the home of the Widow Mason, leaving Jack, Texie and Simon Colin to reflect upon what he had told them. The young people sat upon the kitchen porch while the old man in the parlor opened letters that came on the evening stage. Suddenly the housekeeper screamed for help and Jack and Texie rushed in to find Texie's father collapsed on the floor, a letter grasped in his hand. A fainting spell had seized him, and when he was made comfortable the young folks discovered the cause, a letter from Ken Colin, written, it said, on his death and cursing his father for long-cherished grievances.

"I reckon I've got but a few minutes to live," the letter closed. "I'd give half of them to see Sis. But if you'd come in right now I'd try to get up and kick you out."

CHAPTER VI
The Room Was Deadly Still

BUCKEYE was the capital of the Flatwoods. Snugged away in a packet of the bluffs where Eagle Run breaks through into the valley of the Wabash, it never woke up but once—when a rumor trickled in from somewhere that a railroad was headed that way. But the rumor subsided, Buckeye went back to sleep, and the big world forgot that it was there.

Zeke Polick's general store was the largest in the place. Zeke sold everything, from onions sets to grindstones, including whisky—barrels of it, from "squirrel" to mellow old Bourbon—right from the spigot. A flatwoodsman could buy it as he wanted it, from a drink to a jugful, but "furriners" had to be identified to get it in quantities less than a quart—an identification quite as exacting, though of a different sort, as that required to borrow money from Simon Colin—which is another way of saying that a man's face went as far in the Flatwoods as his note.

In the mellow evening of the day following the old banker's collapse over the remarkable letter—no syllable of which had been allowed to get beyond the red-roofed cottage—Uncle Nick Wiffles, a tall, iron-gray old man with twinkling eyes, sat smoking a quietly meditative, profoundly reposeful pipe in the one chair of the store, his accustomed seat, a sort of post of honor that no one else dreamed of occupying when he was present—his by right of age, of wit, of wisdom—dean of the rustic university, the village store.

It was a variegated company that grouped around him in the dim half-light of the feeble coal-oil lamp, with its charred wick and smoke-stained chimney.

There was Zeke Polick, the postmaster and proprietor of the store, a little old rag of a man, half lying across the counter and leaning on one skinny elbow, his scraggy hatchet face thrust forward with an air of alert sharpness, as if on perpetual lookout for any chance nickel that might happen to stray in range.

Al Counterman, a one-eyed fisherman, with a complexion like a smoke-dried bacon rind, dangled his long legs from a half emptied goods box, more waggishness twinkling from his one eye than twinkled from most other men's two.

Then there was the blacksmith, with his hard arms, and hands so horny they could hold a piece of iron hot enough to sizzle water. Village loafers were there—aimless, doless drifters who had nowhere else to go; whose shabby clothes and empty heads would admit them to no society except that shifting, cosmopolitan circle at the village store.

Besides these, Loge Belden, said to be a Kentucky mountain man, tall, lanky and just comfortably in his prime, with a reddish-sandy mustache and goatee, leaned on the end of the counter nearest the door, before him the fast disappearing remainder of an uncorked bottle of "squirrel" that he had bought earlier in the day. Little was known of him except that he and his sister had lately moved into an old cabin on one of Simon Colin's farms up at the head of Eagle Hollow, and that he had taken the job of clearing the timber from an upland field and making it ready for the plow. Some said he had been a pearl fisher, others that he was "wanted" down at Vincennes. The Flatwoods held him at arm's length—and waited.

"Ricollect Jim Rummidge, don't y'u, Zeke?" Uncle Nick remarked as the postmaster, during a lull in the noisy talk, shifted to his other elbow.

"Jim Rummidge, reckon I do that," piped Zeke's thin voice, as he leaned forward across the counter, pulling nervously at two straggling tufts of slate-gray whiskers that struggled for existence upon the sapless parchment at either corner of his bony chin. "Ain't go'n t' f'rgit 'im, nuther, not right soon I ain't. Went off t' M'souri owin' me a dollar and thirty-four cents, and, I never did git it."

"Aw, well, Zeke, don't worry none," Uncle Nick rejoined, "y'u've wormed it outen some other pore devil b' this time, more'n likely."

The blacksmith slapped his heavy hand down on his thigh, the other laughed, the fisherman's frisky eye twinkled and he swore merrily.

Zeke said never a word, but the expression in his little rat eyes might have meant any number of things. He hung sprawled across the counter fumbling the two straggling tufts of whiskers, and one could almost imagine that his dry face crackled as it wrinkled up in a stingy grin.

"Blamedest feller—that Jim Rummidge," Uncle Nick went on. "Ther' werdn't nothin' but what him an' that brother Si o' his'n wus up to when they wus youngsters. Ricollect one Sund'y Jim tuck it into 'is head t' yoke up a couple o' calves ol' man Rummidge wus calc'latin' to' save f'r oxen, an' 'e coaxed Si t' play off sick with 'im so's they wouldn't haf t' go t' church. Well, the ol' folks werdn't more'n out o' sight when up jumps Jim, an' Si right after 'im, an' they breaks f'r the barn-lot t' yoke up them yearlin's.

"The calves wus purty tame, an' they gits the yoke on 'em all right. Then Jim gits b'hind 'em an' commences t' slap 'em with the rope. But they jist stood thar, leanin' ag'inst one another, feet all sprawled out, an' nary a budge could 'e git out'n 'em.

"'Thunder!' says Jim—y'n know, Zeke, what a lisp 'e had on 'im—'Thunder,' says 'e, 'I kin outpull them calves m'thelf.'

"'Cayn't,' says Si.

"'Kin,' says Jim.

"An' what does 'e do but ups an' ties the rope around 'im.

The grimy blacksmith roared; the crowd joined in; the fisherman laughed till a tear stood in his one eye.

"Sh-h-h—!" warned Zeke, in the midst of the uproar, "hyur comes the parson."

Almost with the words, the dapper, nervously alert young preacher entered the door. In spite of his studious air of riper years, he couldn't have been more than six or seven and twenty. The trade-mark of his calling was hung all over him. His shiny boots, elaborate frock coat, neck stock, high hat and enormous spectacles fairly shrieked schoolmaster.

And yet one could not help wondering why fate had set such a man as the Reverend Caleb Hopkins to the business of keeping school. Dissociated with all suggestion of theology and chalk, his figure was about all that could be desired in a man—height a trifle above medium; well set up; lithe and graceful—and his face—nothing short of handsome, only for a certain air of peering severity.

To look at him as he entered the door—six feet of lithe young manhood smothering under its ascetic, not to say somber, investure—one would never have guessed that there was anything wrong with his health, and yet that was precisely what had brought him to the Flatwoods.

And now as he walked past Loge Belden slouched against the counter, he stopped and stood staring curiously at him.

Belden straightened, pushed his bottle back, and seemed on the point of resenting the look, when the Reverend Caleb quickly turned away, and with a nod passed the group around Uncle Nick and went on to the postoffice window at the rear of the room.

"What d' y'u say we ask 'im t' g' 'long," whispered Al Counterman to Uncle Nick as the young minister stood waiting for Zeke Polick to adjust his dirty spectacles on his thin nose, turn up the smoky lamp and laboriously sort over the meager bunch of letters and postcards.

"Y'u da'sn't," Uncle Nick answered guardedly.

"Watch me, an' y'u'll see whuther I da'st. I ain't a-feared of no parson.

"Mr. Hopkins," he called a moment later, stepping in front of the young preacher as he passed toward the door, "a passel of us fellers is goin' a-seinin' up around Alpine island in the mornin'. I reckon y'u

"Thar set this hyur new parson an' that Texie gal on that bench."

wouldn't like t' go long, n'r nothin', would y'u?"

"Who are going did you say?"

"Oh, me an' Uncle Nick, thar, an' Big Jack Warhope."

"When do you expect to start?"

"Aw, some'r's around the near side o' seven, I reckon. Y'u nee'n't bring nothin' but some ol' boots an' ol' clo's t' wade in."

"I have promised to be at the social tomorrow evening at the schoolhouse, which, I am informed, is always held in celebration of the last day of school. Do you expect to return in time for that?"

"Aw, we'll be back by noon—easy."

"Let me see," pondered the preacher, not willing to compromise his dignity by appearing overanxious. "This is Wednesday; tomorrow is Thursday—I believe I may safely allow myself this recreation. I shall be most happy to avail myself of your kind invitation."

The fisherman stood fingering his hat and staring at the door long after the minister had passed out, the twinkle gone from his puckered one eye, a puzzled look on his smoked bacon rind of a face.

"Well, I'll be derned! Wouldn't that singe y'ur whiskers. I dunno yit whuther he said 'e'd come 'r not."

Uncle Nick threw his head back and fairly roared, while the postmaster rumpled up his dry countenance into a half begrudged grin.

"Course he said 'e'd come. Whar wus you brung up at, anyhow? Didn't y'u hyur 'im say he'd 'vail 'imself of y'ur kind invytation? Course he's calc'latin' t' come. Zeke, we'll haf t' git Al a new spellin' book an' start 'm t' school next fall."

"Well," muttered the fisherman, as his face cleared and the twinkle came back to his waggish one eye, "all I got t' say is: he can use up more dictionary a-sayin' yes than any man I ever hear'd. But ain't 'e some looker—barrin' that killin' rig he's hobbled up in?"

"Most too good-lookin'," piped Zeke.

"Aw, I dunno, Zeke," Uncle Nick observed, "'tain't go'n t' hurt 'im none. Only drawback I can see is: it's a pity t' waste all them good looks on a preacher."

"Anyhow," put in Al, his rakish eye dancing at Uncle Nick's remark, "if he wus ugly enough t' tree the devil up a thorn bush, I don't 'low it'd he'p 'is preachin' none. An' I reckon he shore must be some preacher, 'r he wouldn't be where 'e is—teachin' in a college that makes preachers. I bet y'u he can cipher plum' through any 'rethmetic you can hand 'im, an' they say he's posted on purt nigh ever'thing that's goin' on, r' ever went on."

"That ain't neither hyur n'r there," argued Zeke. "That ain't no more'n his duty, an' what the taxpayers back whar 'e come from 'r' payin' 'im f'r."

"Duty 'r no duty," rejoined the fisherman, "it's a dern' good sign."

"All the same," snapped the postmaster, "if I had a gal—which I ain't got, n'r never had—I wouldn't want 'er throwed with 'im like Sime Colin's gal is, an' she shouldn't be, nuther."

"Aw, well, Zeke," drawled Uncle Nick, "if she tuck after 'er daddy in looks, I reckon they wouldn't be no great danger."

The raucous laugh that followed from the crowd jarred the postmaster. If the blood could have shown through the dry parchment of his cheeks, his face would have flushed. As it was, he squirmed around off the counter, nervously twisting his two tufts of ragged whiskers, his little black beads of eyes snapping excitedly.

"I don't care what y'u say," he shrilled in his high, thin voice, "Texie Colin's got good looks enough, if that's what y'u want. It ain't like 'im, t' take in a teetotal furriner that-a-way, preacher 'r no preacher—don't keer if 'e was a classmate o' Ken's. That ain't no recommend, nohow—bein' a classmate o' Ken's—f'r he wus as orn'ry as the devil makes 'em. They're boun' t' be throwed t'gether more'n they ough't' be, an' nobody else about the place but ol' Mis' Curry—an' her back in the kitchen half the time, an' the other half out about the smokehouse 'r garden."

"Ain't much more'n a kid, nuther," the blacksmith remarked, apparently thoughfully impressed, as he searched his pockets for a match.

"Som'er's around 17 'r 18——"

The postmaster glanced across at Uncle Nick, as if for confirmation of his statement. The old man took the pipe from between his lips and sat tapping the stem against his thumb nail.

"I 'low y'ur not fur off," he answered meditatively to the postmaster's look, the pipe stem against his thumb nail seeming to tick of the years as he cast them up. "Big Jack's 20 past, an' I've hear'n say Texie wus three years younger to a day. That would bring 'er right around 17 'r 18."

"An' s'poson' she is—every lick of it," the postmaster went on. "A gal ain't got none too much sense at 18—an' ther' ain't no gal but what can be drawed on, if the right feller comes along."

"Hol' on thar, Zeke, hol' on!" Uncle Nick had been leaning back against a cracker barrel. His chair came down with a bang, and his voice rang like struck metal. "You're goin' a leetle too fur. They's thousan's an' tens o' thousan's o' gals that can't be drawed on, no matter what feller comes along.

"Ther's a heap more nice gals than men, ther' never wus a bad gal but what ther' wus a bad man first. An' after it's over—she's done. All endurin' the years t' come her heart has t' be drug in the dust, while the man—no, I won't call 'im man, an' I cayn't call im beast, f'r the beasts 'r clean compared—carries 'is head as high as b'fore. I tell y'u, people hain't never looked at them things right. The man d'serves t' be judged accordin' t' the same way the gal is—only more so."

A hush fell over the group. The blacksmith sat patting his foot softly on the floor. Presently his calloused hand came down upon his knee with a sounding slap, while his eyes, dull at most time from long looking into the forge fire, lighted with the fervor of his feelings.

"Good f'r you, Uncle Nick! I agree with y'u complete. That's my kind o' preachin'—right t' the p'int. The new parson 'imse'f cayn't beat that, let 'im do 'is dern'dest."

"My sentiments to a hair," chimed in the fisherman. "I alw'ys takes the gal's part an' be damn'd t' the man. That's how I lost this eye. It wus when—but no matter, I hain't never b'grudged it——"

The fisherman's lone eye settled into a vacant stare at a crack in the floor; the hard lines of his face deepened. Could the others have glimpsed back of that seamed and weathered-beaten mask they might have read there the deep graven memory of a day that was dead—a dream and an awakening, a romance and a tragedy—that had driven him, as the storm drives the driftwood, with what the world

(Continued on page twenty.)

FAMILY CIRCLE

ALICE W. BARLAND
EDITORIAL CONTRIBUTOR

Experience Letters

Dear Mrs. Barland: How glad I am that the letter of Mrs. E. C. B. was not entirely lost. I think she has done a good work by writing it, when so many for political reasons are trying to make it apparent that the farmers are prospering and are only "professional grumblers."

Now that a few of our senators are trying to change conditions and adjust matters so that we can make a living, why not let the truth be known instead of keeping quiet and allowing the real estate men and the bankers to do our advertising for us.

Many of us are too tired and heart sick to do anything and others are like Mrs. E. C. B., afraid their letters will not be published. I am sure they will be. The editors depend upon reports from the farmers, so why not tell them the truth?

An article from Boise published in The Farmer a few weeks ago, entitled, "Liquidation by Farmers Shows Good Increase," recites how a banker in a near-by community is quoted as having told one of his farmer patrons that he would no longer carry his note, and goes on to say that "the farmer sold his potatoes and began to cash in on his dairy products, and paid off his note." Now we know just how that banker had watched the farmer until he made enough to pay him. No matter how much he lost on his potatoes or how little he had to take for his cows, he was forced to sell them, just as they all have been.

Everything is the same here as Mrs. E. C. B. writes, and several other places. It is not only the ones who are buying their farms who are suffering, but the oldest residents who had their farms all paid for. At the beginning of the war we were urged, as a patriotic duty, to buy more land and implements to raise more wheat for the starving nations; some went into debt and when payments could not be met they were sold out. These same places are now being offered for sale and people from other states are being urged to come and buy them and get rich.

Mrs. E. C. B. speaks of praying. Dear friend that is one thing that is not denied us and although we can not attend church or take part in the regular and popular form, we can pray silently and continually, for prayer is the earnest desire of the heart, or communion of the spirit of God within us. He is a God of love and unchangeable and we should take a few minutes every day to be still and feel His love and accept the peace which He promises to give to all who ask it.

We all desire better times and we should work toward the end of making them better and I believe they will come; let us trust they come before long.

Best wishes to the Circle friends and Mrs. Barland.

MRS. C. J. B. Idaho.

Mrs. G. E. H. desires very much to know how to make hair switches. Can some of you tell her how? If so, make your directions very clear. A. W. B.

Dear Mrs. Barland: Will you please publish a good recipe for chocolate caramel and coconut filling for cake. Also will you tell me if there is a Bible school in any of the following states: Virginia, Ohio, Illinois, Iowa and Missouri? I would like to attend a school where nothing but the Bible is taught. Ever your friend, "SUNKIST."

Dear "Sunkist": There are Bible schools of much merit in Chicago, Ill., and in Minneapolis, Minn. I am not able to say if there are any in the other states you mention. But if you will address a letter of inquiry to the Moody Bible institute, Chicago, Ill., I am quite sure you can get all needed information concerning the matter. Watch home recipes for other information. A. W. BARLAND.

Dear Mrs. Barland: In answer to a question as to how to keep geraniums over winter I will say that after digging them up I place them in cans or pails or anything that will hold soil, and put them in the cellar and water them, but do not keep them wet, as that will rot them.

Early in the spring I pick off all the dead leaves and set them outdoors in the day time and carry them in at night while nights are cold.

Geraniums grown in the house may also be kept in the cellar this way.

I have kept mine in this way for years, but have never tried hanging them up.

Oregon. MR. C.

Dear Mrs. Barland: You letter sent out to all of us has more sense packed into one paragraph than many of us can put into a whole letter.

Now will some of you experienced mothers tell me, should a child of 20 months be punished or not?

My boy is a lively one; he takes anything he can lay his hands upon to play with and doesn't care for toys. If he sees me build a fire he tries to build one, too, and this is dangerous.

I taught him to feed himself and now he wants to feed the baby, who is but 6 months old. He doesn't talk, so how can I tell if he understands when I talk to him? He does understand somewhat, but I hate to punish him unless I am sure he knows what it is all about.

He is my first child and I do want him to mind and I really want to know if he is just full of mischief or really naughty.

Washington. MRS. M. V. C.

Home Recipes

Watercress sandwiches—Chop the cress coarsely and season with salt, pepper and a few drops of vinegar. Blend with cottage cheese and spread between bread.

Chopped hard-boiled eggs and chopped pickle or olives, or both, mixed with salad dressing also makes a fine filling for sandwiches. A. W. B.

Bran muffins—Two cups bran, 1 cup graham flour, 1-2 cup molasses, pinch of salt, 1 small teaspoon soda, 1 cup sour milk, if sweet is used add heaping teaspoon of baking powder mixed in a heaping tablespoon of white flour (but don't omit the soda as the molasses requires its use), 1 egg. These eaten at least once a day are better than medicine.

MRS. N. R. C.

Bran muffins, No. 2—Two cups each of bran, flour and sour milk, 2 teaspoons of soda, 2 tablespoons of molasses, 1 teaspoon salt, 1 egg. Bake in gem pans in a hot oven. EMMA HINSDALE.

Easy White Cake—Place the unbeaten whites of 2 eggs in a measuring cup. Fill to one-half of melted butter, then fill to the top with sweet milk. Add 1 1-2 cups flour, 1 heaping teaspoon baking powder, 1 cup sugar; add teaspoon vanilla and a bit of salt. Beat all these together for at least 5 minutes as the success of this cake depends on the beating. This is an easy cake for a little girl to make.

A. W. B.

Circus cookies: One-half cup butter, one cup sugar, yolks of four eggs, one teaspoon of vanilla, two cups of flour, two teaspoons baking powder a little salt. No other shortening should be used in place of butter for perfect flavor.

To make: Cream butter and sugar, add yolks of eggs without beating, add vanilla and put salt and baking powder in the flour and mix it with the other ingredients into a dough. Do not attempt to roll, but with a teaspoon take out a little of the dough, just what you can lift easily on the teaspoon and pat it out round, put a raisin or a nut meat in the center and lay on a buttered pan and bake like any cookies. This recipe will make about three dozen.

MRS. J. A. W.

Peanut fudge: Two cups sugar, one-half cup peanut butter, one-half cup of water; bring to a boil slowly. To test, when it boils up thick take a little on a plate and stir and when it will stand up take off the fire at once and beat till thick, but not too thick to run when turned into the tin. Just before it is too hard check off into squares. This is very easy to make and is cheap and excellent. Try it.

Wash. MRS. H. S. D.

Hot Lunches

Hot lunches for school children and the necessity for a supervised lunch period were topics discussed in the parent-teachers' meeting at Short's schoolhouse two miles out of Snohomish Tuesday night. Mrs. Harriet D. Stow, home demonstration agent for Snohomish county, stated that the practice of having a supervised lunch period was proving commendable because it not only did away with the children's habit of playing ball with one hand and carrying a sandwich in the other, thus making too hasty a meal of the lunch, but is also coming to mean that the lunches will reach a higher standard of nutritive value. In schools where it is impossible for the hot lunch plan to be developed, the supervised lunch period is the next best thing in establishing a better balanced meal for the children.

The growing, gathering and using of mangels as an important item in the dairy cow's menu, are receiving special attention at the western Washington experiment station at Puyallup, according to M. E. McCollam, agronomy expert. The work is being done along the line of investigation of gathering and production costs and storage experimentation.

"Soap and Water"

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High Points in News of the Week

That a small number of senators and representatives in congress will be able throughout the session at least to retard action upon matters that have the support of the regular republicans or the regular democrats is indicated by the difficulties encountered in both the senate and the house during the first two weeks of the session. As reported last week, the house was enabled to organize, electing Congressman Gillette of Massachusetts speaker, only after a deadlock of three days, during which the small "progressive" membership refused to vote for either the republican or the democratic candidate. Election finally came about following agreement by the republican organization that the adoption of certain rules under which the house would operate would be a matter of open action on the floor of the house. At this writing procedure in the house is being retarded by the failure of the so-called progressive element to agree to the committee memberships planned by the regular republican organization. Agreement will probably be reached in a few days, however, so that the house can proceed with business.

In the senate a deadlock existed during the last week equal to that which delayed organization of the house. This deadlock followed an attempt to choose a chairman of the interstate commerce committee. The democrats supported Senator Smith of South Carolina, the regular republicans Senator Cummins of Iowa, and the "progressives" of both parties Senator La Follette of Wisconsin. On one ballot the democrats came within one vote of electing their candidate. When adjournment was taken at the end of the week there was little visible evidence of likelihood of early compromise, but it is probable that before this reaches the reader the organization will have taken place, so that the new congress can proceed to the discussion of the many big problems that are before it.

* * *

That America will participate in an unofficial way in investigating certain of the basic economic problems of Europe is indicated by a statement issued by President Coolidge last week. The allied reparations commission is establishing two committees of experts, one to consider means of balancing the budget of Germany and the measures to be taken to stabilize German currency and the other to take up the question of the capital which has been removed from Germany. In his statement President Coolidge said that this government would look with favor upon the participation of American experts on these committees, but made it clear that they would be acting in private capacities and not as official delegates from these countries. European countries with membership on the reparations commission have indicated pleasure at the possibility of having these Americans on the committee, even in the private capacities suggested.

* * *

A case has been brought in the supreme court of the District of Columbia which will test the constitutionality of the provision in the present tariff law which permits the president to increase the tariff on an imported product when he deems such increase justifiable within the protective purpose of the act. The case is brought by the Norwegian Nitrogen Products company of New York, importers of sodium nitrate. It is a specific application that a proposed increase of 50 per cent in the tariff on nitrates, as requested by the American Nitrogen Products company at Seattle, Wash., be denied on the grounds of the unconstitutionality of the act.

* * *

The outstanding feature of the annual meeting of the American Farm Bureau federation in Chicago December 10, 11 and 12, was the victory of J. W. Coverdale, who had resigned as secretary over the Peteet-Sapiro group and the resignation of Walton Peteet as director of marketing, Mr. Coverdale later being elected secretary and treasurer of the federation with the additional office of director of organization. Next week THE FARMER will publish an informative article by a staff correspondent on the American Farm Bureau situation as revealed by this fifth annual meeting.

* * *

Senator Borah of Idaho has introduced a bill in congress for the repeal of the Panama canal tolls in so far as they affect American coastwise shipping. He has also introduced a bill amending the transportation act to prohibit a greater freight charge for a short haul than for a long haul in cases where the short haul is comparatively long. This latter measure would, if passed, prohibit the charging of a higher rate from the east to interior points of the Pacific northwest than from the east direct to Pacific coast terminals.

* * *

Premier Baldwin of England has called for an assembly of parliament on January 8. Whether or not he and his cabinet will resign depends largely upon the spirit of cooperation or antagonism manifested, when parliment assembles, by the labor and liberal parties. The labor party has more members in parliament than either the conservatives or the liberals, but no party has a majority.

* * *

Representative Sterling of South Dakota has introduced a measure in congress providing for an increase of 50 per cent in the tariff on wheat. This would make the tariff 45 cents a bushel.

* * *

Two small towns were destroyed by an earthquake last week near the Colombian-Equadorean boundary, with the loss of some life, numbers not being great.

Farm Business and Markets Outlook

(Continued from page five.)

to medium steers, $5@5.50; common to fair steers, $4.25@5; choice cows and heifers, $5@5.50; good to choice cows and heifers, $4.25@6; medium to good cows and heifers, $3.75@4.25; fair to medium cows and heifers, $3@3.75; canners, $1.50@2.25; bulls, $3.25@4; light veal calves, $8@9; heavy veal calves, $6.50@8; stockers and feeders, $4.50@5.50.

Hogs—Prime mixed, $7.25@7.35; medium, $7@7.25; heavies, $4.25@6.50; fat pigs, $5@6.25; stockers and feeders, $5@6.25.

Sheep—Prime lambs, $9.25@10.50; fair to medium, $8.50@9.25; yearlings, $6.50@7.50; wethers, $5.50@6.50; mutton ewes, $3@5.

The Grain Market.

PORTLAND, Ore., Dec. 15.—Wheat—Bids: Hard white, Bluestem, Bart, soft white, $1.01; western white, $1; hard winter, northern spring, western red, 96c.

Grain futures: Wheat—Bluestem, Bart, soft white, December, January, $1.01; western white, December, January, $1; hard winter, northern spring, western red, December, January, 96c.

Oats—No. 2 white feed, December, January, $32; No. 2 gray, December, January, $31.

Corn—No. 2 eastern yellow, shipment December, $30; January, $29; No. 3 do, December, $30; January, $29.

Mill run—December, January, $23.

Hay—Unchanged.

SEATTLE, Dec. 15.—Wheat bids: Hard, soft and western white, Big Bend Bluestem, $1; hard and soft red winter, northern spring, western red, 98c.

PULLMAN, Wash., Dec. 15.—Red, 80c; white, 83c.

LEWISTON, Idaho, Dec. 15.—Red, 79c; white No. 1, 81c.

RITZVILLE, Wash., Dec. 15.—Bart, 82c; Red, 80c; Fife, 80c.

DAYTON, Wash., Dec. 15.—Club, 84c; red, 81c.

DAVENPORT, Wash., Dec. 15.—Bluestem, 81c; Gold Coin, 81c; Club, 81c; Turkey red, 79c; northern spring, 79c.

WALLA WALLA, Dec. 15.—Bluestem, 89c; Club, 87c; Turkey red, 83c.

COLFAX, Wash., Dec. 15.—Red, 79c; white, 82c; oats, $28 ton; barley, $25 ton.

SPOKANE, Wash., Dec. 15.—Wheat—Feed wheat, $36 ton.

Oats—$38 per ton; rolled, $40.

Corn—$43 per ton; cracked corn, $45 per ton.

Barley—$38 per ton; rolled, $40.

Bran—$27 per ton.

Bran and shorts—$28 ton.

Shorts—$32 ton.

Hay—Alfalfa, $20 ton in ton lots, delivered.

PORTLAND, Ore., Dec. 15.—Millfeed—City delivery prices: Millrun, $29 per ton; middlings, $41; scratch feed, $13; rolled barley, $42@44; cracked corn, $47; rolled oats, $43.

Hay—Buying prices f. o. b. Portland: Alfalfa, $17@18 ton; cheat, $13.50@14.50; valley timothy, $20@22; clover, $14@15; oats, $15@16; oats and vetch, $15.50@16.50; straw, $8.50 per ton.

General Produce.

PORTLAND, Ore., Dec. 15.—Butter—Cubes, extras, 45c lb; prints, parchment wrapped box lots, 49c; cartons, 50c. Butterfat, 50c, delivered Portland.

Eggs—Buying prices white hennery standards, 40c; mixed color standards, 35c. Selling prices, Front street: Selects, 45c; candled ranch, 40@42c; pullets, 38c; storage white, 36c; storage colored, 33c; association selling price, cash at store, extras, 45c; pullets, 40c.

Cheese—Price to jobbers, f. o. b. Tillamook: Triplets, 30c; longhorns, 31c; loaf, 30c per lb.

Poultry—Hens, 16@22c; springs, 20c; ducks, 15@18c; geese, young, 15c; turkeys, live, fancy, 24c; dressed, fancy, 27@28c.

Dressed meats—Veal, fancy, 14c; pork, fancy, 10@10½c per lb.

SPOKANE, Wash., Dec. 15.—Poultry, live weight—Hens, 4 lbs and over, 18c; light hens, under 4 lbs, 12c; springs, 16@20c; old roosters, 8c; young geese, 15c lb; spring ducks, 16c lb. Fresh ranch eggs—$10@12; fancy poultry farm, $12@13; pullet eggs, $9.50@10. Butterfat, 49c.

SEATTLE, Dec. 15.—Eggs—Select local ranch, white shells, cases included, 43c per doz f. o. b. Seattle; mixed colors, 40@41c per doz; pullets, 30c per doz; cases returned to shippers, 1c less; do to country stores, f. o. b., 42c per doz, loss off; eastern Washington and Idaho, subject to candling, 42c per doz.

Butterfat—F. o. b. Seattle, A grade, 52c per lb; raw milk, $2.30 per cwt.

Poultry—Hens, 4½ lbs and up, 20c per lb; do over 3½ and under 4½, 15c per lb; springs, 2 lbs and heavier, 17c per lb; do 1 to 2 lbs, 26c per lb; hens, 3 to 3½ lbs, 13c per lb; do dry picked, 2c above live; fryers, roasters, 2½ lbs and up, 18c per lb; broilers, 1½ to 2½ lbs, 28c per lb; capons, live, fat, 6 to 10 lbs, 26c per lb; do scald picked, fancy, 30c per lb; do dry picked, fancy dressed, 30c per lb; old roosters, 12c per lb; do dressed, 14c per lb; Belgian hares, 3½ lbs and heavier, live, 14c per lb; do dressed, 18c per lb; geese, fat, live, 14c per lb; do dressed, 16c per lb; spring ducklings, 3½ lbs and heavier, 14c per lb; turkeys, fat, dry picked, 8 to 16 lbs, 27c per lb; do live, 23c per lb; squabs, large, dressed, $4 per doz; pigeons $2; guineas, live, $8 per doz.

Hides, Pelts, Wool.

PORTLAND, Ore., Dec. 15.—Hides—Salted hides, all weights, 4c; green hides, all weights, 3½c; salted bulls, 4c; green bulls, 3c; salted or green calf, 10c; salted or green kip, 7c; hair-slipped hides and skins, half price; flint dry hides, 9c; dry salted hides, 5c; culls and damaged, half price. Horse hides, green or salted, each $1; colt hides, each 25c; dry horse with tail and mane on, 50c.

Pelts—Flint dry sheep pelts, long, 20c; flint dry sheep pelts, short, 10c; flint dry sheep pelts, pieces, 10c; flint dry shearings, each 5@10c; dry salted pelts, 15c; salted pelts, longs, each $1@1.50; salted pelts, short, each 50c@$1; salted goats, long, $1@1.50; salted goats, short, each 50@75c; dry goats, long, per lb, 12c; dry goats, short, each 10@30c; goat shearings, each 5@10c.

Mohair—Long staple, 30c per lb; short staple, 20c lb; burry, 15c lb.

Cascara bark—Peel 1922 or older, 12c; new peel, 1923, 11c per lb.

Tallow—No. 1, 4½c; No. 2, 3½c lb; grease, 2½c lb.

Oregon grape root—Per lb, 4c, delivered Portland.

Hops—1923 crop, 18@23c lb.

Wool—Valley wool, fine, 28@30c; medium, 28@30c; coarse, 25@27c; Cotswold and braid, 20c; matted, 15c; eastern Oregon, 28@33c.

Range of Live Stock Prices for Week Ending December 12

CATTLE.	Chicago.	Spokane.	Portland.	N. Salt Lake.
Choice and prime heavy steers (1100 lb. up)	11.00@13.00			
Good heavy steers	9.75@11.50			
Medium heavy steers	7.95@10.40			
Common heavy steers	5.75@ 8.35			
Choice and prime light steers (1100 lb. down)	11.40@13.00			
Good light steers	10.25@11.50	6.50@ 7.25	6.50@ 7.50	7.25@ 7.85
Medium light steers	8.15@10.40	5 50@ 6.50	5.50@ 6.50	5.50@ 7.25
Common light steers	5.25@ 8.35	4.25@ 5.50	4.25@ 5.50	4.00@ 5.50
Common to choice butcher heifers	4.60@11.25	3.00@ 5.50	3.00@ 5.10	3.00@ 5.00
Common to choice butcher cows	3.35@ 8.00	2.50@ 5.00	3.00@ 5.10	2.50@ 4.85
Bologna and beef bulls	3.25@ 6.75	3.25@ 4.00	2.75@ 4.00	2.25@ 3.50
Canners and cutters, cows and heifers	2.35@ 3.60	1.50@ 2.25	1.50@ 3.00	1.00@ 2.50
Canner steers	3.25@ 5.40			
Medium to choice light veals	7.50@10.00	8.00@ 9.00	9.00@ 9.50	5.75@ 7.00
Common to choice heavy veals	2.50@ 9.75	6.50@ 8.00	3.50@ 9.00	4.00@ 6.00
Common to choice feeders (750 lb. up)	5.25@ 8.00			
Common to choice feeders (750 lb. down)	4.25@ 8.00	4.00@ 5.25	5.00@ 5.50	4.00@ 6.50
Common to choice stocker cows and heifers	3.00@ 5.25			2.50@ 4.00
HOGS.				
Top of market	7.15			
Bulk of sales	6.40@ 7.00			
Heavy (250 lb. up)	6.65@ 7.15	7.00@ 7.25	6.00@ 6.50	
Medium (200-250 lb.)	6.50@ 7.10	7.15@ 7.35	6.50@ 7.10	5.50@ 6.30
Light (150-200 lb.)	6.25@ 6.95	7.25@ 7.50	7.10@ 7.65	6.30@ 7.05
Light lights (130-150 lb.)	5.75@ 6.80	7.00@ 7.25		
Smooth packing sows (250 lb. up)	6.35@ 6.75	6.00@ 6.50	5.00@ 6.50	5.00@ 6.50
Rough packing sows (200 lb. up)	6.15@ 6.50	4.25@ 6.00	4.00@ 5.00	
Medium to choice pigs (130 lb. down)	5.25@ 6.25	6.25@ 6.75	6.50@ 7.10	
Stock pigs		5.00@ 6.25	6.00@ 6.75	4.50@ 6.75
SHEEP AND LAMBS.				
Medium to prime lambs (84 lb. down)	11.00@13.40	9.50@10.00	10.00@11.00	10.00@11.00
Culls and common lambs	9.00@11.25	8.00@ 9.50	7.50@10.00	
Medium to prime yearling wethers	8.00@11.65	6.50@ 7.50	6.00@ 9.00	6.50@ 7.25
Medium to prime wethers	5.25@ 9.75	5.50@ 6.50	5.50@ 8.00	
Medium to choice ewes	4.00@ 7.75	3.00@ 5.00	3.50@ 6.50	4.00@ 5.50
Canner and cull ewes	1.25@ 4.50			
Feeder lambs	11.00@12.75			10.00@11.00

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$5,013,851 In New Taxable Property

The electric light and power companies expended $5,013,851 during the year 1922 in Washington for additions and extensions to serve new customers.

All of this property has gone upon the tax rolls of the state, helping to share the burden of taxation.

If permitted to go ahead with their plans for serving the people of Washington, it is conservatively estimated the electric light and power companies will, within the next ten years, expend over $100,000,000 --all in taxable property. This is practically 6 per cent of the entire assessed valuation of all property in Washington as shown by 1920 census.

Compare this with the "Seattle program," which would have all of these companies owned and operated by the state and all tax-exempt.

Seattle now has over $108,000,000 of tax-exempt property and its tax rate is the highest in the state. Every tax-payer in Washington is now contributing to Seattle's experiment in Municipal ownership.

NORTHWEST ELECTRIC LIGHT AND POWER ASSOCIATION

F-11

Bits of Fun for Everyone

The Absent-minded Rector.

"How will you have your roast beef—rare or well done?" the rector was asked by his host.

"Well done," replied the rector, and added absent-mindedly, "good and faithful servant."—Union News.

Cleanly Spoken.

The boy was home at last. He had tried his luck out west in the mines for five years with little success. And now he was broke.

"John," cried his old mother, seizing both his hands in greeting, "you have hardly changed at all."

"I know, mother," he answered in tremulous tones, "but there ain't no laundries out there."—Swamp Angel.

Foolish Question.

A young lady entered a fur store and a polite salesman came forward.

"I want to get a muff," she said.

"Yes'm," said the salesman. "What fur?"

The young lady looked surprised.

"Why," she said, "to keep my hands warm, of course!"—Pittsburgh Christian Advocate.

Old Satan Himself.

The daughter of a certain strict-principled old deacon had attended a dance the previous night, much against her father's wishes. When she appeared for breakfast the next morning he greeted her with the words:

"Good morning, daughter of Satan."

To which the maiden respectfully replied:

"Good morning, father." — Cornell Widow.

Wanted to Collect.

Irate customer—I bought a car of you several weeks ago, and you said if anything went wrong you'd supply the broken parts.

Dealer—Yes.

Irate customer—I'd like to get a nose, a shoulder blade and a big toe.—Manitoba Free Press.

Latest High Class Patterns for the Home

Please order the patterns you desire at least two or three weeks before you wish to use them. Desiring to obtain the latest high-class patterns for its readers, THE FARMER has made arrangements to have them sent direct from the east, and under present mailing conditions it takes about that time for them to reach you.

4599. Girl's Dress. Cut in 4 sizes: 8, 10, 12 and 14 years. A 12-year size requires 3 yards of 40-inch material. Price 10c.

4589. Lady's Dress. Cut in 7 sizes: 36, 38, 40, 42, 44, 46 and 48 inches bust measure A 38-inch size requires 5 3-4 yards of 40-inch material. The width at the foot is 3 3-8 yards. Price 10c.

4303. Miss' Dress. Cut in 3 sizes: 16, 18 and 20 years. An 18 year size requires 5 1-4 yards of 40-inch material. The width at the foot is 2 3-4 yards, with plaits extended. Price 10c.

4581. Child's Coat. Cut in 3 sizes: 2, 4 and 6 years. A 4 year size requires 2 1-4 yards of 40-inch material. Price 10c.

4158. Lady's Dress. Cut in 7 sizes: 36, 38, 40, 42, 44, 46 and 48 inches bust measure. A 38-inch size requires 3 1-4 yards of 54-inch material. The width at the foot with plaits extended is about 2 1-4 yards. Price 10c.

4405. Lady's Apron. Cut in 4 sizes: Small, 34-36; medium, 38-40; large, 42-44; extra large, 46-48 inches bust measure. A medium size requires 4 5-8 yards of 36-inch material. The width at the foot is 2 1-4 yards. Price 10c.

3790. Doll's Play Suit. Cut in 5 sizes for dolls: 16, 18, 20, 22 and 24 inches in length. The suit will require 3-4 yard of 38-inch material for a 24 inch size. Price 10c.

4593. Lady's House Dress. Cut in 7 sizes: 36, 38, 40, 42, 44, 46 and 48 inches bust measure. A 38 inch size requires 4 3-4 yards of 36-inch material. The width at the foot is 2 yards. Price 10c.

4345. Boy's Suit. Cut in 5 sizes: 2, 3, 4, 5 and 6 years. A 4 year size requires 2 3-8 yards of 36-inch material. Price 10c.

4152. Girl's Dress. Cut in 4 sizes: 6, 8, 10 and 12 years. A 10 year size requires 2 3-4 yards of 44-inch material. Price 10c.

2300. An Attractive Set of Toy Animals. The patterns are cut in one size only. It will require 1-2 yard of flannel for the sheep, 3-4 yard for the dog and 3-8 yard for the pig. Price 10c.

4596. Child's "Party" Dress. Cut in 4 sizes: 4, 6, 8 and 10 years. An 8 year size requires 2 3-4 yards of 40-inch material. Price 10c.

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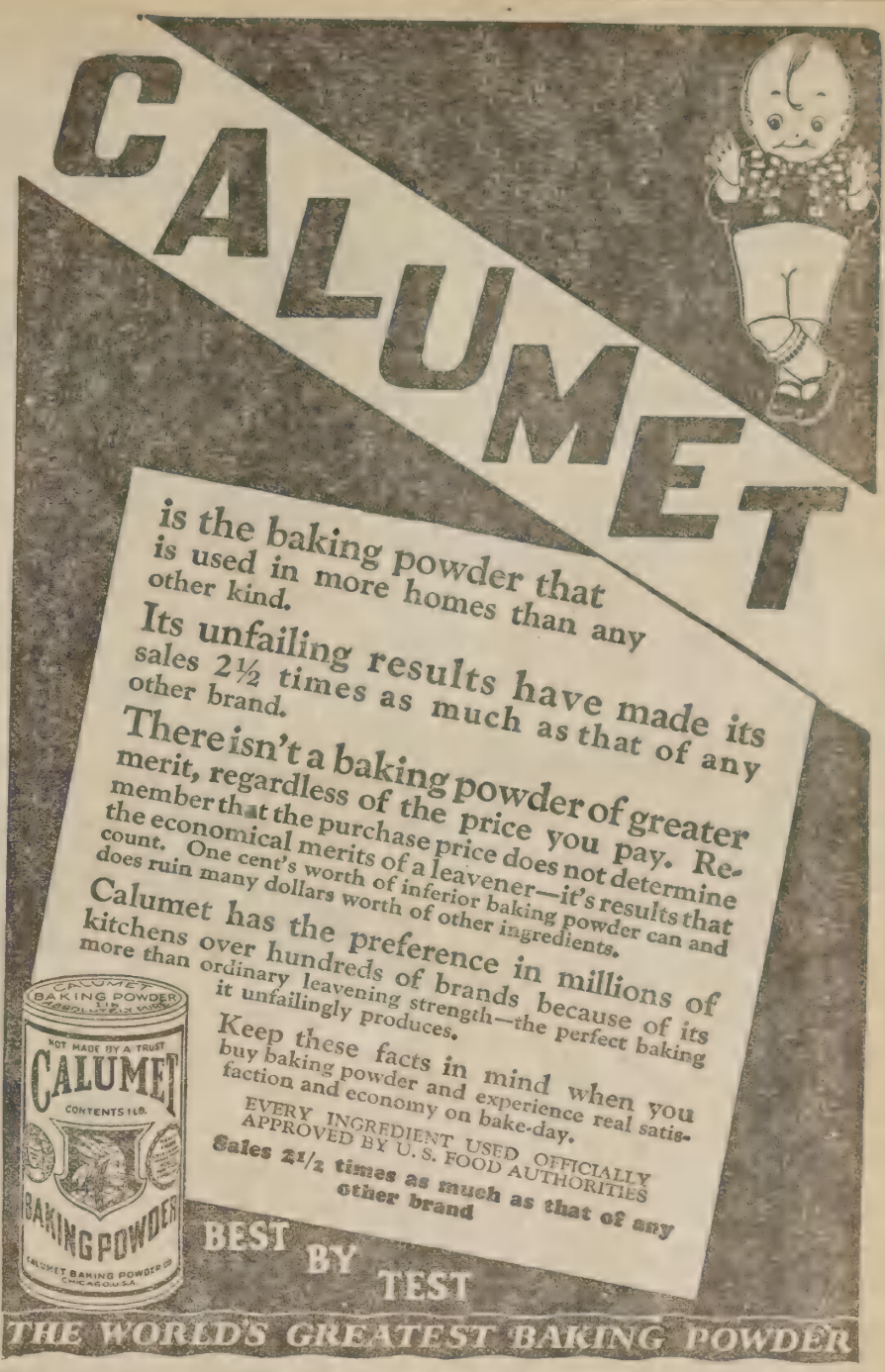

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Barbara Chesnut is a 10-year-old girl living in east Washington, in Spokane county. Barbara is attending training school and is in the third grade. Barbara's father takes THE FARMER. Barbara has a real twin, her sister Shirley. Welcome to the Corner, Barbara.

Irene Bilyou lives in northeastern Washington in Ferry county, near the Kettle river. She is 11 years old and had a birthday on Thanksgiving. They had a fine time at school on Halloween, Irene says.

Paul A. Fox lives in Franklin county, Wash., and tells us of his sow and seven pigs. They are Duroc Jersey purebred pigs. Paul took them to the county fair and won two first prizes and a second prize. He is quite a farmer, we think. Paul also has a colt named Chubie.

An interesting letter has been received from a little 7-year-old Washington boy whose name in Bruce Bain. He lives in southwest Washington, in Cowlitz county. Bruce has a nice horse and sometimes he goes after the cows. His mother is his teacher and he is in the third grade. Aunt Nellie welcomes you to the Corner, Bruce, and will look for another letter.

Almeda Reagan tells Aunt Nellie in a letter received recently that she would like to join the Corner. Aunt Nellie welcomes Almeda.

Fern E. Hodges is a new Washington cousin and sends Aunt Nellie an interesting letter. Fern is a Camp Fire girl. This is her letter: "I am a member of the Iyega Camp Fire. I have 70 honors now and I will soon be a fire maker; that is the second rank. Arlowene Riggin is a guardian, also a fire maker. I have been reading the letters of the cousins and would also like to be one. My cousin, Margie McNielly, is staying with me and going to school. We surely have lovely times together."

Birthday Greetings

THURSDAY, December 20—Idella Bernice Johnson, 10 years old; Lois Larsen, 10; Bert Smith, 8.

SUNDAY, December 23—Milford C. Salmons, 11 years old.

MONDAY, December 24—Bill Cettla, 11 years old; Erick Cettla, 11.

TUESDAY, December 25—Ethel Hinderbrandt, 8 years old.

WEDNESDAY, December 26—Beryl McCarthy, 11 years old; Mildred Pendleton, 11.

LETTERS WELCOMED BY AUNT NELLIE.

Among recent letters received by Aunt Nellie are those from cousins whose names follow. A few of these will be published each week in the regular edition of THE FARMER and others will appear from time to time in The Junior Farmer:

Sybil Moe, May Hilliard, Belle Dufur, Mildred Stockett, Aldena Dippel, Anna Mae Tarter, Lawrence Gallagher, Bruce Bain, Almeda Reagan, Barbara Chesnut, Irene Bilyeu, Paul A. Fox, Edna Eller, Mellie Florence Reid, Ira Fossett, Edith Spurgeon, Evelyn Starr, Dorothy Ruger, Anatha Reimann, Marion Little, Florence Geiger.

BEDTIME STORIES

By THORNTON W. BURGESS.

THE JUMPING MATCH.

Who does the very best he can,
Of him no more we ask.
'Tis all that any one can do,
Whatever be the task.

Jumper the hare had guessed who it was that Jimmy Skunk had found to jump against him, and Jumper knew that he hadn't a chance in the world to beat them. But Jumper didn't mind. He was perfectly willing to admit that they were better jumpers than he, but he was also perfectly willing to go out and try if it would give any pleasure to his neighbors who had gathered to see the jumping match. This was the right way to feel. Jumper didn't know it, but right away, as soon as he said that he would jump his best in spite of the fact that he knew that he would be beaten, his neighbors began to think more of him. Their respect for him grew immensely. It always is that way. Everybody admires those who are ready and willing to do the very best they can, although that best may not be very much.

Peter Rabbit was to be the judge. Ordinarily Peter would have felt very proud and important, but this time he didn't. You see, he had been made judge so that he couldn't claim any unfairness on anybody's part if Jumper should be beaten. Jumper went back a little way, ran a bit, and then made a beautiful, long jump. It really was a wonderful jump, and everybody said so. They clapped their hands and some of them began to say openly that they didn't believe any one could beat it. Then Jumper tried again and did a little better than before. A third time he tried, and this was the best jump of all, and he knew and everybody knew that he had done his very best.

"Next!" called Peter Rabbit.

There was a great stretching of necks to see who was going to jump next, for, like Peter Rabbit, none of the others had been able to think of any one who could possibly jump as well as Jumper the hare. Jimmy Skunk disappeared among the trees of the green forest for a few minutes, and when he returned who do you think trotted at his heels? Why, Lightfoot the deer! Everybody but Jumper looked very foolish. They had forgotten all about Lightfoot and how wonderfully he could jump.

Then he ran swiftly and bounded into the air.

He went back a little way, just as Jumper had done. Then he ran swiftly and bounded into the air. It seemed to Peter as if he never would come down again. But he did, and where his sharp hoofs struck the earth was a great deal beyond the last mark of Jumper the hare. Everybody clapped, and Jumper clapped loudest of all.

"What did I tell you?" he cried to Peter Rabbit. "Didn't I tell you that there was a friend of mine who could outjump me?"

Lightfoot, holding his head up proudly, went back and tried again, and this time everybody cried "Ha!" his jump was so high and so far. Surely there was no one else in all the green forest who could jump like that. Lightfoot looked as if that was his opinion, but Jumper the hare merely looked at Jimmy Skunk and winked. Jimmy winked back. Then Jumper knew that Jimmy was going to bring forth the greatest of all jumpers in the green forest.

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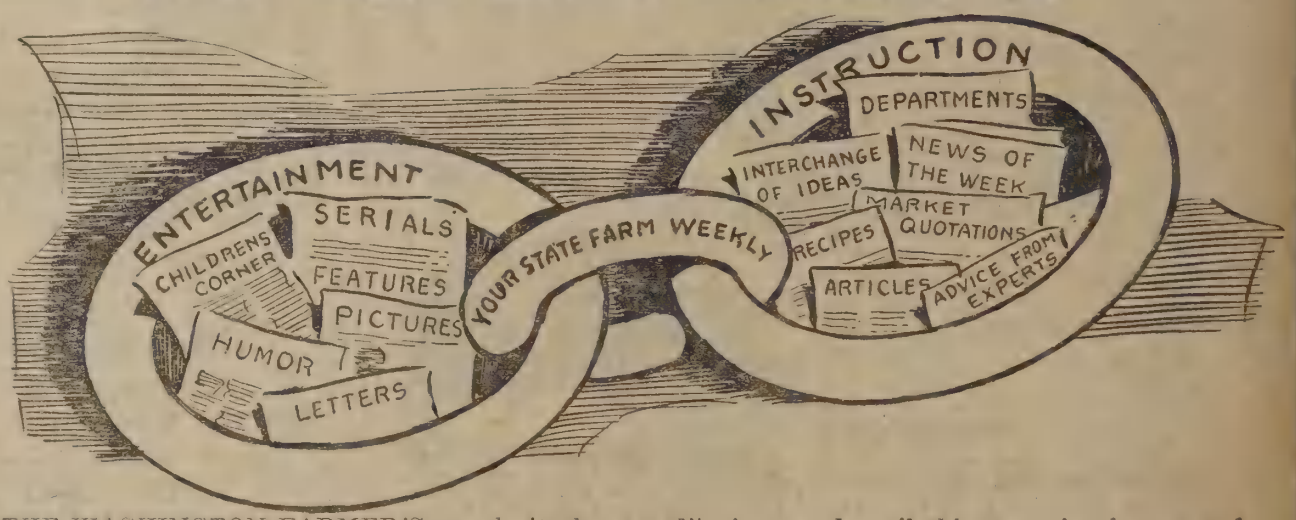

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Dec. 20, 1923.

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Reduced Rates

Victory for Western Washington Fruit and Berry Growers

Strong objection to further increase in express rates led fruit and berry growers of western Washington to request a hearing before the interstate commerce commission. The result of that hearing, held in Washington, D. C., was made known Monday, December 3, when word was received by W. H. Paulhamus, president of the Puyallup and Sumner Fruit Growers' association, that the commission had ruled in favor of the shippers, with a reduction of 10 per cent on rates that were in existence in 1920, instead of an increase of 12½ per cent on the present rate, which was being asked by the American Railway Express company. The existing rate is $2.90 per hundredweight to Mississippi and Missouri river points.

The constant increases in express rates granted during the last two years have been most disadvantageous to the consumers whom the fruit growers must reach. For example, the present rate on a carload shipment of red raspberries to Mississippi and Missouri river points of $2.90 per hundredweight plus the tax plus the refrigeration costs, means 64 pounds of raspberries and 36 pounds of package. In other words, two-thirds of the transportation is paid on the actual fruit content and one-third on the containers—figuring four crates of berries to a hundredweight. If the minimum carload is 15,000 pounds, it means 10,000 pounds of fruit and 5000 pounds of lumber.

Washington produces certain commodities—such as berries—that are so extremely perishable that it is necessary to move them at the fastest possible rate of transportation. It doesn't make much difference what can be produced, or its value, unless it can reach the consumer in good condition so as to allow a price that the consumer can afford to pay.

Stevens County Dairy Plans

Meeting in Colville with F. W. Kherli, assistant dairy specialist of the extension service of the Washington State college, and R. N. Miller, farm management demonstrator of the same service, the problem of the low-producing cow was the first one to be discussed and it was decided that cow testing should be effectively organized in Stevens county as soon as possible, although the difficulties in the way are serious.

To further increase interest in good dairy cattle several community tours of dairy herds will be made. A very successful tour was put on in the Addy Marble Valley community last year. For the coming year the dairymen propose to hold similar tours at Colville, Rice and Chewelah, besides holding the Addy tour again.

The organization of bull clubs or blocks in the various communities for the purchase of improved purebred dairy sires was urged. It was pointed out that one of the tragedies of the dairy business in Stevens county was the fact that proven sires in almost all cases when their period of usefulness in one herd is at an end go to the block.

The keynote of the entire meeting could be said to be the complaint that lack of interest in good dairy stock on the part of the rank and file of dairy farmers in the various communities was the big obstacle to success. It was pointed out that the most potent means of overcoming this indifference was the boys' and girls' club work. It was decided that six dairy calf clubs should be organized, in the following communities: Marble Valley, Meyers Falls, Chewelah, Addy, Arden and Kettle Falls.

The following dairymen indicated a willingness to act as local leaders: J. H. Zodrow at Chewelah, Heze Skeels at Marble Valley, Mrs. Joe Reynolds at Meyers Falls, Rolla Fisher at Addy, W. M. Hudleson at Arden, Oliver Leiser at Kettle Falls.

The following dairymen took part in the meetings: T. C. Bell, Colville; Mr. and Mrs. Rolla Fisher, Addy; H. T. Skeels and Heze Skeels, Addy; H. S. Hunt, Rice; J. H. Zodrow, Chewelah; W. M. Hudleson, Arden; Herman Josefsky, Kettle Falls; Oliver Leiser, Kettle Falls. County Treasurer W. L. Biggar and F. L. Reinoehl, Chewelah banker, also attended. The meeting was held as a part of the Stevens county extension service office work.

Walla Walla Farm Bureau

A definite program of work for the coming year was mapped out at the annual program of the Walla Walla county farm bureau in the middle of December. The application of more business principles on the farm, together with production of a diversity of crops, was among the points emphasized.

W. S. Hedges was elected president and Arthur Cox vice president. The organization committee is F. R. Fields, W. A. Ritz, F. M. Benson, Harve Yenney, Ellis Laidlaw, O. C. Plaquet, S. P. Maxson, Arthur Bergevin, Mrs. C. E. Morgan, J. W. Yenney, O. M. Beatty and H. S. Brewer.

The executive committee is W. H. Kirkman, R. L. Cline, Ralph Rander, C. N. Eaton, P. C. Shemwell, Harry Riffle, G. B. Dague, Charlotte Reynolds, J. D. Taggart, C. B. Auker, Mrs. H. H. Marshall, Mrs. Frank Yenney, Mrs. C. I. Fleming, H. D. Eldridge, G. W. Weber, W. G. Cordiner, J. E. Painter and J. H. Compau.

News for Breeders

HAS HERD OF 70 HOLSTEINS.

"We have one of the greatest dairying counties in the northwest," challenges M. B. Cunningham, dairyman of Vancouver, Clarke county, who has a herd of 70 purebred and grade Holsteins, with a purebred sire at their head, down on the Columbia. "We can produce good ensilage, oats and vetch hay, some alfalfa and clover hay, and lots of good grass. We are at the door of one of the greatest live stock shows in the world, and we have Portland and Seattle, as well as Vancouver, for markets if we need them, though during the 10 years I have lived here the local market has been as good as any. We do need a condensery in the county seat, though. Enough milk is produced in this district to support a big one, for tons of milk are hauled to Portland every day, not to mention the butter and cheese that are made up locally and shipped out."

Cunningham leases a farm of 110 acres at East Fifth and T streets, Vancouver, within the city limits and just a mile from the center of the city. Since his purchase recently from F. R. Beals of Tillamook, Ore., of eight head of purebred heifers his herd numbers 43 grade cows and heifers and 27 purebred females. He was unfortunate enough to lose in September, by the baling wire route, a young bull from the Ed Hoem herd at Snohomish, a sire whose three nearest dams averaged over 1100 pounds of butter in a year, and one whose propensity for getting twin calves earned considerable local recognition in the press. He sired six sets during his year of service, and Cunningham has had from him 44 calves, 35 of them heifers, with more to come. The bull was only 2 years past when he died.

Clover Leaf deary, Cunningham calls his farm, and he is a member of the Clarke County Holstein Breeders' association that was organized last spring, with 10 members owning 123 purebreds over a year old and 66 grades. Other members are Lloyd G. Whipple, W. C. Groth, J. M. Beveridge, Kasper Jenny, G. E. Whipple, B. O. Case & Sons, Ray Hancuff, Mark H. Fellers and J. M. Tooney.

A FIRST PRIZE WINNER.

Herewith is a picture of Comet Sensation, the junior yearling Duroc Jersey boar at the head of the herd of the Garfield Stock farm, owned by S. W. Shoemaker of Garfield, Whitman county. This animal won the blue ribbon in his class at the Lewiston-Clarkston fair at Lewiston, the Washington state fair at Yakima, and the Garfield Live Stock show at his home town. As he appeared in the show ring, he stood 38 inches high, weighed 640 pounds and measured from eye to tail over six feet.

ADDS TO DAIRY HERD.

Success with purebred Herefords in western Lewis county is being attained by G. Korevaar of Meskill, Wash., who recently added four head from the Chandler herd, purchased at the Pacific International, to his herd of grades and purebreds. The addition included a cow, a 2-year-old heifer, a yearling heifer and a yearling bull.

BUYS IOWA HERD BOAR.

F. M. Curtiss, proprietor of Cedar Canyon Farms at Fruitland, Wash., writes to The Farmer that he has bought a new herd boar from his brother, C. F. Curtiss of Ames, Ia. The boar was farrowed April 12, 1923, and is kiown as Ames Epoch 17th, No. 322780. He is sired by Laurel Epoch 291100, a son of Laurel Champion and an Epochal sow.

ANOTHER STATE RECORD.

The Western State hospital at Fort Steilacoom has made another state record with Canary Snowball Gettie, a junior 3-year-old. Her record for seven days was 588.2 pounds of milk and 26.47 pounds fat, which is almost twice as much as she produced as a junior 2-year-old. Her fat record a year ago was 13.86 pounds.

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Hotel and Restaurant
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We Buy and Sell
Grade and Pure Bred Dairy Cattle.
We can save you money whether you wish to buy or sell. One or a carload.
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NEAR CARSTENS' PACKING PLANT.

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Where the high records are made. Several exceptionally well bred bulls for sale at most reasonable prices, sired by Ormsacum King Korndyke Sadie Vale or Carnation King Matador Mutual, son of a world record senior yearling.
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Linn County Holsteins
Cows, heifers, bulls and calves.
LINN CO. HOLSTEIN ASSOCIATION.
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29-Lb. Holstein Bull
A splendid heifer bred proven sire, 2 years old. A calf getter, thoroughly staff broke and guaranteed right, $150.
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Milking Shorthorn Bull
Dropped June, 1922. This is a young bull of much quality, sired by Foothills Corporal, grand champion Pacific International stock show, 1919, of richest milking strain, from Corporal Clay, dam Glenrose Pearl. The dam is a good producer.
$125 for quick sale.
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Milking Shorthorns
Special offer until January 1, 1924.
Bull calves up to six weeks old, also two or three yearling bulls, ready for service. Good reds and roans. These are from easy fleshing as well as profitable milking stock.
Satisfaction guaranteed.
NORTHWOOD FARMS, Redmond, Wash.

Milking Shorthorns
Senior herd bull, Foothills Corporal 150435, weight 2400; dam Glenrose Pearl, record 14,353 milk, 492 fat. Sire Corporal Clay, Kamaduk Herd.
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Sunny Hill Brown Swiss
Federal accredited herd. Choice young stock for sale.
JOHN BOECKLE, Linnton, Ore.

Mistland Brown Swiss
Bulls and heifers of good breeding and individuality at reasonable prices.
JOE SCHUMACHER, Stayton, Ore.

Guernsey Special
$125 will buy a son of Amy of Mound City, A. R., 11893.3 lbs. milk, 546.5 lbs. fat at 4½ years.
VALLEY GEM FARMS, Arlington, Wash.

Guernsey
Bull calf, richly bred, well marked grade, ⅞ Guernsey, ⅛ Jersey; sired by Topsy's Robin Hood of Orchard Hill; carries over 40 per cent blood Sammish Topsy B. F. 831.
WOODSTOCK FARM, R. 2, Renton, Wash.

Pacific Farm Jerseys
Bred for type and production. Rinda Lad and St. Mawes Lad blood lines.
I. NORDSTROM, Bandon, Ore.

We Can Now Offer a St. Mawes bull ready for service.
Dam, a daughter of St. Mawes Noble, has record of 538 lbs. fat in 305 days.
J. C. BROWN & SONS, Shedd, Ore.

Ioka Farm Durocs
Home of Jumbo Giant, grand champion Oregon state fair and Pacific International, 1923. Bred gilts and choice weanling pigs, on approval. Good ones.
A. N. DOERFLER, Silverton, Ore.

Hampshire Swine
We have purchased the entire herd of wonderfully bred Hampshires from Dr. H. K. Stockwell of Monroe. Boar and sow pigs, gilts and a few bred sows for sale. Double treated for cholera.
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Berkshires
Improve your stock. Get the breeding stock now, pay when you raise the pork. Blood lines unsurpassed. Both sexes. Write for [illegible]
F. M. CURTISS, Prop., Fruitland, Wash.

Rambledale Rambouillets
[illegible] registered Rambouillet rams to [illegible] mutton [illegible] ranch.
E. R. HOBBS, Castleford (Twin Falls Co.), Ida.

HOLLYWOOD HOLSTEINS
Registered Holstein bull calves out of yearly record dams, excellent individuals, well marked, thrifty. By getting them young you can get better stock and for half as much money as when you buy yearlings. We have bred bulls that have sired daughters with records up to 1508 pounds butter in a year, and each of our last two herd sires has sired one or more world record daughters. Buy from the famous Hollywood herd that was the highest record large herd in the highest record C. T. A. in the United States last year. A few heifer calves suitable to mate with above bulls.
A CALF OR A CARLOAD.
HOLLYWOOD FARM (Near Seattle) Hollywood, Wash.

Registered Duroc-Jersey Bred Sow Sales
Starting the Southern Idaho Sale Circuit, January 9-10-11, 1924.

W. H. Rambo, Thomas Parks and J. P. Hunt will sell on the above dates the best lot of sows that have ever been offered to the public.

On January 9, 1924, Thomas Parks will sell at Buhl, Idaho, 27 head of sows and gilts bred to or sired by Orion Joe Jr., Buhl Pathfinder and Buhl Constructor.

On January 10, 1924, J. P. Hunt will sell at his farm two miles east of Buhl, Idaho, on the state highway, 27 head of sows and gilts bred to or sired by Gem Sensation Leader.

On January 11, 1924, W. H. Rambo will sell at Clover Leaf Ranch, three miles west of the southwest corner of Buhl, Idaho, 40 head of sows and gilts bred to or sired by Idaho Sensation, Big Commander, Buhl Joe and Gold Finder.

These sows and gilts and the boars they are bred to are the direct descendants of the very best of the breed.

For catalogs write to
COLS. AMOS J. MILLER, Caldwell, Idaho.
and R. E. HOPKINS, Buhl, Idaho.
or W. H. RAMBO, THOMAS PARKS and J. P. HUNT, Buhl, Idaho.

Read the "Want Ad" page this week for good offers of all kinds.

The Red Lock—*The New Serial*

(Continued from page fourteen.)

calls a crime slated against him, to bury his life here with his dog and fishing gear, alone in his bachelor cabin on the river shore.

"Yes, them's mighty fine sentiments," cut the thin-edged voice of the postmaster across the silence—and the dream dissolved in the fisherman's eye—"an' I mostly agrees with 'em an' says amen to 'em, an' the new parson may be all 'e's cracked up to be, but still I ain't takin' back nothin'."

Zeke's thin voice ceased, lost somewhere in the cavernous labyrinth of his sharp, inquisitive nose. He leaned down across the counter again, thoughtfully fumbling the two tufts of wiry whiskers that poked forward from the corners of his dry and furrowed chin.

Uncle Nick prodded down the contents of his pipe with his finger and smoked a while in silence. Taking the stem from between his lips after a time, he blew the smoke away, slowly, as if to get the full taste of it, and waved the pipe across toward the postmaster—a well understood preliminary to a renewal of the argument.

At the moment Loge Belden took another gulp from his bottle of "squirrel," put the cork in, slapped it tight and slouched up along the counter.

"Say, I'd jist like t' put one t' that. This evenin' as I come up the River Road this hyur Warhope homestead an' Sime Colin's house I stopped a little bit on the bridge acrosst Eagle Run an' happened t' look over in the orch'id b'twixt ol' Sime's an' the parsonage. Y'u know ther's a spring along the crick thar under the edge o' the hill—Whisperin' spring, I've hear'n tell y'u-all calls it—an' ther's a bench t' set on under the maple tree by the spring.

"Well, as I come a-past, thar set this hyur new parson an' that Texie gal on that bench, an' as near as I could make out, bein' purty well along tow'rds dark, had 'is arm around 'er. You fellers 'r wastin' a lot o' breath on that gal. I 'low the parson——"

The room suddenly was deadly still, with every eye turned toward the door. Belden felt the stillness; hesitated; turned——

In the open door, framed in sharp outline against the dark background of the nightfall, stood the tall form of Jack Warhope.

With the reach and spring that only the woods and hills can give, Warhope walked into the room. Al Counterman slipped off the goods box and hitched up his overalls; Zeke Polick slid down behind the counter; the blacksmith smoked hard; Uncle Nick slowly rose from his chair, no detail of the scene escaping him, while the glint that had leaped into his eyes carried him back 20 years toward the days of his manhood.

The woodsman drew a step nearer.

"I 'low y'u must 'a' be'n mistook about that—arm."

"Not a damn bit."

Like lightning came the sharp smack of an open hand that fanned Belden's head back. He leaped away from the counter and struck—a good smashing swing, clean from the hip; but it didn't land. The jaw it was aimed at wasn't there when it came across.

Belden lost his temper—the mistake of many a better man—and lunged viciously. He ran into an uppercut to the chin that doubled him back over a barrel of salt. He whirled up, and his right hand clawed the butt of a pistol out of his pocket.

The pistol came out, but that was all. A heavy six-gun leaped from the woodsman's side, a bullet crashed into the pistol butt, gashed Beldon's hand slightly and tore on into the salt barrel.

The woodsman stuck the six-gun back into the holster at his hip, hidden by his hunting blouse, snatched Belden by the collar and jerked him out into the middle of the floor.

The woodsman dropped the other's collar, talked a moment or so with Uncle Nick and Counterman about the seining trip next day—the matter that had brought him into the store—and passed out at the door. The crowd gathered around Belden.

"Y'u ort 'a' had more sense than t' pull on him. He ain't no ways spry on talk, but he can pick hick'ry nuts with a six-gun."

(To be continued.)

General Motors Trucks

Stay On The Job

Because they are built oversize and overweight in every part of both engine and chassis GMC trucks provide a surplus of strength that easily withstands the jolts and strains and heavy going that every farm truck must endure.

More—this extra strength keeps GMC on the job continuously. Wearing parts last longer—parts that bear the strain do not break.

And, GMC engine power is in keeping with GMC strength of construction. It will move the truck fully loaded any place where wheels can get traction.

Write for free booklet "Motor Trucks on the Farm".

GENERAL MOTORS TRUCK COMPANY
Division of General Motors Corporation
PONTIAC, MICHIGAN

GMC

GMC Trucks are "Seven Steps Ahead"

The "U. S." Walrus. Its all-rubber surface gives you complete protection

Complete protection at a minute's notice

Slip the "U. S." Walrus right on over your shoe—its smooth rubber surface is as watertight as a boot

You can stand any amount of slush—mud—barnyard mire with the "U. S." Walrus.

For the odd jobs that take you from house to barnyard and back again a dozen times a day — slip the "U .S." Walrus right on over your shoes. You can put them on as easily as you slip into an overcoat. And you avoid tracking all the outside dirt and muck into the house.

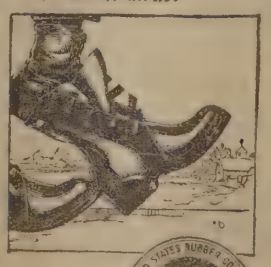
That's something every farmer's wife will appreciate!

What's more, when you're through with a job—one good douse under the faucet washes the hardest caked mud clean off that smooth rubber surface.

Tough, rugged, with a heavy fleece lining that keeps your feet warm in all kinds of weather, you'll find the "U.S." Walrus the greatest footwear convenience you've ever known.

The "U. S." Walrus can be washed clean instantly. Its surface is as smooth and waterproof as a boot.

Easy to slip in and out of! One of the big convenient features of the "U. S." Walrus.



Trade Mark

Other "U. S." Models—all built for long, hard wear

"U. S." Boots, built so strongly they're famous wherever boots are worn—Rubbers and Arctics, all styles and sizes for the whole family—"U. S." Bootees, the all-rubber lace shoes for spring and fall use—every kind of rubber footwear you could possibly need is included in the big "U. S." line.

Every single one is backed by 75 years of skilled experience. It will pay you to look for that "U. S." trademark—the honor mark of the largest rubber organization in the world.

United States Rubber Company

Ask for "U.S." Walrus

THE WASHINGTON FARMER
ESTABLISHED 1894
SPOKANE. SEATTLE.

Jerseys Prosper on Wynooche River

For 14 years John H. Taylor and family have been developing a dairy farm on the Wynooche river seven miles above Montesano in Grays Harbor county. They selected Jerseys as their foundation, and have built up an excellent herd of purebreds, some of which have brought the farm honor in the form of gold medals and high records and all of which have contributed to the general prosperity of the farm through consistent production. In the 14 years that the Taylors have been breeding Jerseys, they have invested about $5000 in foundation animals. They have sold $14,500 worth and now have a good herd of about 40 head. Golden Massypolo 3d, a cow of Mr. Taylor's own breeding, made a world record in production as a junior four-year-old. In 1914 there were 12 Jersey cows in the United States holding gold medals and the Taylor herd contained two of them.

This farm comprises about 150 acres, of which half is hill land like that shown in the back of the picture herewith, half being rich bottom land that produces enormous crops of feed. The mountains give the place increased picturesqueness and its general attractiveness makes it one of the widely known farms of that region.

The original foundation for the Taylor Jersey herd came from the farm of Adam Stevens of Ellensburg.

Whitman County Is Beginning to Balance Its Farming---Page 3

Went to Chicago

To Represent State of Washington

One of the greatest gatherings of club boys and girls in the history of club work in this country took place at Chicago during the International Live Stock show and the hay and grain show early in December. Hundreds of boys and girls from various sections of the United States were present and took part in the club activities. Notable among the gatherings was a group of 41 girls, representing 41 states. They had won statewide contests which entitled them to be known as the champion domestic science club girls of their respective states. They were the guests of Montgomery Ward & Co. and were royally entertained by that concern during their 10-day stay in Chicago.

The state of Washington was represented in this group by Miss Selena Deno of R. F. D. 1, Spokane. Miss Deno is too well known in her home state among those familiar with club work to need introduction. However, an enterprising reporter for Ward & Co. interviewed her while she

Miss Deno.

was the company's guest and what he reported will be interesting to her friends. Describing her as a "western breeze," he quotes her in part as follows:

"Of course Chicago is bigger than Spokane and may have more interesting things to look at, but I can assure you that what we have out there is just as good as any other place in the world.

"I won my right to this trip in sewing and community work, and when I finish normal school and after I have had my four years in college I hope to be a club leader or demonstration agent. I think club work is the best kind of employment for a girl who has to earn her own living. Club work gives a practical education to the young folks and I sincerely hope the membership continues to grow until every farm boy and girl in the country is numbered on our rolls. By diligent study of the necessary qualifications I hope to become a part of this most useful work, so that I may be able to assist in developing such a worthy movement."

Plan Dairy Plant

Continuing its program of preparation to dispose profitably of all its surplus milk, the Inland Empire Dairy Producers' association is now taking steps looking toward establishment of a powdered milk plant in Spokane. At a meeting of members in Spokane December 8 the board of directors was authorized to establish and equip such plant at a cost of not to exceed $95,000. The funds for this purpose will be raised by sale of stock to members, the price of the stock being deducted from the price of the milk sold to the association, a few cents per hundred pounds.

President H. S. Findley and Manager G. D. Railsback reported to the membership meeting the results of their investigations of powdered milk plants in western Washington and California, where this method of handling surplus milk is carried on successfully. They stated that powdered milk had a market value of from 9 to 14 cents per pound, and that 100 pounds of skimmed milk made about nine pounds of the powder. Thus they predicted an increase to members of not less than 50 cents per hundred pounds for their surplus milk when the plant was placed in successful operation.

The members at the meeting were practically unanimous for the establishment of the plant. "We have all helped to build three or four big dairies for somebody else," said one member. "Now let's build one for ourselves." And his attitude was reechoed by most of the other producers present.

FAVOR KITTITAS PROJECT.

Word has been received from D. W. Davis, United States commissioner of reclamation, announcing that the engineers who inspected the four pending units of the reclamation program in the Yakima river valley have reported in favor of developing next the Kittitas high line canal project. This unit, when completed, will irrigate about 70,000 acres in Kittitas county.

Skagit Fair Shows Gain

The Skagit County Fair association recently turned in a report showing a gain of $1400 for the year. With the building of the huge cattle barn the association now has one of the largest buildings of its kind in the northwest. Other improvements have been made on the grounds and it is believed continued growth will be shown in the annual exhibitions.

The following directors have been elected for the coming year: Tom Lockhart, W. S. Deighton, A. P. Johnson and W. J. S. Gordon, for three years. Hans Knutzen was named to take the place of Nels Anderson, who died recently. Mr. Knutzen will serve one year.

Attended by 6000

Skagit County Dairymen's Jubile

There were at least 6000 people who attended the third annual jubilee of the Skagit County Dairymen's association at the Burlington Milk Products plant. The program consisted of talks by prominent dairymen and entertainment features. Two orchestras were kept going the entire evening before the long tables were spread with the picnic lunches.

President W. J. Knutzen was introduced by L. A. Turner, who acted as announcer for the program, and gave the welcoming address, and told the audience how the dairymen were now standing on their own feet. Mr. Knutzen was followed by J. A. Scollard of Chehalis, president of the United Dairymen's association, who reviewed briefly the work of the Skagit organization and how dairying conditions had improved since the association had been functioning.

"Cooperation has won its place in the state," he declared. He stated that in 1913, 1914, 1915 and 1916 the price of raw milk was $1.59 for 4 per cent test, and for the last three years, the average price had been $2.04, or 51 cents higher. With a production of 75,000,000 pounds a year, he continued, at 50 cents, gives $365,000 increased revenue to the dairymen of this county.

The program consisted of nursery rhymes, featuring Skagit dairymen and others, and read by the "Darigold Twins," two men in black-face, kept the audience chuckling for several minutes. Ralph D. Nichols, formerly of the port of Seattle, showed motion pictures of the Skagit dairy plant, which were appreciated very much. Leonard Hanson recited "The Days of '21," concerning the dairymen.

A "battle royal" was next staged between a Darigold milk can and a competitors' can. Peter Omdahl talked on "Cooperation," and spoke highly of the efforts of the association and its manager, J. M. Humphrey, to help the dairymen. F. E. Bertrand sang "Skagit County," his own composition, which was heartily encored. S. W. Butler and Manager Humphrey gave short talks and invited every one to stay for dancing.

KITSAP FARMERS ORDER SODATOL.

Six cars, or 60 tons of sodatol, have been ordered by over 400 ranchers of Kitsap county, through their county agent, G. N. Worden, and additional orders are being received at his office daily. The cost of this material delivered at Kitsap points is only $3.20 per box.

GREAT NORTHERN EXTENDS SEASON'S GREETINGS

While in volume of traffic the year 1923 has been the largest in the history of the Great Northern Railway, the net results of the year have been less profitable to the owners than in some former years, owing to the fact that increases in the cost of things which comprise transportation, its sole product, have been greater than those in freight and passenger rates.

The Great Northern thanks the people who so liberally patronized it in 1923 and at the same time extends its thanks to those faithful, loyal and efficient employees who made it possible to handle this large volume of business. The Great Northern has great faith in the men and women who serve it, in the fairness of those whom it serves, and in the ultimate prosperity of the territory it traverses. It has endeavored to render good service to its patrons and hopes to continually improve that service and to merit further patronage.

To all—patron and employee alike—in the spirit of the season, the Great Northern Railway wishes a joyous Christmas and a happy and successful New Year.

LOUIS W. HILL,
Chairman of the Board.

Talk No. 11

Organize, Standardize, Advertise, Say Orchardists

Tentative Plan for Federation to Market Northwest Apples Is Approved

By GEORGE N. ANGELL

Confidence in the ability of the fruit growing industry of Washington and the northwest to recover from the temporary depression into which it has been thrown by disorderly marketing, and intense interest in any plan for organization, orderly marketing or advertising which offered assistance in recovery, were the outstanding expressions of the 19th annual meeting of the state horticultural association at Yakima December 10 to 12. Pessimism and discouragement, which threatened at first to cast a shadow over the most largely attended session in recent years, were quickly dispelled by the inspiring talk on cooperative marketing by Isaac D. Hunt, vice president of the Ladd & Tilton bank of Portland, Ore., on the afternoon of Tuesday, and from then until the close of the equally inspiring address by N. B. Coffman, banker, of Chehalis and president of the Washington State Chamber of Commerce, with which the program following the annual dinner ended Wednesday night, the atmosphere was one of hopefulness, the talk all of methods to be followed in working out salvation. Educational addresses were listened to with respectful attention, but the real meat of the gathering for fruit growers who have marketed at a loss for two or three seasons past and who already are beginning to realize that possibly the present shipping season will be more disastrous than any in the history of the business was in the constructive suggestions made by growers, bankers and marketing specialists as to how best to make effective the slogan of the session, "Organize, Standardize, Advertise."

Oregon Growers Present.

Indicative of the sectional nature of the marketing problem and of the wide interest it has aroused, Oregon fruit growers took a prominent part in the convention. There was a large delegation present from Hood River, and R. H. Kipp, manager of the marketing committee of the Portland Chamber of Commerce, attended also. Practically every fruit growing section of Washington was represented in the attendance.

As foreshadowed by his remarks at the annual meeting of the Oregon Horticultural society at The Dalles the previous week, Mr. Hunt, who assisted in organizing the largest cooperative in Oregon, who is personally an orchard owner, and who is chairman of the marketing committee of Oregon's $300,000 development fund, "took off his coat" on behalf of the Portland bankers' plan for federating the various fruit growers' associations of the northwest into one large body that could work intelligently for all of them on such mutual problems as handling exports, standardizing the northwest pack and telling the world of the superiority of the northwest apple. He reminded growers of the meeting that was held in Portland last summer when three of the leading banks, knowing that the industry faced ruin, proposed a plan that nearly every one present at the conference agreed to as sensible. Committees were appointed, but no further action was had, and he came to Yakima, he said, to try to revive the plan.

A Common Problem.

"I am not advocating a great big organization of all the fruit growers. Frankly, I doubt if it is a possibility to get every apple producer into one association. They have too many different problems. But all northwest apples are of about the same grade and quality, therefore they all have a common marketing problem, and a federation of existing associations was the plan we proposed. Lay aside your suspicions and your sectional jealousies. Get together first in your associations, then in a federation that can control distribution, and you'll not be sitting around with long faces wondering how far you'll be in the red after each season's returns come in. But don't put too much trust in cooperative marketing. The remedy is in your own hands. You've got to wake one another up and do whatever is done for yourselves. You've got to do it now, and if you fail to do it, I'm here to tell you that it's goodby to the apple business. In four or five years, at the present rate, 60 per cent of the apple trees in the northwest will come out by the roots."

Lively applause greeted the pointed statements of the Portland banker, the careful diagnosis of the farmer's ills made by President J. H. Auvil of the Wenatchee District Cooperative association, the suggestions for caution made by E. L. French, director of agriculture, the carefully thought-out and calmly presented observations of W. L. Steinweg, president of the First National bank of Yakima, and the synopsis of marketing fundamentals made by E. F. Dumler of Washington State college. Growers present—there were more than 500 of them each day—took leading parts in the debate and committee work; both Hunt and Coffman promised to render all assistance possible; and the upshot of the meeting, in a few words, was that the best obtainable thought in Washington and Oregon on the subject of cooperative organization and marketing will be focused on the preparation of a definite program to be submitted to the statewide agricultural conference called at Yakima January 16 and 17 by the state chamber. Out of this conference it is now hoped will come some recommendation for action that can be indorsed by the "co-ops" of both Washington and Oregon, the problem of getting the fruit growers of the northwest—Idaho and British Columbia included—appears to be nearer solution than at any time in the last decade.

Federate Existing Agencies.

Specifically, the committee on markets and advertising, which Dan Williams of Yakima was chairman, recommended the federation of existing agencies identified with the apple industry in the northwest, with regulations providing for orderly distribution and marketing; that the federation be requested to adopt and put into use a uniform sale contract as a corrective for rejections; that it give consideration to an advertising campaign based on the apple production; and that Hunt be requested to collaborate with a committee interested in the industry and present an outline of the proposed federation for consideration at the January meeting in Yakima. The existing committee was continued for that purpose, J. L. Dumas of Dayton, D. L. Pearson of Hood River, I. A. Van Volkenborgh of Wenatchee and C. A. Long of Spokane being members with Williams.

Four Committees Work.

This was one of four committees on marketing (including advertising), transportation, storage and byproducts, appointed on recommendation of President Paul Weyrauch and on authorization of the opening session Monday evening to gather all possible information on the respective subjects during the session and afterward, and to report at the January conference. The committee on storage, consisting of Howard Wright of Yakima, Roy Larsen of Wenatchee, A. G. Craig of Spokane, Gordon S. Brown of Hood River and H. S. Denison of Walla Walla, reported that there is immediate need for greater storage, but recommended that since there is a difference of opinion as to the location, whether here or in the east, a careful survery be made for the benefit of the January meeting. The committee on byproducts, consisting of F. A. Wiggins of Toppenish, Gallock Maxey of Selah, Ira D. Cardiff of Yakima, Percy Butler of Hood River and John S. Peterson of Omak, made no report, nor did that on transportation, consisting of A. W. Stone of Hood River, C. H. Swigart of Yakima, Robert Cumming of Spokane, A. A. Prince of Walla Walla and F. E. DeSellem of Wenatchee.

Resolutions Adopted.

Resolutions of the convention reported by the committee of which J. H. Auvil of Wenatchee was chairman were adopted in most cases without much dissent. They indorsed the tentative report of the marketing committee just referred to; "okehed" the movement for reduction of existing freight and other railroad charges that is being pushed in Yakima by Dr. J. S. Kloeber of Selah, and indorsed the effort for establishment of a basket rate on apples, pears and peaches and a bulk rate on apples from Washington shipping points to all points where the rates are effective for competing districts, notably Idaho. The latter resolution brought forth lively discussion, an effort to table it on the ground that it was a sectional matter in which Yakima was chiefly interested, being unsuccessful, and the arguments of Yakima proponents, notably Dr. Kloeber and H. M. Gilbert, serving finally to effect passage. Another resolution registered the association's protest against a policy of national isolation and urged federal officials to restore to prewar conditions "markets which have been destroyed to the disaster of fruit growers." Still another indorsed the Purnell bill, which is before congress, providing for additional appropriations for investigational work by state colleges; and another favored the reestablishment of the license system in vogue during the war, as applied to wholesale fruit and produce dealers both at destination and point of shipment.

Consider Advertising Plan.

The so-called Garfitt plan of taxing northwest boxed apples (the jobbers also contributing) to pay for advertising and "servicing" the product was indorsed by resolution as being "a constructive method of stimulating consumption and sale, deserving of support when a feasible working organization is perfected." This

(Continued on page eight.)

Wheat Will Always Be King in the Palouse

But What About a Queen? Indications Point to an Alliance With the Royal Dairy Cow Family

By J. E. NESSLY

Whitman county, claiming to be the greatest wheat producing county in the United States, had a crop of 13,000,000 bushels of wheat in 1923. It was the largest crop in bushels and average yield this wonderful county has ever produced. The general average for the entire county was 32 bushels per acre. This, too, is claimed to be a record: "I have lived in Whitman county 40 years and never before saw an average of 32 bushels of wheat per acre for the entire county," said a pioneer citizen of Colfax, who has farmed and been in close touch with agricultural conditions in the county for two-fifths of a century.

Yet, despite this enormous crop of wheat, which is worth, even at present quotations, a price that was never dreamed of by Palouse farmers 30 or even 25 years ago, times are not as prosperous as they should be in Whitman county.

Only a small portion, comparatively, of the 1923 crop has been sold. The price started off at about 85 cents a bushel. It held pretty close to that figure and it is believed that the average price paid for the wheat sold up to November 15 was about 85 cents. This would have been a price that would have meant enormous profits 25 years ago, but it spelled loss to many Whitman county farmers this year. The cost of production has more than doubled in 25 years. Then land was worth from $35 to $50, the latter being a high price. Much of the 1923 crop of wheat was grown on land for which the owners paid as high as $150 per acre. Little of it was valued at less than $100 per acre. Taxes on this land are several times what they were 25 years ago. Everything costs more. Wages are much higher. It is probably true that wages have increased the cost of wheat more than any single factor.

"I made a little money farming this year," said a farmer near Colfax, "but I made it by doing my own work. I raised 4,000 bushels of No. 1 wheat, on 100 acres, an average of 40 bushels per acre. I did my own work until it came to threshing and there is where I learned what labor costs. I paid $686 threshing bill on that 100 acres, an average of $6.86 per acre. Yet I don't think the thresherman made any great profit at that. I raised some hogs and some colts and a few other things besides wheat and I made some money. But if I had been compelled to hire all my work done as many farmers were, I would not have made anything. And, speaking of colts, I think the Palouse farmers are overlooking a bet in not raising more horses. We will soon be out of horses. My horses are now from 7 to 10 years old and it will take four years to raise a colt and make a work horse of him. At that time my horses will be from 11 to 14 years old and horses will be scarce. I think Palouse farmers would do well to pay more attention to replenishing their work stock and the sooner they begin the better it will be for them."

Successful Producers.

I asked a banker at Pullman about farming conditions and he made a statement that I believe contains much truth. He said: "There are two kinds of farmers who are getting along pretty well. One is the farmer with 640 to 1000 acres or more, who has good equipment, considerable home help, and is fixed to raise wheat on a large scale without hiring too many men. I think those who have a small combine and can handle their own crops are making money. The second class is the farmer with 80 or 160 acres or possibly with 320 acres, who raises some wheat and some hogs, has some cows and some chickens and raises most of his own living and has a little of several things, including milk and butter and eggs and potatoes and other small stuff to sell. That man is getting along all right. But I think it has been fully demonstrated that few men can make money raising wheat and wheat alone, on 160 or 320 acres of Palouse land."

I talked with Horace Comegys, of near Thornton. He was born in Whitman county. He is farming 640 acres near Thornton, part of the big farm his father, the late Judge George Comegys, accumulated, part of it when Washington was a territory, and he has 80 acres of summerfallowed land rented and has put it in fall wheat. Mr. Comegys is a good farmer—a careful farmer and a successful farmer. He raised purebred cattle, but now the beef cattle business is not as profitable as the wheat industry.

Raise Something Else.

"A Palouse farmer must raise something more than wheat," he said. "I tried sheep on my farm a few years ago and find they pay better than anything I ever tried. I sold out most of my flock when prices were high. I got around $20 per head for them. They had paid me well while I was raising a flock and they paid me well when I sold them. Many of my neighbors bought sheep from me at the top prices, around $20 per head, because they saw that sheep made money for a Palouse farmer. But only one or two of them stayed in the game. I am building up another flock. It costs very little to keep them. I think many more sheep could be raised in connection with wheat farming in the Palouse country, to good advantage."

Agitation for government help in rais-

(Continued on page nine.)

Wheat land is beginning to produce feed for the dairy cow, a step toward a better balanced system.

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Freight Rates and Farm Profits

The statement was made in a public hearing the other day that if the railroads hauled wheat free of charge from warehouse to market, the wheat farmer would still be conducting a losing game. Representatives of the railroad interests seized upon the statement as evidence that there was no justification for the plea for reduced rates on wheat.

This is a ridiculous assumption. Just because the grower is losing 50 cents or some other amount per bushel because of a multitude of unfavorable conditions is no reason that his loss should not be reduced a few cents per bushel by the reduction in freight rates where they are shown to be excessive. One might as logically say that the farmer need not undertake to remove any of the unfavorable conditions affecting his business because freight rates remain high and tend to decrease wheat profits anyway.

No Factory-Made Cow for Henry

Not long ago the feature writers in newspapers and magazines were telling about Henry Ford's plan to drive the milk cow out of business by manufacturing milk from various commercial products—synthetic milk, they called it. That the noted automobile manufacturer has given up that idea in favor of the kind of milk upon which mankind has thrived since Noah put a cow aboard the ark is indicated by the fact that Mr. Ford now has a high-class herd of milking Shorthorn cattle on his farm in Michigan. The other day he added 14 head to it when he spent several thousand dollars buying the entire herd of this breed exhibited at the Chicago International Live Stock show by Bachelder farm of New Hampshire. This famous herd made the cross-continental tour from New Hampshire to Portland, Ore., recently, showing at the Pacific International in November.

Accredited Hatcheries in Washington

The growing interest in poultry as one of the leading by-products of the farm is noticeable. In this connection it is with much pleasure that one notes the fact that Washington stands first in the quality of the breeding stock represented by its accredited hatching and breeding associations. It is the second state in the Union to have a state accredited hatchery under state supervision. It is the only state that demands that all females shall be mated with males with a guaranteed breeding back of them of 200 eggs or better. The chicks produced by these hatcheries are under supervision of the state college.

However, the selection of breeders, male and female, is only one step in the direction of securing good chicks. The Washington association has adopted rules and regulations for the feeding and management of breeding stock that are calculated to produce the most vigorous chicks possible.

These rules and regulations are being rigidly enforced by the state supervisor; that they are sound is attested by the results obtained under them in the demonstration hatcheries last year. From the report, it is learned that the eggs produced by these hatcheries hatch better by 15 per cent than the state average, and that the chicks showed a mortality much lower than the state average.

It is also interesting to note that December 1 there were 165 accredited flocks, representing 76,015 breeders; 47 accredited hatcheries, with a total hatching capacity at one setting of 774,578, and that there were 31 flocks representing 29,166 pullets being trap-nested under state supervision for next year's cockerels.

Good for the Children

One of the big manufacturers of a coconut oil substitute for butter is advertising its product widely in the city papers throughout the country. "It is good for the children," reads the advertisement.

That strikes us as being about the last straw. Good for the children!

If we could save the children from the evils of this substitute business we should be less strongly opposed to it. Grown folks need less protection. They have passed through the building stage. Their bodies and minds are developed. But the boys and girls are still in the making. The vigor and strength of their minds and bodies depend in great degree on the quality and quantity of the foods that they receive.

Good for the children! Yes, good compared to no food or insufficient food. But as compared to real cow butter it is pitiably poor for the children. This has been proven so often and so irrefutably that repetition seems unnecessary. To be sure, these butter substitutes look like butter and taste like butter. It is easy to palm them off on the children or even old folks. The more is the pity of it. They are imitations and counterfeits as cleverly made as the worthless greenback from the counterfeiter's printing press.

Why imitate butter? Why not sell coconut oil in its original condition? Why accompany every package with a dose of coloring matter to make it look like the natural product of the dairy cow? Why flavor it with milk to give it somewhat the taste of the real article?

If coconut oil is good for the children, why in the name of all that is reasonable and honest and fair in business should it not be sold openly and above board as coconut oil and not as an imitation of butter?

You know; everybody knows. Butter is one of the best foods the world produces for children or adults. It is one of the most palatable and delicious and one of the most healthful and beneficial. That is why it is imitated. It is exceptionally valuable just as money is valuable, and it is significant that the counterfeiters select the two of them to imitate.

It is less than a year till the people of this state will have to decide between butter and coconut oil as the spread for their children's bread. Next November we must vote on the bill that was passed by the last legislature prohibiting the manufacture and sale of this counterfeit article. We suspect that the advertising that the manufacturers of and dealers in the butter substitutes are doing has a two-fold motive behind it—immediate sales of the make-believe butter and the misinformation of the general public with a view to defeating the anti-oleomargarine bill at the next election.

The dairymen and the city people who realize the menace of these imitation "spreads for bread" have a lot of educational work to do during the next 11 months. The people of the cities must be made to see the damage that will result to the state and its people if the counterfeit is permitted to replace the genuine—an irreparable damage to both the health and the industry of the state. The dairy cow and the children of the state must be upheld by the vote of the people next November.

Washington State Gleanings

The Washington Berry Growers' association, whose headquarters are at Sumner, a short time ago sent out final statements and remittances for all fresh fruit shipped during 1923. Secretary J. A. Forehand announces that the association will send to its members, many of whom reside in Puyallup, an additional advance on cannery berries, amounting to a total of $75,000. This amount includes advances of 2 cents on strawberries, 1 1-2 cents on raspberries and loganberries and 1-2 cent on blackberries.

LA CENTER GRANGE OFFICERS.

The La Center grange has elected the following officers: J. H. Leverett, master; Adella Vail, lecturer; Mrs. Beasley, chaplain; Anna Rashford, secretary; Mr. McFarlane, treasurer; Forence Bacon, Ceres; Gladys Bradway, Pomona; Mildred Spady, Flora; J. C. Newman, steward; Thomas Beasley, gate keeper; William Zeider, assistant steward; Mrs. J. L. Leverett, lady assistant steward.

CANNERY ENDS APPLE WORK.

Work on apples at the Baker Canning company at Sumner is completed for this year. The women employees worked their last day December 10. About 150 women have been at work putting up the apples this fall and during the summer much larger crews of women were employed to work on raspberries, blackberries, strawberries, loganberries, cherries and peaches. A small crew of men will be retained to do the repair work and help get the factory in good condition for next year.

TRY OUT NEW WHEAT.

The new "Burbank" wheat was raised by a few farmers in the vicinity of Ritzville last season. Fred Kramer, near Odessa, brought the first sample to the mill to have it ground and tested for baking purposes. His wheat went 30 bushels an acre and tested 59 pounds.

If is spring wheat, maturing 10 days earlier than Bart. It stools a fourth more and raises about five bushels to the acre more than any other wheat grown here. Henry Borgens, Packard, had 10 acres sown to this wheat, and the yield was high. Laney brothers, near Odessa, raised 50 bushels an acre.

IRRIGATION DAM FINISHED.

The wing dam across the Snake river, built by the Burbank irrigation district, has been completed at a cost of $24,500, as against an estimate of $43,000, it was announced at Walla Walla by R. Mauvais, chairman of the board of directors of the district.

With low water in the Snake river the canal which supplies water for irrigation carries 13.4 feet of water, where before 10 feet was the maximum during high water. The dam was built to save a large sum each year for electric power to pump the water.

STEVENS FARM BUREAU.

At the annual meeting of the Stevens County Farm bureau, held in Colville, the following officers were elected to serve for the ensuing year: E. G. Kohlstaedt, Colville, president; Mrs. Ray W. Hall, Orin, vice president. Executive committee: Earl Ogden, E. G. Kohlstaedt, A. E. Skidmore, Colville; J. H. Newhouse, Ford; J. O. Streeter, Chewelah; P. A. Rasmussen, Bossburg; Mrs. Ray W. Hall, Orin; Abe Heidegger, Rice; H. T. Skeels, Addy; John McDaniel, Addy; Wilbur Dupuis, Orin; E. A. Barnett, Springdale; J. H. Zodrow, Chewelah.

DAIRY FARMERS BUY STOCK.

For the improvement of their already high record herd of grade Jerseys, Munn & Son, dairy farmers near Olympia, have purchased two fine registered Jersey cows. One of these, Dahlia Forest Girl, has won two gold medals in succession the last two years for production, with records of 773 and 736 pounds of butterfat per year, respectively.

The other, Firwood Holly's Pet, is due to calve soon for the first time. She combines two of the most popular strains in the country, St. Mawes and the Stoke Pogis families.

Munn & Son have the leading grade [illegible] Thurston county, the association tests [illegible] of 421 pounds of butterfat average per cow for the year. They are now going in to build up a herd of registered stock.

APPLICATIONS FOR GRAZING.

Supervisor P. T. Harris of Okanogan has announced that applications to graze stock on the Chelan national forest next season will be received up to January 20. Applications after that date will be considered only for surplus range. Applications from permittees delinquent for fees can not be considered until the delinquencies are paid.

Henry Wallace, secretary of agriculture, has announced that no change in rates will be made for next season. The present rate on cattle is 90 cents a head from April 1 to November 1, with reductions down to 66 cents for periods beginning as late as June 1. On horses, the rate is $1.12 from April 1, with reductions graduated to 82 cents from June 1 to November 1. Special rates from April 15 to June 15 are 27 cents for cattle and 33 cents for horses. Sheep rates are 12 1-2 to 14 cents, depending on the length of the season.

TO BUILD APPLE WAREHOUSE.

A warehouse with capacity of about 200 cars will be built either at Wenatchee or at Yakima by T. J. Poupart, Ltd., London, England, to handle export apples from eastern Washington, according to S. P. Birch, representative of the firm. The purpose is to make it possible for the company to have a steady stream of apples going from this section to England, which is impossible in existing circumstances.

Under present plans the storage plant will be erected in time to handle the trade next year. The size of the building has not been determined. A branch office of the firm was recently opened at Portland to care for the Pacific coast exports of northwest boxed apples. The company can handle, it is said, 500,000 boxes of apples from this section.

"People here talk about cold storage in England," said Mr. Birch, "but they don't realize it is impossible. People in our country don't want cold storage fruit when they can get fresh fruit from European countries in 24 hours after it arrives at London. Cold storage is nearly impossible to get in London. Meat and butter are about all that have that class of storage.

"The only way to keep the market good is to have even shipments. London now is the dumping ground of the world. If any one has apples they can't sell they dump them in England."

To Help Wheat Growers

Plans Offered by Organizations and Committees

To THE FARMER it seems that various organizations in the Pacific northwest are bent on the same purpose of helping the wheat growers, though traveling different roads and proposing somewhat different plans.

In different ways they are all aiming at the bounty or premium method, substantially as proposed by the American Wheat Growers, Associated. Some term it "The Montana plan"; some "the Secretary Wallace plan"; some the "Oregon plan" and some the "Spokane or eastern "the Montana plan"; some "the Secretary plan"; some the "Oregon plan" and some the "Spokane or eastern Washington plan."

The plan first put out by the Wheat Producers' organization committee after its Spokane meeting of December 3 and 4 was construed as proposing government price-fixing, and drew considerable opposition. It has now been amended by the organization committee, and as amended has the approval of the Spokane Chamber of Commerce. It is as follows:

The committee recognizes that the ultimate solution of the economic situation in which the wheat farmer finds himself, depends on the adjustment of production to world's demands.

The committe urges emphatically the organization of the wheat farmers in cooperative or other associations whose objects will be the orderly marketing of wheat.

The plan:

Section 1. Tariff schedules to be provided high enough to cover the elevation of the domestic price of wheat products to its normal or prewar relationship with other prices.

Section. 2. A government export commission or corporation, whose duty it shall be to procure an adequate price for wheat (and wheat products) and maintain same through the export of surplus wheat.

Section 3. Wheat (and wheat products) protected in this manner, to pay its pro rata share of losses sustained in the disposal of surplus at the world's markets. For example: If the export of 140,000,000 bushels of wheat out of a crop of 700,000,000 bushels that move in trade is necessary in any one year to sustain the domestic price, and such export is at a loss of 50 cents a bushel below the domestic price, the loss would be $70,000,000 to be collected as a tax from the 700,000,000 bushels. That would mean a tax of 10 cents per bushel to finance an operation that lifted the domestic price of wheat 50 cents a bushel over what it would have been had the foreign market been permitted to fix the home price.

Section 4. Methods. In either of two ways. (a) It would offer a bounty or premium to exporters to cover losses incurred on wheat purchased in the United States and sold abroad, or (b) it would purchase and export wheat.

Section 5. The export commission to be financed as follows: The government to furnish a reasonable initial revolving fund, the commission itself levying the necessary tax to cover the season's loss on each bushel of wheat sold by the producer.

Arthur D. Jones of Spokane, a member of the committee and one of the large wheat growers of eastern Washington, offered a different plan (though aiming at the same remedy, of a bounty or premium on exported wheat. We think it has points of superiority over the plan adopted by the majority of the committee. It strikes us that it conforms closely to the views of President Coolidge as expressed in his message, and its meaning is clearer.

We give herewith Mr. Jones' plan in full, believing that the different organizations will find, when they arrive at Washington and sound out the views of congress and the administration that it will be the most acceptable. It is as follows:

1. An existing government agency, such as the United States department of commerce or the war finance corporation, to determine, as nearly as may be, in advance of the 1924 harvest, the production of wheat in the United States, the quantity required for domestic consumption, seed and carry-over and the quantity remaining for export.

2. The further determination by the same body, as nearly as may be, of the sum per bushel which, if added to the world price, would bring the price of American-grown wheat up to the same level with the general range of commodity prices in the United States.

3. Official announcement then that this government agency would pay the sum per bushel thus determined as a premium or bounty on American-grown wheat or wheat products exported to foreign markets.

4. Said premium or bounty to be paid from a fund to be derived from a tax on all marketed wheat, to be collected through railway, grain dealers and certified mill reports.

5. Tariff schedules to be provided that will be high enough to prevent an influx of foreign-grown wheat or wheat products to share unjustly in the benefits derived from taxing the American product.

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Prove Your Faith

Preaching Without Practicing Will Get Us Nowhere

For as the body without the spirit is dead, so faith without works is dead also.—James 2:26.

One of the fundamentals in what we call religion is the fact that a religious principle is almost always directly and specificially applicable to the common activities of life. The New Testament writer was thinking in a religious sense when he declared that works are the proof of faith and that faith without works is dead. Belief and faith alone are insufficient to insure salvation. One must put into operation the principles in which he believes. "Show me thy faith without thy works," writes the apostle, "and I will show thee my faith by my works." One may believe that the Man of Galilee pointed the way of salvation, but unless he follows in the path pointed out he will never attain that salvation.

In our everyday lives, in the making of our daily living, we find this basic principle applicable. Where is the man who does not believe in his heart that honesty is the best policy? Or the man who does not believe that thrift and industry are essential to prosperity? Or that united community effort is better than single-handedness and jealousies? And yet in how many people are these beliefs, these facts, dead because they are without works! The man who believes in honesty is not saved by that belief from the penalties if he practices dishonesty. He who is lazy and indolent is not made prosperous merely because he believes in thrift and industry. And a man may attend community meetings every day and night in the week, shouting for cooperation, but accomplish nothing for himself or his neighbors because he does not cooperate.

It is time for us to quit saying one thing and doing another; believing this or that and disregarding our beliefs when we are brought to the test of our faith. If we believe in honesty, let us be honest in our every thought and deed. If we believe in thrift let us be thrifty. If we believe in cooperation with our fellows, let us cooperate. And, in the religious sense also—if we believe that Jesus the Christ was right in the principles that he set forth and practiced, let us put those principles into action in our daily lives. Is it not a sure evidence of hypocrisy to believe and not do, to preach and not practice? Were it not better we have no opinions, no faith, no belief, no knowledge than that, having them, we be too lazy or indifferent to put them to work.

COOPERATION IS A LANGUAGE.

St. Paul Farmer: However much we may differ on politics, or religion, or any other controversial questions cooperation is a language that we can all talk in harmony, and it is a system that we can all support.

FARM BUSINESS AND MARKETS OUTLOOK

RISING confidence in the business outlook for the first half of 1924 has been a dominant note in recent weeks. The new year is regarded as a year of promise. The dread of depression is passing and the pessimistically inclined, who have been describing the minor reaction in industry since last March as a depression period, even though volumes of production and distribution continued large and nearly every one remained employed at good wages, are beginning to look for a rally from the present level some time during the year.

The encouraging symptoms shown in the last two weeks include an increase in buying of steel for forward delivery and a reduction in excess production of oil. Automobile companies are enlarging their schedules for next year, even though production of cars and trucks in 1923 will reach 4,000,000. Large sales of copper have been made. Wholesale trade in some lines has grown dull because of the approaching inventory period, while retail buying is brisk because of holiday sales. The drop shown in the last report of car loadings was partly due to a holiday and partly to a normal seasonal tendency.

More fundamental signs as to the character of 1924 are to be found. One of these is the ease in money markets, which is the basic factor. There is no dearth of money for sound borrowers, and little danger of forced liquidation as long as manufacturers avoid overproduction and distributors follow present policies of cautious buying. Foreign trade is swinging around from an import balance in the early months of 1923 to a substantial export balance. In November our exports were the largest since February, 1921, and foreign countries sent us over $39,000,000 in gold, adding further to our already large reserves. Throughout the last year foreign ability to take our goods has been far larger than expected.

Assurance of good business probably in increasing volume as far ahead in 1924 as the momentum of present tendencies will carry us means continuation of the high rate of consumption of such farm commodities as meats, dairy and poultry products and choice vegetables and fruits, which are in demand when payrolls are fat. It also means, however, that the products which farmers themselves must buy will not cheapen much, if any, during that period.

Cattle on Feed.

Eleven corn belt states had about 2 per cent more cattle on feed on December 1 this year than on the same date a year ago, according to a preliminary estimate by the United States department of agriculture. In the western and Pacific coast states, about 15 per cent fewer cattle were being fed for market than a year ago and the Lancaster, Pennsylvania, district has around 20 per cent less.

A keen demand for yearling beeves to supply holiday trade carried prices sharply higher last week to a new top of $13.10 for the year at Chicago and lifted the general average on that kind about 25 to 50 cents. But another big run of heavy short-fed steers surfeited the market on such grades and caused a decline of 50 to 75 cents. Cows and heifers also lost ground in striking contrast with the stability shown a week ago.

Plain light stocker and feeder cattle are selling at bargain rates with many at $4.25 to $4.75 on the Chicago market. Such cattle usually have been money makers when put in condition for the late spring market.

Healthy Undertone in Hog Market.

Hog prices last week dropped to a new low for the calendar year as well as for this cycle. Combined receipts at 11 leading markets during the last two weeks totaled nearly 2,000,000 head, representing the heaviest run ever known with the exception of the corresponding period in 1918, when growers were rushing hogs to market as rapidly as possible in order to dispose of them before the "stabilized price" was removed.

Lambs on Feed.

About 3 per cent, or 170,000 head, more sheep and lambs were on feed for market in the corn belt and western states on December 1 this year than on the same date last year, according to an estimate by the United States department of agriculture. The total number this year is 5,170,000 head, compared with 5,000,000 head last year. The corn belt has 2,838,000 head, compared with 2,624,000 last year and the western states have 2,332,000, against 2,376,000. Indiana and Iowa account for most of the increase in the corn belt. Colorado, Montana and Wyoming show slight increase and Utah has the same number, but Idaho, California and Nevada show decreases.

Receipts of sheep and lambs increased sharply last week and prices declined, especially on heavy lambs and shorn offerings.

Steady Demand for Wool.

A steady demand for wool is reported in seaboard markets. Manufacturers wish to provide for their requirements during the heavyweight season before the market becomes entirely bare, even though the goods market is rather unsatisfactory at present and there was more or less overproduction during the heavyweight season last year.

Wheat Market Stable.

Wheat prices during the last four months have shown a degree of stability unknown for nearly a decade. The rule of market behavior applying in such cases is that the longer the period of narrow fluctuations the larger the movement up or down when a definite trend starts. Whether the next big move will be toward a higher or lower level is the important question. Gradually the evidence on the side of higher prices seems to be gaining weight, although the issue remains more or less cloudy.

Foreign interests are buying wheat sparingly in expectation of ample offerings from Canada and the southern hemisphere.

The rapid disappearance of Canadian wheat is a factor of importance in the future of the market. Canada still has a big surplus, however.

The final estimate of the rye crop was wheat was 786,000,000 bushels. This represents a small increase over the preliminary report and last year's final figure was revised upward to the extent of 5,000,000 bushels. The wheat acreage this fall is estimated at 12.6 per cent less than last year. The condition of the crop is much higher, however, being 88, compared with 79.5 a year ago.

Corn Crop Estimate Increased Slighty.

The corn crop estimate was increased slightly in the December returns to a total of 3,054,000,000 bushels, compared with 2,906,000,000 bushels a year ago. Prices were not affected by the revision, however, and the market seems to be on a fairly strong basis.

Oat prices seem to maintain a little greater strength than other grains, although primary receipts increased moderately last week and the decline in the visible supply was halted temporarily. The final crop estimate was substantially higher than the preliminary returns and 84,000,000 bushels higher than last year.

The final estimate of the rye crop was

(Continued on page sixteen.)

Range of Live Stock Prices for Week Ending December 19

	Chicago.	Spokane.	Portland.	N. Salt Lake.
CATTLE.				
Choice and prime heavy steers (1100 lb. up)	10.85@13.25			
Good heavy steers	9.40@11.60			
Medium heavy steers	7.75@10.25			
Common heavy steers	5.75@ 8.25			
Choice and prime light steers (1100 lb. down)	11.50@13.25			
Good light steers	10.00@11.60	6.50@ 7.25	6.50@ 7.75	7.25@ 7.90
Medium light steers	8.00@10.25	5.50@ 6.60	5.50@ 6.75	5.00@ 7.35
Common light steers	5.00@ 8.25	4.25@ 5.50	4.25@ 5.50	3.00@ 5.25
Common to choice butcher heifers	4.50@11.50	3.50@ 5.25	3.50@ 5.65	3.00@ 5.10
Common to choice butcher cows	3.25@ 7.75	3.00@ 4.75		2.50@ 4.75
Bologna and beef bulls	3.25@ 6.75	3.25@ 4.00	2.75@ 4.00	2.00@ 3.50
Canners and cutters, cows and heifers	2.25@ 3.25	1.50@ 2.25	1.50@ 3.00	1.00@ 2.50
Canner steers	3.25@ 5.25			
Medium to choice light veals	7.75@10.25	8.00@ 9.00	9.00@10.00	5.50@ 7.00
Common to choice heavy veals	7.75@10.00	6.50@ 8.00	3.50@ 9.00	3.75@ 6.50
Common to choice feeders (750 lb. up)	5.25@ 8.00			
Common to choice feeders (750 lb. down)	4.00@ 7.75	4.00@ 5.25	5.00@ 5.50	4.00@ 6.50
Common to choice stocker cows and heifers	2.85@ 5.00			2.25@ 4.00
HOGS.				
Top of market	7.25	7.35	7.65	6.80
Bulk of sales	6.60@ 7.05	6.50@ 7.30		
Heavy (250 lb. up)	6.80@ 7.25	6.25@ 7.25	6.00@ 6.50	5.00@ 6.00
Medium (200-250 lb.)	6.70@ 7.25	7.00@ 7.30	6.50@ 7.10	
Light (150-200 lb.)	6.40@ 7.15	7.00@ 7.35	7.10@ 7.65	6.25@ 6.80
Light lights (130-150 lb.)	6.00@ 6.90	6.50@ 7.00		
Smooth packing sows (250 lb. up)	6.50@ 6.85	5.00@ 6.25	5.00@ 6.50	5.00@ 5.75
Rough packing sows (200 lb. up)	6.20@ 6.65	4.25@ 5.00	4.50@ 5.00	
Medium to choice pigs (130 lb. down)	5.50@ 6.60	6.25@ 6.75	6.50@ 7.10	4.50@ 6.00
Stock pigs		5.00@ 6.25	6.50@ 7.00	
SHEEP AND LAMBS.				
Medium to prime lambs (84 lb. down)	10.50@13.00	9.50@10.50	10.00@11.00	10.00@11.00
Culls and common lambs	8.50@11.00	8.50@ 9.50	7.50@10.00	
Medium to prime yearling wethers	8.00@11.00	6.50@ 7.50	6.00@ 9.00	6.00@ 7.25
Medium to prime wethers	5.50@ 9.50	5.50@ 6.50	5.50@ 8.00	
Common to choice ewes	4.50@ 7.50	3.00@ 5.00	3.50@ 6.50	3.50@ 5.50
Canner and cull ewes	1.50@ 4.50			
Feeder lambs	10.75@12.50			10.00@11.35

LIVESTOCK AND DAIRY

More Economical

To Market Veals at Three Weeks

H. W. A. Tramm, a dairyman of Chehalis, finds that he can market his veals more economically at the age of three weeks than if fed longer, since they require nothing but whole milk during this entire period.

He raises grade Holstein and Guernsey cows, and is therefore able to get veal calves which have good-sized frames and are better able to produce 100 pound veals than would some of the small breeds. The striking feature of Mr. Tramm's method, however, is that he can feed whole milk at a profit, while at the same time he is selling whole milk on the market.

For the first seven days the calf is fed an average of 16 pounds of milk a day, while the remaining 14 days an average of 20 pounds a day is given. This makes a total of 392, or approximately 500 pounds of milk. At $2.40 a hundredweight this would have a cash valuation of $11.35, which is deducting 65 cents, the cost of hauling 500 pounds of milk from his farm to town. If the veal weighs 100 pounds at the end of the feeding period it should bring $12, at 12 cents per pound.

While the above estimate shows only a profit of 65 cents, Mr. Tramm explained that the profit came in being able to feed a part of the first nine milkings to the calf. He pointed out that where the calf was killed at birth in an effort to save all the whole milk for sale, that these first nine milkings were a total loss. Mr. Tramm said that he had tried feeding calves a longer period, and working them onto skim milk as soon as they were able to make the change, but felt that the gains were not rapid enough to warrant so much expenditure of labor and going to the trouble of separating milk for this purpose. He also states that veal fed in the above manner made a better quality of meat than when fed a longer period on a cheaper ration.

Orderly Marke ing by "Zones"

George A. Pierson, president of the Union stockyards, has worked out a plan for the orderly marketing of live stock which he believes is entirely feasible. Mr. Pierson's method consists in having stock trains arrive from certain localities on certain days of the week and having the producers of those localities agree that they will not ship on other days. This requires the cooperation of shippers, railroads and stockyards. Mr. Pierson came to Portland from St. Paul, where he was long employed at the stockyards. He says that market used this system as early as 1912 and had it well lined up in three or four years. The Portland yards already have this system working with the Union Pacific system for two days in the week.

The first train reaches Portland for the Monday market. The train starts at Huntington about 10 a. m. on Saturday. This train, and the following sections as may be needed, picks up all live stock from eastern Oregon main line and branches. It gets into Portland on Sunday and is unloaded and all ready for the Monday market. It is the first train in for that market. At the same time the S., P. & S. has a train from the Bend branch. It also arrives about Sunday noon and is ready for the Monday market. The other Union Pacific train leaves Nampa, Idaho, about 8 a. m. Tuesday, gets in about noon Wednesday, feeds and rests over night and is ready for the Thursday market.

Mr. Pierson has a tentative similar schedule of trains for the entire week and is taking each one up with the different roads as rapidly as possible. The proposed weekly schedule is as follows, the day named, of course, being the one of arrival:

Monday—Huntington train, O.-W. R. & N. Co., and Bend train, S., P. & S., as outlined above—the first one.

Tuesday—Southern Pacific and Oregon electric, for western Oregon. Train to leave Ashland Sunday morning.

Wednesday—From Spokane, either or both Union Pacific or S., P. & S., for any stock from Montana or northern Idaho and eastern Washington that may wish to come to Portland. It gives the shipper time to try the Spokane market on Monday, before deciding to come. A through bill of lading, with the usual privilege of stopping, would obviate any extra freight rate.

Thursday—The Idaho train already arranged, as outlined above.

Friday—Various short-haul railroads and trucks. Because these shipments will be small Mr. Pierson wants them to avoid the heavy days.

Saturday—No schedule; cleanup day.

Mr. Pierson reports that railroads are responsive as far as he has taken it up with them and that in localities the system is in vogue it has greatly pleased the shipping.

At the beginning of the federal control of railroads during the war the government officials, together with the railroads and live stock exchanges, worked out a similar system called the "zoning plan."

Dehorning Calves

"The best way I have ever found to dehorn an animal is to do it before it has any horns to remove," remarked Harold Hansen of Enumclaw. "If taken when a very young calf, not older than three weeks, the knobs can be treated in such a way that no growth will take place.

"First clip the hair around the knobs, and apply either caustic or use a prepared horn remover. It is also a good plan to use a little vaseline around the knob, which prevents the caustic from running down onto the skin where it is apt to make a bad sore. Some cases have been known where calves thus treated have gotten out into the rain and the caustic has run down into the eyes, thus causing serious trouble and even blindness.

"If the calves are let go until after the age of three weeks, the dehorning should not be done until the animal is past a year old."

New Test Barn

A new test barn is being erected at the Western State hospital at Fort Steilacoom, which will accommodate 14 cows, a feed room, grain compartment and an office for the herdsman. The building measures 40x108 feet, has concrete floors, tile sides, high windows all around which will be screened in. The roof is made from 2x6s laid lengthwise to the building, and shingles will be put on top.

This structure will accommodate the cows that can not be handled conveniently in the main milking barn. The entire arrangement is built both for the convenience of the cattle and the attendants. All of the work is being done by the men who are at the hospital, and only two carpenters are employed to oversee the process of building. The barn will be ready for use early in December.

ANOTHER WOODEN HOOP SILO.

W. H. Chapman of Durvall has finished a 10x36-foot wooden hoop silo. This makes the third new silo for King county dairymen during the month of November. A. E. Calkitt, near Issaquah, built an 8x30-foot silo, while a neighbor of Mr. Chapman's put up another one. County Agent W. W. Henry assisted in the building and planning.

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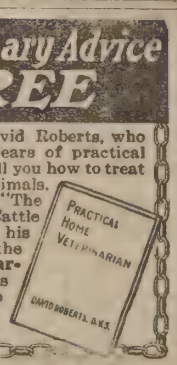

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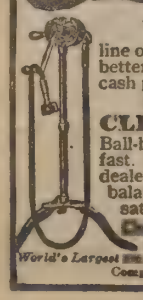

Canada's 1923 Crops Beat All Records

SHARE IN CANADA'S OPPORTUNITIES

In 1923 the wheat crop of Canada exceeded the 1922 crop by almost 100,000,000 bushels. In Alberta, the average yield was 26.5 bushels per acre and there were many individual cases where yields of 50, 60, 75 and 80 bushels were returned. Other crops showed a corresponding increase over previous years with equally high yields. These enormous yields on moderate priced land even at average prices for farm products have placed many farmers on the road to success.

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John Peters, Meservey, Iowa says: "One of my milch cows was giving about ten quarts to a milking, when she suddenly fell off to less than half that amount. I gave her the Kow-Kare treatment for six days and it brought her back to her full flow, and she is now better than ever. I gave some of the medicine to my other cows and every one of them improved. Kow-Kare is just what cows need. I shall tell my neighbors what a fine cow medicine this is."

G. P. Lanterman, Dexter, N. H., writes us; "I have used Kow-Kare for three or four years and recommend it to all having cows. With this alone I have cured all ailments that cows are subject to, and as a milk producer it has no equal."

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As a general conditioner and aid to greater milk yield the usual dose is one tablespoonful twice a day, one week in each month—at a cost of one cent a day per cow. Our free book, "The Home Cow Doctor," tells how to add to your milk income through the aid of Kow-Kare.

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POULTRY AND RABBITS

To Cull Pullets

"It is a more difficult matter to cull pullets than the laying hens and it is often a difficult matter to judge them accurately," according to W. D. Buchanan, poultry specialist of the state college extension service.

"The weight of a pullet should be about three pounds at five months old. If the bird is free from lice and mites and weighs less than two pounds she should be rejected. Leghorn pullets should be yellow legged and yellow skinned, the yellower the better.

"A pullet with dull eyes, long hooked or crow beak and poorly developed comb and wattles is likely to be a poor layer. If the pullet stands knock-kneed, with a hump in its back, or loose ruffled feathers it is usually lacking in vigor. This test, however, will not apply when the birds are molting.

"Solid well-meated bodies are the signs of good layers. The breast bone must be well covered with flesh. The bird's body must feel plump to the hand. If the muscles are loose and breast thin the pullet can not long stand the strain of egg production.

The good laying pullet must have capacity. A pullet with very short back or keel bone or one with a very narrow rounding back, or one that is greatly lacking in depth of body can not deliver the goods. The depth of abdomen is the almost sure sign of the quality of the layer. The bird with the good full crop is likely to be a good producer."

Hatch Own Eggs

"It is not always possible for the small poultry raiser to hatch his own eggs, but I believe that the commercial egg producer should keep a few breeders, even if there is a greater cost and more expense involved," remarked H. C. Quest of Enumclaw, one of the partners in the Questoy Poultry Yards. "The accredited hatcheries will be a great help to the small flock owner because he can then get his chicks in his own district or he may even sell some of the eggs from his own breeders to be hatched.

"We are only just getting started in the breeding game and have so far been spending all of our time with the production of commercial eggs. We have selected out 700 breeders that are from the Hollywood and Tancred strains, and are keeping the lights off their pens this fall. It does not pay to force them, even at the price of eggs, and we expect to get some quality chicks.

Mr. Quest explained how he expected to keep the yards of the brooder houses free from diseases by making the houses only large enough for 600 chicks and moving them to a clean place the following year. In this way there should be no trouble from losses, as where the same pen is used for two or more years without changing the soil. For the larger birds, however, the soil in the pens will be cultivated each fall and seeded to grain or some kind of a green crop and in this way kept in a sanitary condition for use during the summer months.

The buildings on the Quest farm are all the Shoup type houses and, in fact, all plans followed in feeding and care are taken from the directions given out at the experiment station at Puyallup. The laying house was originally built for trapnests, but the traps have been installed only in the one house where the pullets are housed for their first year and then selected out for the breeding pens. More of the traps may be put in during the next year, provided the flock is entered for the Accredited Trapnest Flock association.

"We feel that we have a particularly good district for the raising of poultry," said Mr. Quest. We are nearer to the hills and get slightly colder weather than do some of the districts down in the valley, but in one way it is an advantage, since we get enough snow to cover the kale and thus protect it from heavy freezing weather. We fed kale up until March last year, when most of the crops in other sections were killed down by frosts. It grows well here and we have to have it to get the eggs.

"There is another advantage in getting out here away from the main poultry districts. We are in a dairy community, where we can get buttermilk for a more reasonable price than in places where it has to be shipped in. We have to go to the creamery to get it, but we can get all we want and it is fresh. As for being farther away from the market, we ship to the association and get practically all of the feeds from them and both can be hauled on paved roads with the maximum expense."

Poultry Problems

By R. T. PARKHURST.

Will you please tell me what is the trouble and a remedy for my pullets? They seem to be doing just fine, look well and lay well, but I find one once in a while with something wrong with its eye. It seems that just one side of the head is swollen and the eye swollen shut. The eye seems to have foam and water in it. MRS. R. C.

The indications are that your birds are infested with contagious roup. I suggest that the worst cases be isolated or killed.

Place in the drinking water potassium permanganate sufficient to make it a wine color. Dip the heads of the sick birds once a day or oftener in a solution made by placing 7.3 grain mercury bichloride tablet in a pint of water. This solution is corrosive and poisonous and should not be used in a metal container.

The housing conditions should be so arranged that there is no draft in the house. At least three to three and one-half square feet of floor space should be allowed per bird. There should be sufficient circulation of air to take out all the moisture and impure gases from the house. It is much easier and more satisfactory to prevent contagious roup than it is to try to cure it.

I desire to know if it is profitable to run enough turkey hens in one band to require more than one turkey tom. How many hens will one tom serve and what age should tom be to get best results? MRS. S. P.

The number of hens to mate with one tom varies considerably, depending to quite an extent upon the individuality of the birds, the time of year and the opinion of the breeder. I would, however, suggest from 10 to 15 for satisfactory results.

The proper age of the tom is also a much-discussed question and birds of almost all ages are used. In order to get the best results I would suggest that you mate young or yearling toms to 2-year-old hens. It is often necessary to run a large number of turkey hens in one band and more than one turkey tom would be required under these conditions. More satisfactory results are usually obtained when small enough breeding pens are used that only one turkey tom is required. In large bands there is always the danger of turkey toms fighting.

Can you please tell me what is wrong with my chickens? They sneeze or cough every few minutes. There is no discharge from mouth or nose. Some look quite healthy, while others are droopy and have dark combs. They eat well. Only one was ailing three months ago and it died in a day or two. Now a dozen or more sneeze. I opened one dead bird and its meat and insides were a bluish color. Is there any cure? I have lost three birds so far. I have only 50 and they are on open range. L. E. M.

The indications are diphtheretic roup. I suggest that you confine the birds and use disinfectant in the drinking water of mercury bichloride to the amount of 7.3 stick on the small growths in the throats, grain tablet to a gallon of drinking water. This solution should not be used in a metal container and not over 10 days at a time.

Cases that are just starting can often be stopped by using caustic or styptic tongues or around the windpipe and mouth. Bad cases should be disposed of by killing.

All of the birds should have their throats swabbed out with iodine. The worst cases should be isolated immediately.

Plan Green Feed Crop

The poultry industry loses much every year for lack of adequate green feeding stuffs. This is true to great degree in the drier sections than in the territory of more moisture and more equable climate, but is true to a marked degree even in the latter. Now, and not next summer, is the time to plan for the green feed crop.

Probably no other plant is as well qualified for green poultry feed as the common so-called cow kale. On soil and in climate suited to it, it grows rank and will stand a great deal of adverse weather conditions. It may be seeded either in the fall or spring, preferably the latter. One may plant it in the field where it is to stand, later thinning it out, or may seed it in small seed beds for later transplanting. It would stand in the rows about 18 inches apart, with the rows three feet or 10 inches apart. Where hand-cultivation is to be practiced and where the soil is reasonably fertile, it may be planted closer. Some poultrymen in favorable sections allow a portion of their kale crop to go to seed the following spring, not only securing seed either for market or home use, but also providing feed during the summer for their flock.

Sore Ears in Rabbits

By E. E. WEGNER, W. S. C.

Would you please print in the paper what is the cause of rabbits having sore ears and what to do for them. E. M. S.
Goldendale, Wash.

This is probably what we commonly call canker of the ear. It is caused by a small mite burrowing into the skin. The scab which usually forms there should be softened with a 2 per cent solution of lysol, using a small brush or stiff feather. When soft it should be scooped out with a hairpin or other suitable object and burned. The inside of the ear should be freely dusted with flowers of sulphur. Repeat this treatment every four or five days. If the animal continues to hold its head on one side it probably means that the ear drum has been pierced. In this case the disease will probably be fatal and the animal had better be destroyed. This is, no doubt, the condition that you have present.

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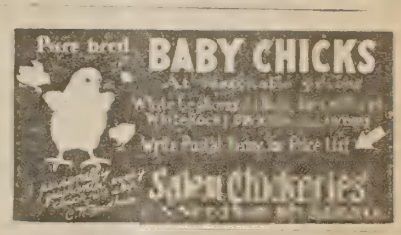

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Swedish Inventor Has New Oil Light

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Edison enabled us to enjoy the benefits of electric light, Count Welsbach's mantle made it possible to have the incandescent gas light, but it remained for a Swedish engineer named Johnson, now living in Chicago, to devise a lamp that would burn ordinary, every day kerosene oil and produce a light said by the many scientists who have seen it to be whiter than electric. The lamp is as simple to operate as the old style oil lamp, burns without odor, smoke or noise and is proving a sensation where oil light is needed.

Mr. Johnson offers to send a lamp on ten days' free trial and will even give one to the first user in each locality who will help introduce it. A letter addressed to W. R. Johnson, 31 N. Fifth St., Portland, Ore., will bring full particulars about this wonderful new lamp. He has an interesting agency to offer, too.—Adv.

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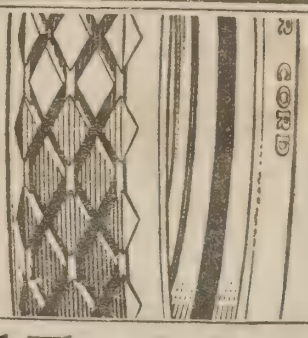

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GOODYE

ORCHARD AND GARDEN

Bordeaux Spray

Bordeaux mixture is used to control fungous diseases of trees, shrubs, vegetables and so on. While it has been to considerable extent supplanted for this purpose by lime-sulphur, it is still the most efficient spray known for such diseases as apple tree anthracnose, peach leaf curl, peach blight and the like, in the opinion of H. P. Barss, plant pathologist at the Oregon experiment station. In an article published in The Oregon Grower, Professor Barss discussed the Bordeaux spray in part as follows:

Bordeaux mixture is a combination of copper sulphate (bluestone) and lime. For winter use it is generally made up in what is known as the 6-6-50 formula: six pounds bluestone (copper sulphate), six pounds stone lime (best grade), 50 gallons water.

For trees in leaf it is often made up in the 4-4-50 formula: four pounds bluestone (copper sulphate), four pounds stone lime (best grade), 50 gallons water.

Other proportions are also frequently used.

It is of great importance that Bordeaux mixture be properly prepared. It should be made up fresh each time it is to be used. Stock solutions of bluestone alone or of lime may be kept almost indefinitely, but the mixed lime and bluestone solutions rapidly deteriorate on standing unless a special preservative is added. The barrels or tanks in which Bordeaux mixture is made up and the container for the stock solution of copper sulphate should always be of wood, since the copper will attack and destroy iron. On this account it is well to have wooden hoops on the barrels. The stone lime used should be of the best quality.

If large quantities are used, it is best to prepare stock solutions which contain, for instance, one pound of bluestone or one pound of lime for each gallon of water. For example, take a 50-gallon barrel of water and suspend near the top a coarse sack containing 50 pounds of bluestone. After a few hours it will have dissolved. Take also 50 pounds of quicklime and slake carefully with constant stirring, and the addition of water as needed to prevent it from becoming dry and "burning." When thoroughly slaked add water to make up to 50 gallons. These stock solutions then contain each one pound of the original material to one gallon of water. If kept for a long time the stock solutions may lose volume by evaporation. This should be made up with water before using.

Some of our spray authorities claim that excellent Bordeaux can be made by using fresh, hydrated lime in place of quicklime (stone lime). Use only fresh hydrated lime, since in standing for several months it may become worthless because of carbonation from the action of the air. Use one-third more by weight of the hydrated lime than would be required of quicklime and simply mix with the required amount of water, since it is already slaked.

The Bordeaux mixture may be made in a satisfactory manner by several different methods, but the two concentrated solutions should never on any account be mixed together without dilution. The following methods will be found to give good results, using the "one pound to the gallon" stock solutions mentioned above. The quantities given here will make 50 gallons of the common 4-4-50 formula. If a stronger or weaker solution is desired, the quantities of the stock solutions should be increased or decreased to correspond. Larger or smaller amounts may be made up, of course, using the same proportions.

1. Take four gallons of the stock copper-sulphate solution and add 21 gallons of water.

2. Stir up the stock solution of milk of lime thoroughly, take four gallons of this and add 21 gallons of water.

3. Pour off the two together slowly through strainer into tank or barrel, stirring thoroughly or pour one into the other, stirring thoroughly.

It is often convenient to prepare the two solutions on an elevated platform and to run them simultaneously from the dilution tanks directly into the spray tank.

Where spray tanks are provided with an efficient agitator excellent Bordeaux may be made by proceeding as follows:

1. Fill spray tank about full of water and add as much stock solution of bluestone as will be required for the tankful of spray.

2. Add stock milk of lime as [illegible] for the tankful of spray, [illegible] separate barrel or other container and water until fairly thin.

3. Strain the dilute milk of lime gradually through a strainer into the dilute bluestone solution in the tank while the agitator is running full speed.

4. After all the required lime is added fill the tank up to the top with water and begin spraying.

Sometimes it is not possible to use up all of a tank of Bordeaux at once after it is made. The left-over Bordeaux may then be prevented from spoiling by using common white granulated sugar, which, in small quantities, acts as a preservative and stops the rapid deterioration which usually takes place within a few hours after Bordeaux is freshly made.

Gooseberry Care

By O. M. MORRIS, Department of Horticulture, State College of Washington.

Would you kindly advise me how to take care of gooseberries. I am just starting out with 1100 new two-year-olds. What kind of spray and when to spray is what I would like to know, also what fertilizer to use.
Kent, Wash. H. H. S.

The gooseberry grows luxuriantly on almost any type of soil of moderate fertility with good water supply existing through the growing season. In your district if the plants do not grow reasonably well it is probable that you would receive some beneficial result of application of barnyard manure. That is the best fertilizer you can use in your district. If this is not available then you could probably use about 150 pounds of nitrate of soda and 400 to 600 pounds of superphosphate per acre with good results. Careful, thorough cultivation to avoid the results of any drought of the summer and keep down weeds should give you splendid results.

The powdery mildew is the most common fungi disease attacking the gooseberry. This can ordinarily be held in check by spraying with lime sulphate solution. The first application should be made as soon as the leaf cluster buds have begun to open. The leaves may be from one-fourth to one-half inch long, but spraying should be done before any leaves are open. The second spraying may be two weeks later and will ordinarily complete the work for the season. The efficiency of these sprays depends very largely upon the thoroughness with which the work is done. All parts of this plant must be thoroughly reached and covered with the spray. Additional sprayings are usually not profitable.

Thorough pruning out of badly infested twigs will assist greatly in the control of this and similar diseases.

Organize and Standardize

(Continued from page three.)

plan, which was proposed by Secretary William Garfitt of the Western Jobbers of Chicago had been favorably considered at a big meeting of fruit growers in Yakima some time ago and had attracted the attention also of Wenatchee, Hood River and Walla Walla. A committee had been appointed in each of these districts, had attempted to sound local feeling on the subject, and met in Yakima on Monday that the horticultural association assembled to discuss it and if possible make some recommendation regarding it to the state body. At this meeting O. A. Fechter, president of the Yakima Valley bank, brought discussion of the plan to a head with the statement that he could see no value in advertising until selling methods are improved. "First we should discuss our selling and distributing methods," he asserted. "If we can improve them, I think there will be no trouble in raising money for advertising." He moved that it be the sense of the meeting that the Garfitt plan is practicable and advantageous to the fruit growers of the northwest, but that to apply it a limited organization is necessary; that such an organization is necessary not only for advertising, but for stabilizing prices so as to make any advertising plain effective. In view of the fact that marketing would be thoroughly discussed at the horticultural association meeting, a committee which later became the marketing committee of the association was appointed to report on the feasibility of limited organization, and on its report the association's action was based, as outlined above. The Garfitt plan, which by some has been termed merely an attempt by the jobbers to throw dust in the eyes of the growers, was thereby classified as an issue subordinate to the general movement toward better coordination.

A Shining Example.

Mr. Coffman's address at the annual banquet was a banker's story—and he knows it from the very beginning—of the "tribulations, trials, growth and success" of the Lewis-Pacific Dairymen's association, the Lewis county "co-op" on the foundation of which was built the United Dairymen's association, and which is pointed to the state and country over as one of the most successful existing agencies for the cooperative marketing of farm products. It was a gripping story of the transformation of an enterprise which started out with a destructive program—the putting out of business of the Chehalis plant of the Carnation Milk Products company—into one with the constructive aim of doubling the number of dairy cows in Lewis county and providing a satisfactory market for their product. An enterprise that already has built around it one of the chief dairy centers of western Washington, where 15 years ago a purebred animal was hardly known, but where today there are 150 farmers interested in pure breeding, and three-fourths of their herds are purebred or high grade. "We never did anything in Lewis county that did more to raise the standard of citizenship," asserted the banker. "J. A. Scollard (the president) came out of it one of the best informed men, most skillful operators, in the entire state, and the men who stood back of him became men big in stability, in self-esteem—tolerant business men, meeting responsibility as it appears with the forethought and foresight of men of affairs. When American citizens take hold of a proposition like that, they've got the problem solved by the very fact of doing so, and that's just what you fruitgrowers must do. You have this splendid valley, this favorable climate, these interested railroads. I am not dreaming when I say that we are on the verge of a great inflow of capital, of population in this state, and this is no time to stop. Do this thing yourselves. Come in to this January meeting, say that you are ready to act, and in another year you will have forgotten that the discouragements under which you now labor ever existed."

Other speakers were three past presidents of the organization, J. L. Dumas, H. M. Gilbert and F. A. Wiggins, and the newly-elected president, Earl Barnhill of Wenatchee. Entertainment was furnished by the Rotary quartet and by Sam Kiefer, who gave a humorous talk as "agriculturist of the Yakima Valley Transportation company."

A list of new officers was given in a previous issue of this paper.

Adapt Variety to Climate

When getting a new variety of fruit started in any district, it is imperative that it be well suited to the conditions before it is planted in large numbers. This point is brought out in the case of grapes in the Yakima valley. William Lee Jr. of Yakima has tried out the Worden variety, which he believes is better suited to the general conditions than is the Concord.

"Grapes are wanted in mixed cars of fruit," said Mr. Lee, "but the Concord matures too late to be available. The Worden, however, is earlier and could be used in mixed cars, for which it would be in demand. In the lower valley especially they would mature in time for shipping in that way.

"The Worden is a seedling of the Concord, and is a larger and a better grape. I believe that fewer Concords should be grown since the Worden is a better variety for supplementing our other soft fruit in mixed cars and would thus bring additional money into the valley."

Protection to Fruit

There are certain wild berries which many birds choose almost invariably in preference to cultivated fruits. Planted in the vicinity of the orchard, those varieties which are in fruit at the same time as the orchard species will protect the yield of the latter. Among such wild berry-bearing plants are: Elderberry, eaten by 67 kinds of birds: raspberries and blackberries, eaten by 60 or more bird species; mulberry, serviceberry, dogwood fruits, nonpoisonous varieties of sumach, wild cherries and blueberries, all eaten by more than 30 birds. Red cedar and golden currant are also eaten. The mountain ash, in addition to its other virtues as a lawn tree, affords food for the birds. By offering them such alternatives to our cultivated fruit we enlist the willing labor of the birds very cheaply in our heavy task of keeping down the orchard pests.

Keeping Down Insect Pes s

Fruit growers in the fruit districts of the state are sparing neither time nor effort in keeping down the insect pests that lower the quality of apples. Harry Jones of the Wapato district, near Yakima, is doing a thorough cleanup job in his orchard. Scrapers made from mower sickle sections are used to scrape off the loose bark on the trees and butcher knives are used for cleaning out the crotches.

After the tree has been gone over with the scraper he follows up with a steel brush. This gets into the cracks and makes short work of any codling moth larvae which the scraper may not have dislodged.

To guard against mice injury to the trees, he cleans up for several feet around each tree.

LATE PLUMS MAY NOT RIPEN.

If you plant a variety of plum that is late in ripening you will get a flat and flavorless fruit in some sections of the state. Except in gravelly soil and under conditions otherwise favorable to early maturing, the Green Gage plum is a variety too late in ripening for the Spokane region, and the same may be said of several varieties.

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Wheat Will be King

(Continued from page three.)

ing the price of wheat has almost completely stopped selling. Very little wheat is being sold. Farmers are hoping that congress, or the president, or somebody or something will do something to raise the price of wheat and are holding onto a goodly share of their crop. They sold enough to pay harvesting expenses and other pressing needs and are hoping for higher prices for the remainder. It is estimated that 60 per cent is still in the hands of the growers. That is one reason why business is not as good as usual at this time of year. Farmers had fondly hoped for not less than $1 per bushel for this season's wheat crop. The difference between 85 cents and $1 is 15 cents. That isn't much on one bushel of wheat, but when multiplied by 13,000,000 bushels it means $1,950,000, and that much added to the income from Whitman county wheat would have meant much to the growers and to the business interests.

Methods Are Changing.

Whitman county is experiencing a change that may prove beneficial. It is generally conceded that the old methods of raising wheat, summerfallowing one-third or one-half of the land every year, can no longer be made profitable and changes are inevitable. But those changes come about slowly and gradually. It is while these changes are being made that relief is needed and needed badly. Diversified farming will help to solve the problem, but that comes slowly. It takes time to get cows and build up a dairy herd. It takes time to get poultry and build up a profitable flock. It takes time to cut the big wheat farms into small, diversified farms and it takes time to get these farms occupied by men who will make a success of diversified farming. And then how about profitably marketing these diversified crops?

Whitman county, a county rich in agricultural wealth, is greatly deficient in dairy cows. A few farmers have gone in for dairying. I was surprised when shown a list of big wheat farmers whose sons are milking cows. There are a number of them raising from 640 to 2000 acres of wheat and milking from six to 18 cows each and paying their running expenses with cream checks. A Colfax merchant told me of the wife of an extensive wheat farmer who is a regular customer at his store and has bought some desirable things for her house in addition to the general store bills, and paid for all of them with cream checks.

Of course, all Whitman county farmers can not become dairymen, nor can all the wheat farms be converted into dairy ranches, but a large per cent of them can add some cows and some pigs and some chickens and some alfalfa and some corn to their wheat farms and make all of these add to the net profits of the farm.

A Pioneer Creamery.

Colfax has the oldest creamery in Whitman county. No one connected with it knows just how old it is. But I remember when it was running at Elberton, 28 years ago. It was later moved to Colfax and has been running there since 1896. It is called the Colfax Jersey Creamery. It was started by E. H. Hinchliff (deceased many years ago) and C. N. Hinchliff, now in Seattle. It is still owned by the Hinchliff estate. C. B. Bucher has been manager of it for 18 years and it was an old creamery when he took charge. There are 264 customers who are delivering milk to this creamery. Some of them have been delivering milk to it since 1897. They have found it profitable for 26 years. Some started recently. Among the recent converts are A. L. Crampton, one of the big wheat farmers of Whitman county, who is milking 14 cows; Ed Rinehart, another pioneer wheat farmer, and several sons of Henry Hickman, one of the wheat kings of the county. Here is a partial list of some of the oldest patrons of this dairy: P. R. Lair, W. J. McVickers, W. Van Gordon, A. Crow, W. W. Hubbard, G. M. Aldergott, William Alexander, P. R. Aschliman, J. H. Kirkman Adrian Hilty, J. V. Faires, J. G. Hoffman, J. W. James, U. Cronk, William Guske, Louie Hofer, I. B. Harris Jr. (his father, I. B. Harris Sr., began delivering milk to this creamery 26 years ago) and John K. Shireman. These names were picked from the list of 264 on the wall of the creamery and probably many other old timers who have been delivering milk for from 10 to 25 years were overlooked. Some of these men are getting as high as $150 a month. Many are getting more than $100 per month, and that comes in handy at seasons when cash is hard to get. Mr. Bucher told me of some of these men who are making payments on land with the cream checks they receive.

The "Milk House."

I also visited the "Milk House" at Pullman. This is a creamery started two years ago by three young men, Roberts, Carson & Austell. They had taken a course in creamery and dairy practice and they thought they saw an opening for a creamery at Pullman. They thought right, as subsequent events have shown. They opened their creamery two years ago and now have 419 customers who are supplying the creamery with milk. About half of these are local, live near Pullman and deliver the milk to the creamery by truck or team. The other half live on the Genesee branch of the Northern Pacific railroad, as far south as Genesee, Idaho, and ship the milk in by express. A few haul it from their farms south of Pullman. The creamery has paid as high as $7500 a month for milk and cream, for it uses whole milk as well as butterfat. One of the men who is supplying milk and cream to this creamery has drawn as high as $700 a month. This is at the rate of $8400 per year. Some of these men have been dairying for 20 years. When there was no creamery at Pullman they shipped their milk or cream to Spokane or other points. Here are the names of a few of the men who are selling milk and cream to the "Milk House":

C. H. Barclay, who has a herd of pure-bred Holstein cows and is taking dairying seriously (he is the one who got as high as $700 a month for the product of his dairy); J. D. Carson, "Bob" Germain, L. G. Thayer, H. H. Curtis and W. C. Glaspey. These are just a few of the oldest dairymen who live near Pullman and have been making the dairy business pay for many years.

Brick Burford, secretary of the Whitman County Farm bureau, is working with banking and other interests to bring a lot of good dairy cows into the county. He is being assisted by W. H. Tally, state secretary of the farm bureau. Both are graduates of Washington State college, at Pullman and Mr. Tally is a native of Whitman county, having been born on a farm near Oakesdale.

Fall wheat conditions in Whitman county are good. Many pioneer farmers say they never saw a better prospect at this time of year. There appears to be about the average acreage of fall sown wheat and, unless there is a big reduction in spring planting, the acreage in 1924 is not going to be much below that of this year. It seems a difficult thing for a Palouse farmer to reduce his wheat acreage. Wheat has been "king" for so many years he hesitates to dethrone this crop.

Wheat Is King.

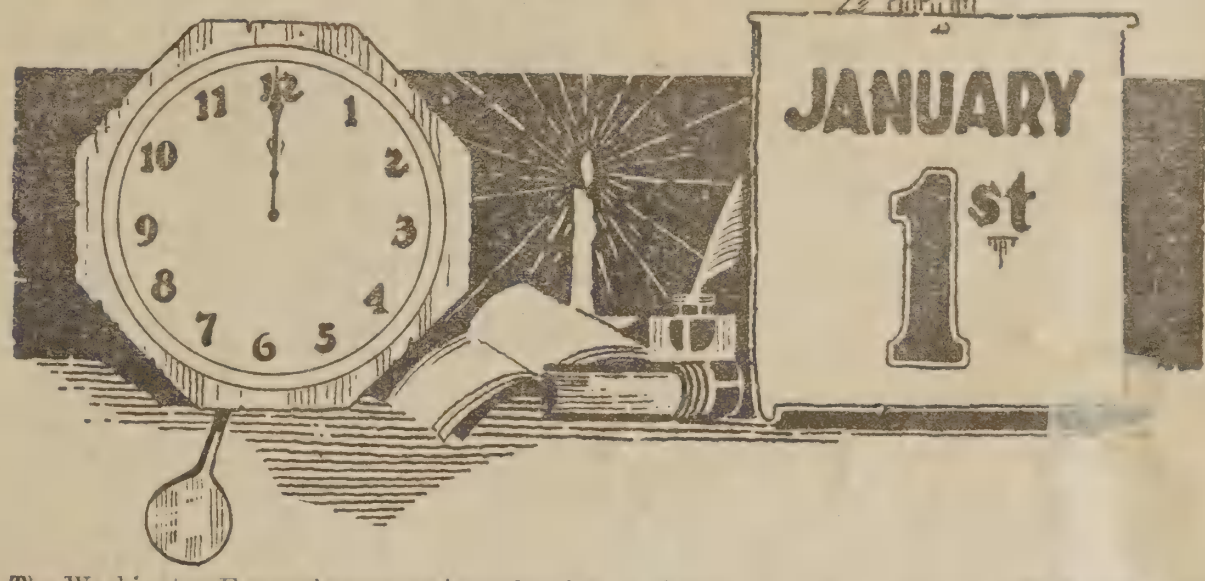
I was told an amusing story by a business man of Moscow, just across the Idaho state line two miles from Whitman county, where conditions are similar to Whitman county, and it illustrates the "ruling passion" of the average Palouse farmer. This man said:

"We had a wonderful crop of peas in Latah county and in eastern Whitman county this year. The crop was big, the yield being almost equal in bushels to the yield of wheat, and peas sold for as high as 4 cents a pound ($2.40 per bushel) while wheat was worth about 85 cents, or less than 1 1-2 cents a pound. Rain threatened and the Palouse farmers worked with great diligence, early and late, to save their wheat, worth less than 1 1-2 cents a pound, and let the peas, worth 4 cents a pound, remain in the fields. They can not get away from the idea that wheat is the most important thing in the world."

Low prices for Whitman county's "king" crop in 1923 have been a hard blow, but things are not nearly as bad as some pessimists paint them. Nor, on the other hand, are they as bright as they are painted by some optimists. Conditions are by no means as good as they ought to be in a county capable of producing (and that does produce and has produced) 13,000,000 bushels of wheat in a single season. But Whitman is still, and always will be, one of the greatest agricultural counties in the west and she will again see the return of the prosperity that has made her great.

A GOOD RESOLVE:

BOOST COOPERATION IN 1924.



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However, in looking forward to the great amount of subscription business which must be attended to in 1924, we are reminded that "to stand still is to go backward." A field has to be persistently cultivated or it will grow up to weeds. We must keep the pump handle going up and down or water will cease flowing from the well.

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American Farm Bureau Federation Policies

By GILBERT GUSLER

The fifth annual meeting of the American Farm Bureau federation held at Chicago, December 10 to 12, closed with O. E. Bradfute again president, the election of an executive committee composed largely of members of the conservative group, and definite approval given to the policy of the American Farm Bureau to give cooperative marketing a less prominent place in its program of work for 1924 than it has held during 1923. It ended also with the problem of compromise, of harmony on some common basis with the so-called radical group entirely unsolved.

Cooperative Marketing.

For a year there has been a decided difference in opinion in the executive committee as to the line of work to be carried on by the farm bureau. The lines have been well defined. One group believed that the executive officials of the organization, particularly Secretary J. W. Coverdale, were not carrying out the mandate of the previous annual meeting with respect to cooperative marketing. This group believed that the promotion of cooperative marketing should be the major activity and that ample funds should be placed at the disposal of the marketing department to carry on its work.

The other group, while not minimizing cooperative marketing, backed up the officials in insisting that the farm bureau should follow a balanced program, laying equal emphasis upon transportation, marketing, legislation and education.

Secretary Coverdale's Resignation.

The feeling in the executive committee came to a head during its final meeting on the Saturday preceding the annual meeting when the resignation of Secretary Coverdale was accepted. On the same day at a conference on cooperative marketing called by Walton Peteet, in the course of discussion of the year's activities, Mr. Peteet made remarks to the effect that the officials of the American Farm Bureau were unfriendly to cooperative marketing.

That sentiment among the delegates was crystallizing in favor of the administration was apparent in the ovation accorded President Bradfute at the close of his address at the opening of the convention when he made a plea for an end to mud-slinging and said that the dispute over cooperativve marketing was a difference of opinion as to who instead of as to how, as to who should reap the glory and the pecuniary profits.

A set program, which included reports of the various departments and many speeches rather than a discussion by the delegates of the work for the coming year, afforded numerous dramatic moments and oportunities to test the prevalent sentiment among the delegates. One of these came when Secretary Coverdale presented a report from the records of the organization showing that the states in which cooperative marketing had been stressed as the chief activity had not maintained their memberships, at least so far as paying dues to the American Farm Bureau was concerned, as fully as those states in which the balanced program had been followed. Mr. Coverdale also was given a great ovation by the delegates.

Following this report, S. R. Guard, former director of the department of information of the American Farm Bureau federation, whose resignation was accepted several weeks previously by President Bradfute because of Mr. Guard's opposition to Mr. Coverdale, obtained the floor to present his plan for a general service program for cooperatives to be carried out by the farm bureau along such lines as organization, research, publicity, transportation, legislation, etc., these services

E. O. Bradfute.

to be paid for by the cooperatives as a means of financing the farm bureau.

Climax on Final Day.

The climax came on the final day of the session when Mr. Bradfute was reelected president by unanimous vote. E. F. Reed of Minnesota was elected vice president. Members of the executive committee were chosen by sections. Only three of them, two of whom voted against the resignation of Mr. Coverdale, were reelected and a fourth, Mr. Reed, was made vice president.

The committee follows:

Western group—A. C. Hardison, California; Frank Evans, Utah; Charles E. Gibson, Colorado.

Midwestern group—Ralph Snyder, Kansas; S. H. Thompson, Illinois; C. E. Hearst, Iowa.

Eastern group—Frank M. Smith, New York; George M. Putnam, New Hampshire; S. McLean Buckingham, Connecticut.

Southern group—E. P. Cohill, Maryland; W. D. Farris, Texas; and Edward O'Neal, Alabama.

Resolutions.

Following the election the resolutions committee presented its report. It included among other things a resolution recommending that the states and country farm bureaus should establish service relationships with cooperative marketing associations in order to encourage a more definite relationship between the farm bureau organization and the commodity organizations than has existed up to date, any services rendered by the farm bureau to be paid for by the cooperatives.

Another resolution recommended the discontinuance of tax free securities, and reiterated the objection of the farm bureau to a general sales tax and a reduction of income taxes. Cooperative marketing of farm products as offering the most practicable means of stabilizing agriculture on a profitable basis was again indorsed, but no policy or action was outlined. Other resolutions declared opposition to price fixing, favored a truth in fabric bill, adequate appropriations for highway construction, the Henry Ford Muscle Shoals act, the electrification of class A railways, an amendment to the intermediate credit act changing the minimum loan period from six to four months, limiting rediscounts on loans under the federal reserve act to 2 per cent above the basic federal reserve rate, favored a merchant marine without subsidy, adequate tariff on agricultural products, limitation of immigration, urged organization as the major activity of the American Farm Bureau for the coming year, urged the adoption by county and state farm bureau of such methods as are necessary to bring about a full transmission of membership dues regularly each month, and immediate adoption by the American government of a vigorous foreign policy.

Wheat Growers' Committee.

A final resolution presented by the resolutions committee without recommendation indorsed the formation of the National Wheat Growers' advisory committee and pledged earnest cooperation with that committee in its efforts to develop cooperative marketing of wheat. The resolution further indorsed the activities of the cooperative marketing department of the American Farm Bureau in the formation of the committee and instructed that department to work in closest possible harmony with the committee.

This resolution brought to a head the differences of opinion among the delegates. The National Wheat Growers' advisory committee was formed at a meeting called under the auspices of the National Council of Farmers' Cooperative Marketing Associations, which the American Farm Bureau officials are disposed to regard as a rival in the cooperative marketing field.

Mr. Peteet took the floor immediately upon the presentation of the resolution to say:

"If the convention should fail to adopt the resolution by an overwhelming vote, it will destroy the cornerstone of our program of cooperative marketing, since a marketing program which takes no account of wheat is a joke. The movement will go forward anyway," he warned. "The question is whether the farm bureau is to haul down its flag of leadership or continue to have a share in the movement."

Mr. Peteet went on to explain that the attitude of the farm bureau officials all through the spring was not one of support to his efforts to include a grain marketing plan in his cooperative marketing program. As a last resort, he had attended the meeting at which the National Wheat Growers' advisory committee was formed. He had pledged the support of the farm bureau to the committee's plan to organize the states to market wheat cooperatively and was made a member of the committee.

Storm of Opinion.

The resolution brought a storm of opinion from the floor.

S. H. Thompson, president of the Illinois Agricultural association, told how Illinois had supported loyally every movement toward cooperative marketing as well as the farm bureau. Her leaders had committed themselves to a strenuous program of grain marketing and Mr. Thompson felt that the farm bureau should indorse the national committee as a definite attempt to continue aggressively on the cooperative marketing of grain.

The conservative group contended that the farm bureau officials should have been given larger consideration in the calling of the meeting and in the formation of the national committee. Others of the group said that the indorsement had been asked for too late and that had there been any real desire for the counsel of the farm bureau it would have been given a greater opportunity to help formulate the policy of the committee. This group felt, also, that the interests back of the national committee, under the leadership of Aaron Sapiro, were not favorable to the U. S. grain growers fathered by the American Farm Bureau and which has finally begun to function in a small way.

The resolution was finally referred to the new executive committee with power to act. Since this committee is composed mostly of members of the conservative group, this was considered equivalent to pigeon-holing the resolution.

Peteet Resigns.

At the conclusion of the vote Mr. Peteet again took the floor, and, accepting it as a declaration that his cooperative marketing program of the past 10 months had not been in harmony with the desires of the delegates, resigned as director of marketing.

The report of the steering committee as to the program for the American Farm Bureau for 1924, which provided a reduced budget and discontinuance of some of the present activities, was referred to the executive committee with power to act. This report provided for a nominal secretaryship to be combined with the office of director of organization.

Illinois and Indiana were closely associated with the Sapiro-Peteet group all through the fight and it is still uncertain as to how the disagreement will be ironed out by them or whether it will develop into a division in the organization. Ohio and Iowa were leaders throughout in the conservative group.

Later in the week the new executive committee reinstated J. W. Coverdale of Iowa as secretary and treasurer of the federation. The committee gave him the additional office of director of organization formerly held by a separate official.

What is regarded as another blow to the anti-Coverdale forces was delivered when the committee, according to an official statement issued from the offices of the federation, indorsed indirectly the United States Grain Growers' corporation.

A Three-Horse Team

By E. L. POTTER.

Can you tell me how to work three horses satisfactorily on a wagon? J. D. T.

There is only one really satisfactory way to work three horses to a wagon and that is to have made for the wagon a pair of heavy shafts, such as would be used for one horse, only heavier and longer. The three horses are then worked with the middle horse in the shafts. The evener is a standard three-horse evener such as would be used for plowing or cultivating, only heavier. The shafts are supported by a long neck yoke, held up by the breast straps of all three horses. This is the type of hitch that is used by all the big three-horse teams in the cities and I may add that three-horse teams in the heavy trucking districts in the large eastern cities are very common.

Sometimes where it is desired to work a third horse only for a few days as an emergency proposition, he is hooked by attaching the single tree of the extra horse to a piece of wood or iron, extending from the tongue to one side about three feet. In order to give strength to this piece and to prevent side draft it is usually supported by running a rod or light chain from the outside end back to the rear axle of the wagon. This avoids any appreciable amount of side draft and makes a fairly satisfactory arrangement where something cheap and temporary is desired. It has, however, the disadvantage of having the third horse attached direct to the wagon and without any evener to equalize the pull between him and the other two horses. If he is lazy he will probably not pull very much, while if rather free he may pull too much.

Attempts have been made to make three-horse eveners which could be attached to the ordinary wagon in place of the regular two-horse evener and permit two horses to work on one side of the tongue and one horse on the other without side draft. These eveners, however, have all been failures, as they must be, since they are attempting the mechanically impossible. I do not believe there are any of these eveners on the market any more.

Canadian Thistle Control

Canadian thistles can be controlled and possibly completely eradicated by a good stand of alfalfa, according to Joe Ender of Lopez island, San Juan county, who reports the result of one year's trial with alfalfa. "This method, however, applies only to soils where good stands of alfalfa can be secured," said Mr. Ender, "and it would be useless to fight the thistle in this manner if the alfalfa does not get a good foothold upon first being seeded."

Other instances of the control of this weed by the use of alfalfa have been reported to H. J. Lechner, the new county agent, and some of the growers have even found that red clover can be used in the place of alfalfa.

NEED TO COORDINATE.

Manager W. L. Carver of the Kennewick-Richland Fruitgrowers' association thinks that the northwest fruit industry's greatest need is for cooperative associations to coordinate their selling activities, particularly on apples. Why organize more independents when existing cooperatives compete against each other? he asks.

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Are United for Agriculture

Influential Bankers Confer at State College

By LINCOLN R. LOUNSBURY,
Agricultural Extension Editor.

A group of the most influential bankers in the state put on their hats and coats and left their big financial establishments for two days to listen to the problems of the farmers of Washington.

The result—a new organization? "NO!" But a unity of the present organizations and a definite method adopted to use the machinery of any organizations which are willing to cooperate with the farmer. Not to dictate to the wheat grower, the live stock man, the dairyman or any other specialized type of farmer, but to let him work out his own program, and lend a helping hand to cooperate.

After a two-day conference at the State College of Washington, going over the entire program of Washington agriculture as analyzed by the specialists of the extension service, they all agreed that by working together something could be accomplished.

Here is the scheme: All efforts of the American Bankers' association, state bankers' association, state chamber of commerce, state agricultural council, state department of agriculture and the extension service of the state college through a county council. Now that sounds like a new organization, but it is not in the sense that it is already in existence in Thurston county, and all the organizations are working in various counties of the state.

The county agricultural agent in counties where there is one will have the job calling these forces together under the following plan:

The Plan.

The extension service of the state college of Washington will be represented by the county agent, who is already on the ground and who has a very definite knowledge of the problems facing the farmers in his county. The state department of agriculture will be represented by one of their district or county horticultural inspectors. Then a group of farmers will be selected from among themselves to represent their interest, together with the agencies given above. This group will constitute one-half the group, which will be farmers and their representatives, the county agent and the horticultural inspector.

Now for the other half of the group: There will be a representative from each bank in the community or county; a representative from the chamber of commerce or commercial club or both if there are the two organizations. The bankers and business men shall have an equal part on the council, but shall not represent over half. It will work out that if there should be five banks in the county and a commercial club and chamber of commerce, there would be seven representatives from the business interests. Now to make up the balance of the council, there would be the county agent, as an organizer, the horticultural inspector and five farmers.

Suggestions and discussions will be presented from each group and they will be viewed from the standpoint of the best interests of the entire community. With a council of this kind in each county, it will voice the sentiment of the people interested in farming development, from the ground up and not from the top down.

It is the purpose of the action taken by the agricultural interests of the Washington bankers to unite all existing agencies and not make new ones in an honest endeavor to better rural development.

These are the results, backed by the financial interests of the state. I made the statement at the beginning that the group represented the most influential bankers in the state. Let's see who they were and what they represented:

The meeting was called by C. D. Rorer, commissioner of agriculture for the Twelfth federal reserve district. Similar meetings have been held in other states, but this is the first to be conducted in the coast states. There will be a similar one held in Oregon next month.

Those Present.

The extension service of the state college was represented by Dr. S. B. Nelson, director of extension; Dean E. C. Johnson, representing the experiment station and college of agriculture. The state department of agriculture was represented by E. L. French, director. N. B. Coffman and D. O. Lively were present for the State Chamber of Commerce. J. A. Scollard from the agricultural council; R. H. Macartney, president Washington Bankers' association; William Hatch Davis, secretary and general counsel, state association; J. T. Alexander, Chehalis; J. W. Bradley, Spokane; Senator T. J. Wilmer, Rosalia; H. B. Miller, Toppenish; J. N. Scott and F. C. Forrest of Pullman; D. H. Moss, Seattle, member of the American Bankers' association executive council; W. T. Triplett, Spokane, state vice president of the American Bankers' association.

Members of the state bankers' agricultural committee present at the conference included: W. A. Miller, Puyallup; L. N. Plamondon, Woodland; Robert Moody, Everett George Gannon, Pullman; and E. E. Flood, Spokane; Ralph Comegys, Thornton; and W. H. Linklater of the Western Washington Experiment station, Puyallup.

"I am fully convinced that the business interests of this state are soid to agriculture," said Mr. Rorer, commissioner of agriculture for the Twelfth federal reserve district. "This is shown by the fine desire of the business interests to assist the farmer. However, if this assistance is to be successful, it must be worked out from the farmer up and not from the business man down. The farmer knows his problems, and by taking up the problems of the farmer, the banker, the business man all together in united group, there is a chance for success."

Trapping Suggestions

By ISAAC MOTES.

To catch wolves, foxes, wildcats, opossums, skunks and coons in a steel trap take a barrel and knock out both ends. Drive a staple on the inside, about midway from the ends, and tie a live rabbit or chicken by the legs close down to the staple. Be careful to tie it so it will be as comfortable as possible. Then take the barrel out some distance from the house into the field, or wherever you have seen signs of any of these animals, locate it in a smooth place and prop it with rocks or pieces of wood, with the side to which the chicken or rabbit is tied resting on the ground. Then set four good No. 1 1-2 or No. 2 steel traps, two at each end of the barrel, so that an animal can not reach the chicken or rabbit inside without getting caught.

In winter, when timber wolves, coyotes and foxes are hungry, and inclined to prowl around farmhouses this is a good way to catch them, for when the animal in the barrel sees them approaching it begins to flutter or jump and jerk, and in the case of a chicken it will doubtless squall, and this will excite the night prowler, and in its eagerness to seize its prey it will rush up to it regardless of human scent about the place, which it might not do if the chicken or rabbit were not there fluttering or jerking.

It will be best to fasten the chain to a rock or good-sized piece of timber, rather than to a stake, so the animals can drag it away slowly. If fastened to a stake they may gnaw or twist a foot off and escape, but if fastened to something they can drag a little they will delude themselves into believing they are escaping, and will drag the weight until tired out, and you can easily follow them next morning.

Egg Men Meet

Three poultry meetings are being held in eastern Washington this week by leaders of the Farmers' Union Egg and Poultry association. The first is at Grandview Thursday, the second at Yakima Friday and the third at Walla Walla Saturday. J. Q. Adams, president of the Farmers' Union and active in the educational and organization work of the poultry association, is attending all three meetings.

Of special significance is the report that the Washington Cooperative Egg and Poultry association, which operates principally in western Washington, but which has a branch organization at Yakima, is soon to turn back the contracts of the Yakima members. Word from Yakima indicates that the poultrymen are considering signing up with the Farmers' Union organization, which has headquarters at Spokane. There are about 60,000 hens signed up with the present association in the Yakima district. The Grandview and Yakima meetings this week are taking up the probable realignment.

The meeting at Walla Walla is to take steps for the signing up of sufficient hens in that district to warrant the establishment of an assembling station at that point. I. D. Casey of Attalia, near Pasco, visited at the Farmers' Union office in Spokane last week and conferred with officers of the poultry association relative to possible membership. Mr. Casey is one of the largest producers in the state, having several thousand hens. He will participate in the meeting at Walla Walla Saturday.

The association at Spokane reports membership owning over 50,000 hens at the present time.

Coordinate Farm Bureaus

A coordination of the Spokane county and Stevens county farm bureaus has been effected by which the two will work out of the office of the Spokane bureau at Spokane. This is expected to eliminate unnecessary costs of operation and administration and will give to Stevens county members an opportunity to participate in the general marketing and purchasing program being carried on by the Spokane organization. E. A. Barnett will be the Stevens county representative on the joint board of directors. D. H. Ulrich, secretary of the Stevens county bureau, will transfer his headquarters to Spokane, where he will join forces with T. S. Brown, secretary of the Spokane bureau.

The Stevens county organization has elected new officers for the ensuing year, as follows: E. G. Kohlstaedt, Colville, president; Mrs. Ray W. Hall, Orin, vice president; Earl Ogden, Colville; J. H. Newhouse, Ford; J. O. Streeter, Chewelah; P. A. Rasmussen, Bossburg; Mrs. Ray W. Hall, Orin; Abraham Heidegger, Rice; H. T. Skeels, Addy; E. G. Kohlstaedt, Colville; John McDaniel, Addy; Wilbur Dupuis, Orin; E. A. Barnett, Springdale; A. E. Skidmore, Colville; J. H. Zodrow, Chewelah, directors.

Wins Consistently

The picture herewith shows one of John L. Smith's excellent Holstein cows, Hazelwood Leda Heilo Korndyke, on Hazelwood farm near Spokane. She stood first in the 2-year-old class at the 1922 Pacific International and repeated the performance in the 3-year-old class in 1923 at the same show. In a test which she finished a few months ago she made 15,997.5 pounds of milk and 824 pounds of butter, the test being finished when she was only a little

past 2 years old. Judge Moscrip, who placed the ribbons at the Pacific International in 1922, pronounced her one of the best 2-year-olds in America. Mr. Smith is not only proud of her as an individual, but proud of her breeding as well. Her sire was the good show bull, Hazelwood Heilo Ormsby Korndyke, whose dam, Heilo Ormsby DeKol, was second at the National Dairy show and three times made records of over 30 pounds.

The dam of Hazelwood Leda Heilo Korndyke was Hazelwood Leda Ormsby, with a record of 13,443 pounds of milk and over 620 pounds of butter in 305 days. Her granddam on the dam's side was Leda Hengervold Colantha.

Another interesting feature and one which gives this young cow an even more promising future is the fact that she is a sister to Idaho Violet Posch Ormsby, the famous University of Idaho cow that recently produced 26,812 pounds of milk and 1259 pounds of butter in a year.

Grading of Cream

Butter and Cheese Makers' Plan

The Washington Creamery Operators, Butter and Cheese Makers' association held their 16th annual convention at Seattle December 11 and 12. The convention was by far the best that has ever been held by any similar organization in the state and the well-arranged program held the interest of every one throughout the entire session.

Some of the prominent speakers were Professor G. L. McKay of Chicago; Professor Willard Sadler of Vancouver, B. C.; Chris Johnson of Salt Lake City; Governor Louis F. Hart; Dr. L. C. Pelton and Professor E. V. Ellington of Pullman.

Perhaps the most important questions taken up were the matter of grading cream and the question of supplying cans free to the producers. The latter was passed on in the negative by the delegates and will be acted on by a special committee at a later date. The grading problem was received favorably by those attending the convention and plans are being worked out to put the plan in practice.

The nomination committee recommended the reelection of all of the officers that have acted during the last year and the report was unanimously accepted. The officers were W. E. Turner, president; H. E. Turner, vice president; Carlyle Hall, 2d vice president, and L. W. Hanson, secretary-treasurer. All the officers are Seattle men.

GOES TO THE ORIENT.

C. L. Longwell, one of the pioneer fruit buyers of the Wenatchee district, who ships to Alaska and the orient, has gone on a four months' trip, during which time he will visit China, Japan, the Philippines, Java and other East India points, calling upon dealers with whom he has had transactions and arranging for future business in that rapidly increasing field for Wenatchee apples.

ELECTRIC INDUSTRY

Sets Pace for Progress

As new factories are built, as farmers increase their irrigation acreage, as new homes are constructed or as new projects are launched, the electric light and power service is ready for their use.

That's it; the power is ready. It has been developed beforehand. It has pioneered the way and literally set the pace for building, cultivation and home-building.

As rapidly as a city or community can absorb more electric power, the light and power company develops the necessary horsepower for the next progressive move in its territory. ***No industry has ever been turned away from your district through lack of adequate power.***

Money for new power plants, transmission lines and necessary properties are secured at fair rates of interest with comparative ease. All electric companies are glad to sell their stocks and securities to their customers and other fellow citizens. They want just such "partners."

The electric company strives to be more than just "ready." It sets the pace for progress.

NORTHWEST ELECTRIC LIGHT AND POWER ASSOCIATION

F-12

A Clever Game

In last week's issue of THE FARMER appeared an article regarding a new wrinkle in the game of securing subscriptions to farm papers. A small army of clever, smooth-tongued solicitors are traveling over the state avowedly in the holy cause of securing reduction of taxes for the farmer. The truth is, however, that the result of their operation is equal to increasing his taxes by $2, for as soon as they inveigle him into signing a blanket petition to congress asking tax reduction they explain to him that the alleged service they and the eastern farm paper they represent are thus rendering, together with a subscription to the paper, is worth $2.

Get that idea? Assuming that everybody wants taxes lowered, which they surely do, these solicitors flash the big tax reduction petition, get into the good graces of the farmer, and then spring the two-dollar subscription deal. Clever? Yes, but we doubt if many readers of this magazine will fall for the scheme, for our folks know a better way than that to get taxes lowered. The polls is the place to tell congress what we want. Congress is not going to pay any attention to a big, formal, job-lot petition, especially when secured as a subterfuge in a subscription-getting campaign.

It is evident that this petition game has been used elsewhere for recently there appeared in Wallace's Farmer an editorial exposing the method as used in that state. Wallace's Farmer, by the way, is under the editorial and business management of Henry C. Wallace, secretary of agriculture, and John P. Wallace. Here is the way that sturdy farm paper hits the same scheme that is being put into operation in this state by the hord of solicitors above referred to:

"Traveling solicitors of an eastern monthly farm journal seem to be at work in southwestern Iowa. They are going about in overalls, evidently in the hope that they may be taken for real farmers. Their first approach is by the presentation of a petition demanding lower taxes, the prevention of labor strikes, the licensing of commission men, and the reduction of freight rates. There are not many farmers who are not in favor of these four propositions, and consequently the solicitor gets a favorable reception. After signing the petition the farmer is told that a necessary part of the proceeding is the payment by him of the trifling sum of $2, for which he will receive this particular farm journal for 10 years.

"Of course it is the $2 subscription the solicitor is after. All the rest is merely window dressing. The payment of the $2 will not bring any lower taxes, nor lower freight rates, nor anything else except probably the monthly issue of this particular farm journal. It is simply a scheme for capitalizing the farmer's trouble for the benefit of this particular publication and not a very creditable scheme at that. One is inclined to wonder whether a publication that tries to work such a scheme is as sincere as it would like to have its readers believe. A paper that is worth reading ought to sell on its merits and the service it renders."

Should Raise Feeds

"I have always contended that a dairy farmer in western Washington should raise as many of his feeds as possible," said W. G. Grimm of Everett, who owns a Jersey herd near Arlington. "This is a natural grass country, and our timothy and clover mixtures grow well on almost any kind of soil. Alsike is a good clover to add to a hay or pasture mixture, and holds out longer than clover. In fact, we try to keep our meadows four years or more without plowing them up.

"If more of the farmers in western Washington would grow their own hay they would be money ahead in the long run. The pastures are a necessity, of coarse, but we should regulate the amount of land used for pasturing in the first part of the season. There is a disadvantage of a hay crop being hard to cure when we have a wet season, but there is a possibility of pasturing a few weeks on the early grass that comes up, thus throwing the hay crop a few weeks later to miss the rains.

"Some of the farmers in this section are discarding the silo, especially where only small herds are fed. This is perhaps justified where a large crew can not be had for filling the silo. In cases where Canadian thistles are troublesome the use of a silo should not be overlooked, since the thistles can be kept down much better by either cutting for hay if they are not too thick, or putting them into the silo. They will always make good silage even when partly mature, and the cows will eat the silage readily.

"Some of the farmers find that they can raise roots more profitably than silage, but such cases are for the smaller herds as a rule. A man can do his own work and not have to hire any extra labor during harvest as is often necessary when putting up silage. As far as the feeding value of the two crops is concerned there is little if any difference.

"Kale is a fine crop for succulent feed, but it has not been grown as much during the last few years because of the root maggot. It also takes more labor to feed green feed, as it has to be cut fresh every day. The plants do not mature until late summer at the best and by that time there are many other crops that could be used."

Mr. Grimm said that he had used vetch both as a hay crop and for silage, but did not like it as well as clover, since the crop has to be seeded every year and it is sometimes difficult to get an even stand. This difficulty may be partly due to inoculation since this is not always carried out with vetch, but the practice gives better results when carried out.

Want Rates Reduced

Two examiners for the Interstate commerce commission are holding hearings on the Pacific coast to secure evidence on which they will act concerning applications for reduced freight rates on wheat and hay. A hearing was also held in Spokane

The attorneys for the railroads at the Spokane hearing emphasized the claim that any reasonable reduction of the freight rates on wheat or hay would be of such slight advantage to the producers that it was scarcely worth considering. They declared that a 10 per cent reduction would result in practically no benefit in the way of increasing the farmer's prosperity, since his losses under present conditions were largely caused by the general disturbance of world affairs and a correspondingly poor market. Producers and their counsel took the opposite position that, while general conditions contributed to the depression in farm business, reduction in freight rates would be a considerable step toward the betterment of these conditions.

The railroads laid stress also upon the testimony of a number of bankers that the farmer's condition was less serious this year than last year, arguing before the examiners that this indicated a return to prosperous conditions without freight rate reductions.

Among several witnesses presenting the farmer's side of the case were W. J. Robinson, president of the Washington Wheat Growers, Associated, and L. A. Hunt, manager of the Northwest Hay Growers' association.

No recommendation from the board of examiners is expected for some little time and after their recommendation to the commission further time would elapse before action were taken on the application for lower rates.

Demonstrate With Sodatol

Stumping powder is again being furnished by the United States government to the farmers at reduced rates from war materials. A demonstration of what sodatol, the new powder, is capable of doing was put on near Lacey, Thurston county, by E. B. Stookey, the county agent. There is approximately 1760 pounds of explosive material in each ton of sodatol, the composition being made up of T. N. T. and one of the common forms of nitrates. It can be sold to the farmers for about 40 per cent of what ordinary blasting powder usually costs.

The government has contracted with the De Pont powder plant for mixing the new product, since the law requires that such materials be handled only by factories that are properly equipped and isolated from habitation. All orders are handled in carlots and it is expected that the county agents will be able to fill the demand from the supply on hand, provided it can be mixed in large enough quantities.

Governor Hart attended the Lacey demonstration and gave a short talk on the value of this new product to the farmer who was in need of large quantities of powder to clear his lands. There were about 200 farmers and business men present and all were well pleased with the ease with which the stumps were blown.

Hens Are Hard Workers

I noticed recently that some woman in Oregon had a White Leghorn pullet that had laid 54 eggs in 54 days. Now we have a Ringlet Rock that laid her first egg at the age of 5 months and 24 days, and laid an egg every day for 84 days, missed the 85th day, then laid every day until the 95th day, then she sat. Thus she made a record of 94 eggs in 95 days. We set her for a rest. She hatched and was back laying in 10 days and is at it yet, not even a complete stop for molting. (She is not for sale.)—G. T. Atkins, Chehalis, Wash.

Hens of high producing strains have been known to lay as long as 150 days without missing a day. Even higher records are reported.—Editor.

MULES IN THE UNITED STATES.

In 1910 the number of mules on farms in the United States was 4,209,769. The number on January 1, 1920, was 5,432,391, an increase, during the decade, of 1,222,622, or nearly 30 per cent.

Just Folks

Here are two sets of words and phrases which indicate two important parts of all human action:

Self.	Others.
Today.	Tomorrow.
Plan.	Execution.
Theory.	Practice.
Easy to see.	Hard to do.
What should be.	What will be.

Excessive planning, multiplied theories of doing, are rampant in our world. You can scarcely pick up a newspaper or a magazine or pass a day without finding one or more assumed solutions of political, social or religious problems. It seems as though more persons today were spending more time on telling you how to do than ever before in the history of the world.

Lessons of experience and history are largely forgotten. The world is largely overlooking the fact that glittering prospects are quite apt to result in brain-racking and back-breaking work; that many theories do not work out.

There is also much ineffective work due to defective preparation. It is folly to expect results if there is no adequate knowledge of performance.

Yet just now a voice is making itself heard in matters of higher education, declaring that so much time is being spent in high school, college and professional courses that the student is half way through life before he begins his life work.

Preparing to live can not only take up too much time, but may in a measure defeat itself. The very habit of preparation may dull the spirit of execution.

It seems almost as if all preparation should be on the side, that doing itself should be the larger part of preparation. Rules and principles may be learned on the side, while the chief work always is in getting facility and applying the rules and principles, and facility always comes from doing.

E. A. S.

Farmers' Want Ads

FLORISTS E

IF YOU LOVE GLADIOLUS SEND GOOD 2C stamp and receive fine bulb to bloom for you. A dollar—25 bulbs, assorted—including one worth 50c. Harper, florist, Tacoma, Wn.

MONUMENTS F

COMPLETE STOCK. WRITE FOR DESIGNS and prices. Inland Monument Co., N1001 Monroe, Spokane.

PERSONALS R

GENTLEMAN, 36, WISHES TO CORRESpond with young lady, 18 to 35 years; must be neat appearing, kind and home loving; no objection to one child; object, matrimony. Write A. J. F., Box 11, R1, La Grande, Ore.

HELP WANTED—MALE 3

ALL MEN, WOMEN, BOYS, GIRLS, 17 TO 65, willing to accept government positions, $117-$250, traveling or stationary. Write Mr. Ozment, 208, St. Louis, Mo., immediately.

EARN $5 TO $10 DAY GATHERING EVERgreens, roots and herbs in the fields and roadside; book and prices free. Botanical G., New Haven, Conn.

SITUATIONS WANTED—Female 18

LADY, 38, WANTS PLACE ON RANCH OR cooking where I can keep my daughter in high school; would go anywhere. 2422 H st., Bellingham, Wash.

SCHOOLS AND COLLEGES 26

EARN $110 TO $250 MONTHLY; EXPENSES paid as railway traffic inspector; position guaranteed after completion of 3 months' home study course or money refunded. Excellent opportunities. Write for free booklet G-157, Stand. Business Training Inst., Buffalo, N. Y.

FRESH FOOD PRODUCTS 51-3

GOOD QUALITY, MEDIUM SIZED ITALIAN prunes, 100 pounds, $7, unprepaid; 25 pounds, $3.25, postpaid in 4th zone; 9-pound bag, $1.30, express prepaid; satisfaction guaranteed. Fred Kubin, Salem, Ore.

FISH—4 LBS. SMOKED SALMON, $1; 4 LBS. Alaska salmon bellies, $1; 4 lbs. black cod, $1; 3 lbs. best codfish, $1; delivered by mail. Coffin Fish Co., Seattle, Wash.

MERCHANDISE 51-5

MEN'S O. D. ARMY LONG PANTS, ABSOlutely all wool, 31 to 35 waist, $2.95; boys' all wool suits, 2 pairs pants, sizes 6 to 17 yr., $9.35; men's 12 and 16-in. pacs, solid leather, oil tanned, $6.75 and $7.50; boys' solid leather 10-in. hi-cut shoes, sizes 11½ to 6, $3.25, $3.45, $3.95, $4.50; blankets, tan, wood finished, 64x76; good weight, special, $3.75; women's Cuban heel rubbers, 1st quality, sizes 2½ to 8, special 50c pair. Farmers' Dry Goods Store, 1211 1st., Spokane. We pay postage.

YOUR ANNUAL OPPORTUNITY—FOR QUICK disposal we offer salesmen's samples of woolen goods, underwear, hosiery, blankets, sheeplined coats, mackinaws, leather vests, etc., at one-third to one-half less than regular prices. Our price list of sample goods is now ready. Send for it today. Minneapolis Woolen Mills Co., Dept. 23, 612 1st ave. North, Minneapolis.

SPECIAL—ONE-POUND TIN "SATISFACTION tobacco" and pipe for $1. Smoking, chewing tobacco, cigars, cigarettes and complete line of pipes. Wholesale and retail. Peter M. Jacoy, 3 Washington st., Spokane.

HONEY 53

FINEST HONEY, FIVE POUNDS, $1; TEN pounds, $1.95, postpaid; sixty pounds, $7.50; two cans, $14.50; add transportation. Satisfaction guaranteed. Bancroft Apiaries, Hermiston, Ore.

ALFALFA-SWEET CLOVER HONEY, PREpaid, second zone, 3 10-lb. pails, $5; 60 lbs., $8.30; two cans, $14.50, not prepaid. Harry Fisher, Prosser, Wash.

HONEY (Continued) 53

KING CLOVER'S ALFALFA-SWEET CLOVER honey; 60-lb. can, $7.50; two cans, $14.50; 60-lb., prepaid, second zone, $8.29. King Clover, Sunnyside, Wash.

HAPPY HOME HONEY — ALFALFA AND clover; 60-lb. can, $7.50; two cans, $14.50; case six 10-lb. pails, $8.50. H. N. Paul, Mabton, Wash.

ALFALFA-SWEET CLOVER HONEY, 60-LB., $5.85; two cans, $11.50; 10-lb. pails, $1.45 f. o. b. Rigby, Idaho; quality guaranteed. Macdonald Co.

EXTRACTED HONEY—1 60-LB. CAN, $7.50; two, $14.50, collect; 3 10-lb. pails, $5, prepaid, third zone. Wells D. Rose, Sunnyside, Wash.

ALFALFA HONEY, SIXTY POUNDS, $7.50; two cans, $14.50, not prepaid. Skovbo, Hermiston, Ore.

MISCELLANEOUS—FOR SALE 60

SASH AND DOORS—O. B. WILLIAMS CO., 1943 First ave. So., Seattle. Chicken house sash, 20" wide by 25" high, 80c; a dozen different sizes in stock for immediate shipment. Skylights for chicken houses, 36"x40"; price, glazed, $2. This is the size recommended by the Western Washington experiment station. We carry them in stock for immediate shipment. Sash and doors for all purposes at lowest prices. All orders receive prompt attention. Our large illustrated catalog No. 35, showing full line of building material and built-in fixtures for the home, free on request. O. B. Williams Co., Established 1899.

PIPE—GET PARTICULARS ON OUR SPEcial flue pipe, 1¼, 1½ and 2 inch. Big saving on it. We also have all sizes second-hand and new standard pipe at low prices. We also save you on roofing, belting, pumps, engines, cables, etc. Alaska Junk Co., S120 Adams, Spokane, Wash.

WALL BOARD—WRITE FOR SAMPLE OF Washington plaster wall board; won't warp, won't burn. Manufactured by Washington Building Products company, 6851 E. Marginal Way, Seattle, Wash.

NATURAL LEAF TOBACCO—CHEWING, 5 lbs., $1.75; 10 lbs., $3; smoking, 5 lbs., $1.25; 10 lbs., $2. Pay when received; pipe and recipe free. Farmers' Union, Paducah, Ky.

HOMESPUN TOBACCO—CHEWING, 5 LBS., $1.65; 10 lbs., $3; smoking, 5 lbs., $1.25; 10 lbs., $2; 20 lbs., $3.25. Recipe free. C. Scott, Sedalia, Ky.

TOBACCO — KENTUCKY'S PRIDE; EXTRA fine chewing; 10 pounds, $3; smoking, 10 pounds, $2; 20 pounds, $3.50. Farmers' Club, Mayfield, Ky.

SEND $1 AND RECEIVE 2 LBS. CHEWING or 3 pounds smoking, postpaid. Kentucky Tobacco Growers, Sedalia, Ky.

FOR SALE—100 STANDS BEES, AND SUPplies. G. V. Sumner, McMurray, Wash.

CANE FEED MOLASSES. WRITE A. A. Lewis, S151 Lincoln, Spokane.

MISCELLANEOUS. 61

OPENING OF THE NEW WHITESTONE IRrigation district—8000 acres of irrigable land. This project was constructed under the direction of the Department of Conservation and Development of the State of Washington. Adapted for diversified farming, livestock, dairying, poultry and fruit growing. A picturesque location in the foothills of the Cascade range, Okanogan county, Washington. Write for free picture folder, giving full details. F. W. Graham, Assistant General Agricultural Development Agent, Great Northern Railway, King street station, Dept. 109, Seattle, Wash.

ELIJAH COMING BEFORE JESUS. FREE book. N. Megiddo, Mission, Rochester, N. Y.

AUCTIONEERS 75

DR. KENNETH G. McKAY, GRADUATE VETerinarian, livestock auctioneer. Farm sales solicited. Colville, Wash.

AUTOMOBILES—FOR SALE 112

SEE CHEVROLET FIRST—NEW AND USED cars at prices that will surprise you; stop in or write Inland Empire Chevrolet Sales Corp., 916 2d ave., Spokane. Open evenings. Open Sunday.

AUTO ACCESSORIES AND PARTS 119

NEW AND USED AUTO PARTS, NEARLY all cars. Our low prices and prompt service will convince you. Money refunded if not satisfied. C. & D. Auto Salvage & Supply Co., 1904 Grand ave., Kansas City, Mo.

STOVE REPAIRING 128

WRITE MYER RUBENS, SPOKANE, ABOUT stove repairs, welding broken parts, nickel plating.

PETS—Dogs, Birds, Etc. 171

VARMINT HOUND PUPS, $10 AND LESS; good dogs; quick sale. W. J. Butler, Creswell, Ore.

WHITE COLLIE PUPPIES FOR CHRISTMAS delivery. Urbandale Farm, Oakley, Idaho.

FOR YOUNG ROLLER CANARIES, IN FULL song, write Mrs. J. Wellborn, Warren, Ore.

POULTRY—Baby Chicks 174

HALF GONE—75,000 "HENACRES" CHICKS already sold for 1924. This proves that the northwest has confidence in us and our high grade baby chicks, the product of a wonderful trap nest pedigree breeding plant, one of the biggest of its kind in the world. We have some February, early March and May chicks left at $22 per 100, $200 per 1000. Special low prices on June chicks. Safe delivery guaranteed. Send for our free illustrated catalog and circular "The Last Three Months Are the Hardest," telling how "Henacres" Leghorns won first place for August, September and October at the state egg-laying contest. Henacres, Prosser, Wash.

DAY OLD CHICKS FROM ACCREDITED flocks and hatchery. Accredited by the Washington Accredited Hatchery and Breeders' association, under supervision of the extension service of Washington State college. Selected hens on free range, mated to cockerels with trapnested records of 250 and better. Will have 3500 S. C. W. Leghorn, 1000 B. P. Rocks, and 1000 R. I. Red chicks every Monday and Thursday, 100,000 for 1924. Order now for date you want. Ask for descriptive price list. Moorhead Poultry Farms, Granger, Wash.

CERTIFIED WHITE LEGHORN QUALITY chicks from selected free-range, heavy laying, utility hens mated to double pedigree cockerels with authentic trapnest records. Our breeding flocks are inspected and accredited by the Sonoma county farm bureau. Safe arrival and full count of live, vigorous chicks guaranteed. Accredited "AA" grade chicks at single "A" prices. Send for catalogue and attractive spring prices. Must Hatch Incubator Co., Inc. The world's largest electric hatchery, 445 Seventh st., Petaluma, Calif.

(Continued on the following page.)

POULTRY (Baby Chicks) (Continued) 174

TRESHLAID WHITE LEGHORN CHICKS will produce results. Thirteen years breeding of real quality. High record males, vigorous mature females, mated free range, a breeding proposition hard to beat. We have real chicks that will make you a permanent customer. Discount on large orders. World's largest electric incubator. Free catalog. Freshlaid Farm, Colfax, Wash.

WHITE LEGHORN BABY CHIX OF UNUSUAL value, from especially well culled hens mated with full pedigreed males. Prices, per 100: January, $16; February, $15; March, $14; April, $13.50; May and June, $12; 100 per cent live, strong chix guaranteed. We are accredited by the Sonoma county farm bureau. The Pioneer Hatchery, 422 Sixth street, Petaluma, Calif.

ACCREDITED CHICKS — ALL OUR CHICKS for 1924 will be from accredited flocks mated with certified cockerels sired by hens with 225-egg record. A limited number of chicks from cockerel sired by our $1000 champion cockerel and our world's record pen of hens. Write for special prices for those who order early. Queen Hatchery, 1430 1st ave., Seattle, Wash.

BABY CHICKS FROM THE SALEM CHICKeries are bred right, hatched right, shipped right, and priced right; 100 per cent live delivery guaranteed; liberal discount on large orders. White Leghorns, Reds, Barred Rocks, White Rocks, Black Minorcas, Anconas. Write today for attractive price list. The Salem Chickeries, Salem, Ore.

26,280,000 EGGS SHIPPED FROM WINLOCK in 1922. Winlock Central Hatchery, featured by Washington Accredited Hatcheries and Breeders association and 40,000 egg Smith incubator, offers chicks from hens not under two years, mated with cockerels with records of 230-294; 16½c apiece. Jacob Erving, Winlock, Wash.

BABY CHICKS—YOU GET THE BEST FROM successful breeders, using nothing but eggs from their own trapnested stock. Order them from the Carnation W. Leghorn Farms. My 16 years' experience in breeding enables me to give you entire satsifaction. Ernest W. Raush, Carnation Poultry Farms, Kent, Wash.

WHY DELAY?—PLACE YOUR ORDER FOR 1924 chicks with the White Hatchery, the hatchery with a reputation for good chicks. Safe arrival, full count guaranteed. Member Accredited Hatcheries, Sonoma county, "A" and "AA" stock. Price right. Send for catalog. White Hatchery, Petaluma, Calif.

S. C. WHITE LEGHORN CHICKS. 100 PER cent live, delivery guaranteed; 20 per cent books order. 100, $16; 500, $75; 1000, $140, postpaid; hatch only eggs from my own flock; no lights; trap records to 292. Absolutely only one grade. Catalog free. Roy S. Hands, B614, Cottage Grove, Ore.

BETTER CHICKS FOR LESS—VITALITY first. Vigorous Single Comb White Leghorn chicks that live, develop into beautiful pullets and wonderful layers; bred for high production; your satisfaction guaranteed. Write for attractive price. Kent Hatchery, Kent, Wash.

TRAPNESTED WHITE LEGHORNS, HOLLYwood and O. A. C. stock. We offer 75,000 chicks, 25,000 hatching eggs, 5000 pullets. 11 years at the business. Satisfaction guaranteed. Booking orders now. Send for price list. Inwood Leghorn Farm, Corvallis, Ore.

BABY CHIX—S. C. W. LEGHORN; VIGOrous, heavy laying hens, mated to exp. station cockerels from 250 to 285 egg dams; all free range stock; $20 per hundred. Member Washington Accredited Hatchery association. L. G. Swinney, Spanaway, Wash.

PREPAID—WHITE LEGHORN CHICKS, OREgon Agricultural college stock; the famous egg producers; $16 per 100; prices on quantities. Only 10 per cent deposit. Safe arrival strong, husky chicks guaranteed. Russell Poultry Yards, Corvallis, Ore.

SUPERIOR WHITE LEGHORN BABY CHICKS from high egg-producing flocks, mated to male birds with best blood lines on the Pacific coast. Write for circular and low prices to Crystal White Poultry Farm, McMinnville, Ore.

ACCREDITED CHICKS—HIGH PRODUCING Single Comb White Leghorns; inspected under supervision of the state; satisfaction guaranteed. Send for free catalog. "The Trapnest Tells." Engstrom Accredited Hatchery, Kent, Wash.

ORDER ANCONA BABY CHIX EARLY, FROM prize stock; great layers of pure white eggs; easy keepers, small eaters. Full description in catalog on request. Brainard's Ancona Hatchery, 3332 46th ave. So., Seattle, Wash.

THE POEHLMANN HATCHERY FOR BETter quality W. L. chix from selected free range hens mated with double pedigree cockerels. Literature and price list sent on request. 610 Main st., Petaluma, Calif.

WHITE LEGHORN BABY CHIX FROM flocks mated to cockerels sired by hens with 250 to 285 egg record; $20 per 100; hatching eggs, $1.50 per setting. Surlay Poultry Ranch, W. L. Grider, Route 3, Kent, Wash.

S. C. WHITE LEGHORN BABY CHICKS FOR sale. Twenty years of experience and breeding stand back of our flock of exceptionally heavy layers. Our prices are right. Model Poultry Farm, Corning, Calif.

PEDIGREED S. C. W. LEGHORN BABY chicks and hatching eggs. Our large, selected hens are mated to Hanson's high pedigree cockerels; prices reasonable. Dinic Hatchery, Petaluma, Calif.

WHITE LEGHORN BABY CHICKS FROM MAture hens, mated to male birds with sire's dam's records of 252 to 316 eggs; $18 per 100; $170 per 1000. D. A. Gillette, R4, Yakima, Wn.

ANCONAS—BACKED BY OFFICIAL CONTEST records and splendid list of winnings in the west's leading shows. Booking chick and egg orders. Oscar Dunlap, Junction City, Ore.

BABY CHIX, TANCRED STRAIN; GUARANteed strong and healthy; from trapnested, two and three year old hens. G. N. Bryant, Junction City, Ore.

PERKINS SUPERIOR WHITE LEGHORNS are good Leghorns; $15 per 100; one grade and one price. Chas. L. Perkins, 1337 Burrage, Portland, Ore.

SPECIAL PRICES ON GUARANTEED DAYold pullets; fall and winter delivery. Write for particulars. Eureka Hatchery, Petaluma, Cal.

SUPERIOR WHITE LEGHORN BABY CHICKS at very low prices for 1924 delivery. Write the Rio Linda Hatchery, Rio Linda, Calif.

25,000 TANCRED WHITE LEGHORN CHICKS, prepaid, 14c each. Beverly Egg Ranch, Leona, Ore.

Turkeys.

MAMMOTH BRONZE TURKEYS FROM NEW Western stock from Massachusetts and Missouri. Toms, $10 to $25; pullets, $8 to $10. Mrs. H. D. Moore, R1, Box 21, Hubbard, Ore.

MAMMOTH BRONZE TURKEYS—LARGE boned, well marked young toms and toms, $6 and $10 each; May hatched toms, 24 lbs. Mrs. Henry Hose, Sterling, Idaho.

FARMERS' WANT ADS

This is the farmers' "want," "sale" and "exchange" department for small advertisements of farmers, including live stock and poultry.

Advertising rates for ads running 1 to 3 times, 10c per word per insertion, with a special rate to Farmer subscribers, as follows: Ads running 4 to 12 times, 9c per word per insertion; ads running 13 times or more, 8c per word per insertion.

All commercial and land advertising, 10 cents per word per insertion. Open also to nonsubscribers.

In using these columns advertisers must observe (1) No advertisement will be accepted containing less than 10 words per insertion. (2) Every word, number and initial, including name and address, must be paid for. (3) New advertisements, changes of copy or cancellations must reach general office, Spokane, Wash., 10 days in advance of publication date. (4) Cash must accompany order.

Above rates include insertion in The Washington Farmer, The Idaho Farmer and The Oregon Farmer, which constitute the Pacific Northwest Farm Trio, 46 Review building, Spokane, Wash.

POULTRY—Turkeys (Continued) 174

PURE MAMMOTH BRONZE TURKEYS, choice breeding stock; toms, $10; hens, $6; lots of bronze; pure Toulouse geese. Mrs. F. Crane, Hagerman, Idaho.

GIANT BRONZE TURKEYS—SWEEPSTAKES at state fair; Los Angeles breeding and exhibition birds, with size, vitality, color. M. M. Reiman, Planada, Calif.

GIANT BRONZE TURKEYS FROM PACIFIC International winning strain; circular free. Herbert Stoneberg, Route "B," Eugene, Ore.

MAMMOTH BRONZE TURKEYS—CHOICE OF 500; sires, 45 lbs.; hens, $6 to $8; toms, $10 to $20. Harry Smith, Coupeville, Wash.

THE BIG BONED NARRAGANSETT TURkeys, 50-lb. toms, 25-lb. hens, 1923 hatched, for sale. Mrs. C. C. Dillon, Warsaw, Mo.

VIGOROUS, MAMMOTH BRONZE TURKEYS; sire, 40-lb. tom; prize winners. Mrs. Albert Leach, Caldwell, Idaho, Route 1.

PUREBRED GIANT BRONZE TURKEYS, choice breeding stock; early hatched. Mrs. J. F. O'Neil, Riverside, Wash.

MAMMOTH BRONZE TURKEYS, PRIZE winners; unrelated stock. Mrs. Leo Coffin, Route 1, Eagle, Idaho.

PURE EASTSRN BRED BOURBON RED TURkeys; prices from $6 to $12. Ida Courtney, White Salmon, Wash.

PUREBRED CHAMPION GOLD BANK STRAIN Giant Bronze turkeys. Mrs. Frank Browning, R1, Nampa, Idaho.

YOUNG, PUREBRED BRONZE TOMS, Mammoth Toulouse geese. Emma Moehnke, Beavercreek, Ore.

TURKEYS — THOROUGHBRED GIANT Bronze of real merit. J. Lewis Johnson, Box 69, Eugene, Ore.

GIANT STRAIN PUREBRED MAMMOTH Bronze turkeys. Mrs. C. R. Lowery, Route 2, Boise, Idaho.

PUREBRED BOURBON RED TURKEYS, hardy hens, $6; toms, $7. Cora Evans, White Salmon, Wash.

PUREBRED BRONZE TURKEY PULLETS, $5. Mrs. Bertha Gray, Route 2, Winlock, Wash.

EXTRA LARGE BRONZE TURKEY TOMS, $10 and $15. Mrs. Don Whittig, Boise, Idaho.

GIANT BRONZE TURKEYS; TOMS, $10; PULlets, $5. V. McKimmy, Melba, Idaho.

PUREBRED MAMMOTH BRONZE TURKEYS. Mrs. S. L. Maltby, Rogerson, Idaho.

Miscellaneous Poultry.

S. C. WHITE LEGHORN COCKERELS, O. A. C.-Tancred strain, with individual pedigree showing record of three generations of 300-egg parents. Large, handsome birds that will add style and production to any flock. Our March hatched, farm raised cockerels are second to none in the northwest. Write for description and price. Corvallis Poultry Farm, Corvallis, Ore. Box 304.

HOLTERMAN'S ARISTOCRAT BARRED Rock cockerels; three beauties; hatched from his very best matings, costing $30 per setting; each $15. Also Sheppard's famous Ancona cockerels from his highest producing pens. Price $5, $7. C. O. Gerking, Walla Walla, Wash., Route 4.

IMPERIAL PEKIN DUCKS, PRIZE WINNING, long bodied, heavy kind; choice young drakes, $3; eggs and baby ducklings; low prices. Mammoth Bronze turkeys, toms, $8 to $12. H. L. Moody, Parkland, Wash.

BARRED ROCKS—LIGHT AND DARK, PRIZE winning stock; heavy layers; none better; cockerels, eggs for hatching; baby chicks. Order your chicks now for early delivery. J. M. Harris, Parkland, Wash.

PULLETS—CHOICE W. L. PULLETS, APRIL hatch; husky, free range birds of Hollywood strain; heavy laying stock; ready for the laying pens; $1.85 each. Pulletpens, Prosser, Wash.

HUNT'S BARRED ROCKS, UTILITY COCKerels from the best egg producers, Imperial Ringlets, both matings. Prices right, satisfaction guaranteed. W. A. Hunt, Lebanon, Ore.

PURE BARRED ROCK COCKERELS; good laying strain. Also a few Buff Orpington cockerels. Write to Mrs. A. A. Nafziger, Salem, Ore. R7, Box 151.

LARGE, ENGLISH WHITE LEGHORNS, WINter laying strain; choice cockerels and yearling cocks. Mrs. M. L. Russell, Route 3, Meridian, Idaho.

THOROUGHBRED FAWN INDIAN RUNNER ducks and Barred Rocks; male and females, $1.50 up. C. A. Muths, Route 1, Salem, Ore.

JERSEY BLACK GIANTS, YOUNG STOCK FOR sale, and two-year-olds, guaranteed purebred. E. M. Chambers, Box 601, Bovill, Idaho.

BARRED ROCK COCKERELS, IMPERIAL ringlets; good laying strain; price, $5, $7, $10. J. H. Prutes, Boardman, Ore.

RINGLET BARRED ROCK COCKERELS, $3 to $15; satisfaction guaranteed. George Aikins, Chehalis, Wash. Route 3.

PUREBRED COLORED MUSCOVEY DUCKS, trio, $7.50; pair, $5; single, $3. Park Place Poultry Farm, Nampa, Idaho.

USED INCUBATORS AND BROODERS, Queens, Cyphers, St. Helens. Hi-Quality Poultry Ranch, Yelm, Wash.

S. C. BROWN LEGHORNS, PEDIGREED stock. Write your wants to E. H. Rosenkranz, Colfax, Wash.

COCKERELS, BARRED ROCKS, STANDARD and bred to lay stock. Hi-Quality Poultry Ranch, Yelm, Wash.

BARRED ROCK COCKERELS, OREGON AGRIcultural College strain, $2.50. Eastburg Bros., Idaho Falls, Idaho.

BARRED ROCK COCKERELS, HIGH PRODucing hens, O. A. C. strain. Chas. Halford, Lebanon, Ore.

R. I. RED COCKERELS, RANEY AND MEAD strains; big, fine, dark birds. Pickard Bros., Marion, Ore.

BRONZE TOMS, WHITE WYANDOTTE COCKerels, Pekin ducks. Mrs. McFarland, Everson, Mont.

WHITE WYANDOTTE COCKERELS, PUREbred show birds. Clark McClelland, Boise, Ida.

POULTRY—Miscellaneous (Continued) 174

PRINTING FOR POULTRY MEN. EMPIRE-Pacific Printing Co., Auditorium bldg., Spokane.

PUREBRED TOULOUSE GEESE, $3. T. C. Landers, Twin Falls, Idaho. Route 2.

SUPERIOR BARRED ROCKS, QUALITY, SIZE layers. C. E. Dibble, Payette, Idaho.

FULL BLOOD WHITE MINORCA COCKERels. J. J. Scholer, Ashland, Ore.

MAMMOTH TOULOUSE GEESE, $6 EACH. W. D. Good, Mt. Vernon, Wash.

WHITE ORPINGTON COCKERELS, $3. FRED Bilyeu, Lamont, Wash.

POULTRY AND LIVE STOCK WANTED 175

WE GUARANTEE TO PAY THE HIGHEST market price for your poultry and live stock. Owing to the constant changes in the market we are unable to quote prices in this paper from week to week. We will furnish tags and prices when you are ready to ship. Write us what you have to sell. Prompt returns. John Lewis & Co., Spokane, Wash.

DOLLARS FOR YOUR EGGS—WE PAY THE top market prices for your eggs and poultry. Daily cash remittances. McClintock-Trunkey Co., produce department, Spokane.

WE PAY TOP PRICES FOR YOUR LIVE OR dressed veal, hogs and poultry. Your check by return mail. Shipping tags on request. M. & J. Packing Co., Spokane.

TOP PRICES PAID FOR CREAM, EGGS, poultry, turkeys, geese, ducks. Inland Products company, Second at Cedar, Dept. E, Spokane, Wash.

LIVE POULTRY WANTED — WE REMIT promptly at market prices. Commercial Creamery Co., 1327½ Railroad, Spokane, Wash.

BEST PRICES PAID FOR YOUR POULTRY eggs, veal and hogs; prompt remittance Hotchkiss Produce Co., Spokane.

LIVE STOCK 177

AN AGED LAUREL CHAMPION BERKSHIRE boar that I can not use longer. This is a wonderful animal, winner of first wherever shown, including Pacific International; $30; taking orders for pigs. C. V. Kilgore, Canby, Ore.

MILKING SHORTHORN BULLS, SIRED BY bulls from record of merit dams; a grandson of a 13,226 lb. cow, 510 lbs. butterfat; also others equally well bred, of breeding age; priced right. C. P. Truesdell, Centralia, Wash.

REGISTERED SHORTHORN BULLS OF quality and breeding, red, white or roan; polled or horned; of serviceable age or younger; priced to sell. Wm. Mulhall, Buena, Yakima county, Wash.

PUREBRED, BIG TYPE POLAND CHINA boars, ready for service; two gilts, weaned pigs. J. K. Jorgensen, Dietrich, Idaho.

HIGH CLASS DUROC JERSEY SWINE. Young stock for sale; bank references. Dimick Stock Farm, Hubbard, Ore.

FOR SALE—PUREBRED POLAND CHINA pigs, White Wyandotte cockerels. Fred M. Schmidt, Trout Lake, Wash.

DUROC-JERSEY SWINE, BOTH SEXES FOR sale; booking orders for bred gilts. Stadacona Farms, R1, Spokane.

SPOTTED POLAND CHINA BOARS; BRED TO open gilts; fall pigs; prices right. D. E. Mitchell, Joseph, Ore.

MILK GOATS—REGISTERED SAANENS AT prices that will please you. Ferd. H. Dietzel, Portland, Ore.

REG. SHROPSHIRE AND HAMPSHIRE rams. Write McK. Edwards, Valley, Wash.

REGISTERED DUROC JERSEY BOAR, PRIZE winner. Cora Farm, R1, Garfield, Wash.

HAY FOR SALE 200

ALFALFA, GRAIN HAY, TIMOTHY AND straw; guaranteed quality; prompt shipment. Prices upon application. Richard Nyman, Walla Walla, Wash.

HARNESS and SADDLERY 189

SEND FOR FREE HARNESS AND SADDLE catalog today; cut out the middleman, buy direct from the manufacturer. Lowest prices in the west; satisfaction guaranteed. Established 1881. Write Pierce Harness Co., Dept. T, Spokane, Wash.

MONEY TO LOAN—Real Estate 234

5½ PER CENT FARM LOANS—SEE SECRETary-treasurer of National Farm Loan associations, representing Federal Land bank, Spokane. A. W. Cauthorn, director, 762 East Burnside, Portland, Ore.

HOTELS 306

WHITE'S HOTEL AND RESTAURANT. ROOMS $1 and up; special weekly rates. Stevens and Sprague. Right on the corner; 5 minutes from all depots. In the heart of the business district, Spokane.

JOB PRINTING 372

WEDDING ANNOUNCEMENTS AND INVItations, catalogs, booklets, high school annuals, letter heads, envelopes, cards, butter wrappers, etc. Union Printing Co., 412 First ave., Spokane, Wash.

TANNING 425

WE WILL TAN YOUR COW OR HORSE HIDE for robes or coats, and guarantee our work. We are custom tanners, manufacturers and taxidermists. Write for prices. Spokane Fur Tanning Co., 7 Pine st., Spokane.

ANY KIND OF HIDE TANNED WITH HAIR on, or for leather. Fur and taxidermy work done to order. M. R. Mohr Co., 321 Sprague, Spokane, Wash.

TAXIDERMISTS 426

DEER HEADS AND BIRDS MOUNTED, HIDES tanned and made into rugs and robes. Withers Bros., 913 Sprague ave., Spokane.

KODAK FILM DEVELOPING 472

FREE ENLARGEMENT WITH 75C ORDER high gloss print. Spokane Film Co.

FILMS DEVELOPED FREE—KODO, THE PICture King, 815 Stevens, Spokane.

MATERNITY HOMES 497

MATERNITY HOSPITAL; STRICTLY PRIvate; doctor in attendance; prices reasonable. Mrs. Elizabeth Peel, matron, W1324 Broadway, Spokane.

BUILDING MATERIAL 588

TACOMA SASH & DOOR CO., 12TH AND Dock, Tacoma, Wash. Direct selling means direct saving. These prices demonstrate: Chicken house sash, 20"x24", 75c; other sizes in stock. Chicken house skylights, 36"x60", glazed, $1.95; western Washington experiment station recommends this size. Sash and doors correspondingly low priced. Prompt delivery, careful filling of orders guaranteed. Catalog No. 4 is yours for the asking.

FIX BROKEN PLASTER WALLS WITH PERfection plaster wallboard; nailed on like lumber; takes calcimine or paint; sample and booklet from Western Wallboard Co., Seattle, Wash.

SEEDS 620

CHOICE ALFALFA SEED, 21C, 23C LB.; choice red clover, 23c, 5 lb.; choice alsike clover, 16c, 18c lb. Veazie Seed Co., Jerome, Idaho.

ALSIKE CLOVER, 23C, RECLEANED; TIMothy-alsike grown, mixed, 11c; 94 germination. Meador, Norwood, Idaho.

NURSERY STOCK 621

NURSERY STOCK, ALL KINDS—GRAFTED walnuts, filberts, prunes, peach, apple, pear, cherry, etc. Berries, etc. We sell direct—we save you money—we supply the best. Send right now for catalog. 34 years in business. Carlton Nursery Co., Carlton, Ore.

RELIABLE TREES AND PLANTS—PRUNES, apples, pears, cherry, peach, apricot, grafted walnut and filbert trees, gooseberries, currants, etc., at attractive prices for early orders. Send your want list today for quotations. Benedict Nursery Co., 185 E. 87th st. N., Portland, Ore.

TREES—NOW BOOKING MAIL ORDERS AT reduced prices for limited time only. Apples, pears, peaches, nut trees, prunes, cherries, small fruits, etc. Live agents wanted. Lafayette Nursery Co., Lafayette, Ore.

NURSERY STOCK—PRUNES, WALNUTS, FILberts, fruit trees of all kinds, gooseberry and small fruits. Buy direct and save 50 per cent. Brooks Nursery, Lafayette, Ore.

NURSERY STOCK SOLD DIRECT TO PLANTers; apple trees a specialty; no agents employed; can save you money. Write for prices. Lawson Nursery, Gates, Ore.

FILBERT AND WALNUT TREES, THE BEST paying crops for the northwest. Write for prices on the different grades. Villa Nurseries, Route 1, Portland, Ore.

STRAWBERRY PLANTS—SIXTEEN VARIEties. Asparagus and Munger black caps. Prices low. Briggs Fruit Ranch, Olympia, Wn.

FOR PRICES ON 4 TO 6 AND 6 TO 8 ITALian prune trees, address Milwaukie nurseries, Milwaukie, Ore.

FARM LANDS FOR SALE 651

80 AND 160 ACRE IRRIGATED FARMS, IN the Lethbridge northern irrigation district in sunny southern Alberta, at low prices and easy terms. First class mixed farming proposition. All kinds of livestock thrive wonderfully. Excellent climate, rich soil, ample water. Alfalfa, corn, wheat, oats, barley, vegetables yield abundantly. An opportunity to secure a farm that will bring you a steady income and to make a really attractive [illegible]. Write for descriptive handbook to the Provincial Council of Alberta, 12 [illegible] bridge, Alberta.

CLEARED MIXED LAND; FINE FOR POtatoes, poultry; highway; near [illegible]; few feet to paved; thriving towns; half mile to railroad, sawmill, schools; $100 per acre in 5-20 acre tracts. Easy down payment, balance long time, 6 per cent. The finest land in Western Washington at the price. Full information from Carter, MacDonald & Miller, 208 Columbia st., Seattle, Wash.

BIG LUMBER COMPANY LAND SALE—IN Skagit county; 40-acre tracts, $1400; $200 cash, balance easy. Lots work for the settler. Splendid district, roads, schools, towns. Information free. H. C. Peters, 726 3d ave., Seattle.

SELL YOUR PROPERTY QUICKLY FOR cash; no matter where located. Particulars free. Real Estate Salesman company, 501 Brownell, Lincoln, Neb.

40 ACRES GOOD SOIL; VIEW; BEACH; spring water; all fenced; ideal home place; near town; $2200. Mason Fitzhugh, Roche Harbor, Wash.

FARM LANDS—Wanted 654

NO COMMISSION — SELL YOUR FARM through Washington Farm Bureau Exchange, represented in 45 states. Lists of farms for sale by owners mailed free. 312 Lindelle bldg., Spokane, Wash.

HAVE INQUIRIES FOR NORTHWESTERN farms, spring delivery. Describe fully, state lowest price. R. A. McNown, 310 Wilkinson bldg., Omaha, Neb.

WANTED—TO HEAR FROM OWNER HAVING farm for sale; give particulars and lowest price. John J. Black, Chippewa Falls, Wis.

IRRIGATED LANDS—For Sale 663

DAIRYING, HOGS, SHEEP, POULTRY, ALfalfa, beans, sugar beets, corn and seeds all profitable on North Side project. Good land on easy terms. Special offer for dairymen and poultrymen. R. E. Shepherd, manager, Jerome, Idaho.

FARMERS ON SEQUIM, WESTERN WASHington irrigated land are universally prosperous. Write us. Washington Colonization company, Sequim, Wash.

ACRE TRACTS FOR SALE 669

TEN ACRES, CULTIVATED AND IRRIGATED land, with new modern bungalow. Also ten acres rich bottom land, seven miles from Port Angeles. L. E. Dailey, Port Angeles, Wash.

SUBURBAN TRACTS—For Sale. 672

FOURTEEN ACRES SUBURBAN HOME ORchard; snap for quick sale. Owner, James Doran, Ashland, Ore.

CITY PROPERTY FOR SALE 690

$1350—HOUSE, INCOMPLETE; BIG LOT; near school; easy terms. Alice Helgeson, Linnton, Ore.

FOR SALE OR EXCHANGE 702

160 ACRES GOOD LAND; 100 IRRIGATED; near Eureka, Mont.; for sale or trade for non-irrigated foothill ranch or California land. Chas. R. Morse, Shoshone, Idaho.

TO EXCHANGE—Real Estate 705

HOUSE AND LOT BRINGING $25 MONTH; close to bus line; no indebtedness; also equity in 3 lots, near highway to refinery; will trade all for ewes. Mrs. Dora Smith, 735 S. McKinley, Casper, Wyo.

A Tale of the Flatwoods

THE RED LOCK

By DAVID ANDERSON
Author of *The Blue Moon*

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CHAPTER VII
Arrows of the River Gods

THE Reverend Caleb Hopkins was at the boat landing in good time next morning, under his arm an old pair of trousers, a faded straw hat and a pair of very light boots to wear while wading, all having been supplied by the good gray lady of the parsonage from the cast-off clothes of her late husband.

The others were already there, sitting in the long skiff, Uncle Nick in the stern, Jack Warhope and Al Counterman at the oars, the latter still holding the boat to the wharf.

In his nervous and mincing way the preacher scrambled in; Counterman shoved off; the oars dropped into the water; and, with the seine coiled up on the stern locker under the experienced care of Uncle Nick, the live box towing behind, the skiff slipped away up the river.

Alpine island divides the Wabash into two nearly equal channels. The skiff was guided into the north channel, and had glanced along nearly to the head of the island when Counterman rested his oars with the remark that just there would be a good place to make the first haul.

The skiff was accordingly turned in to the island, and the prow drawn up on the sandy margin. Each man, Uncle Nick excepted, hurriedly undressed, stacked his clothes in the boat and drew on his rough fishing garments.

In strict justice to the truth it must be stated that only Counterman and the woodsman hurriedly undressed. The preacher was far slower and quite noticeably embarrassed over the unusual experience, though he set about stacking the frock coat, high hat and shiny boots in the bow of the boat with the same orderly deliberations he probably observed in the proceeding from premise to premise of one of his sermons.

After a mild bit of urging, a prodigious deal of coaching, he was left near shore to hold the brail stick while Jack and Counterman rowed out around as great an expanse of water as the length of the seine permitted, with Uncle Nick in the stern, laying out the folds and looking to it that the lead line fell evenly to the bottom while the cork line held the net properly erect.

On nearing the shore at the completion of the circuit, the two rowers leaped into the water the moment it was shallow enough, leaving the boat to Uncle Nick, and raced for the bank at top speed, holding the brail stick to the bottom as they ran.

With the frantic river tribes thus forced to shore, the water began to be wildly agitated. Long ripples shot from side to side of the rapidly diminishing space enclosed by the net, as some panic-stricken swimmer plowed his reckless way near the surface.

Even the preacher's tired and studious eyes waked with the excitement, and he tugged eagerly at the brail as the bass and pickerel began to leap, glittering in the morning sun like silver arrows shot up by the river gods.

"Look," he cried, as a two-pound bass leaped the cork line, "they are escaping."

"Plenty left," grunted Uncle Nick, who had beached the boat and was now lending his strength to the brail.

"Thar, boys, haul'er easy," directed Counterman. "We got 'em. They cayn't git away now. Man! hain't ther' a wad uv 'em. I know'd this wus a good hole. Cayn't fool y'ur Uncle Al on fishin' holes, don't keer if e' hain't got but one lamp, an' cayn't sling dictionary like some folks."

The good fish were dropped into the live box, the others thrown back into the river—precisely as war claims the best men and leaves the defective—and the fishermen seined on.

Several hauls had been made, none of them quite so profitable as the first, and the sun was fast mounting toward midsky when, as a windup, they prepared to drag the famous Alpine hole that lay along the south edge of the narrow sandbar jutting far down-stream from the lower end of the island.

"This hyur's a hard hole t' fish," observed Counterman, handing the near brail to the preacher and taking his place at the oars with Jack, "but they're thar, an' we can git 'em."

"Bank's purty steep," called back Uncle Nick from his place in the stern. "Better not try t' wade out none."

The preacher nodded and the other stooped to his task at the seine. It was plain that unusual results were expected from the haul by the way the two rowers bent to the oars and the extreme care with which the old man laid out the folds of the great net.

But when the usual circuit was completed and they began to haul in on the seine, it was noticed that it did not bow out in the wide curve a spread seine should. Instead, as the men pulled, the sides drew in toward each other until the floating corks stretched out into the river in nearly parallel lines.

"Hung up, by thunder," growled Counterman, scraping the sweat from his grimy forehead with a grimier forefinger. "Snag 'r somethin' about 40 yards out thar—right whar the bottom's out, too, as the feller says. Must 'a' drifted in durin' the high water. Hit werdn't thar last fall."

Jack walked up the bank a short distance to where the boat was beached.

Stripped to the skin, a figure that might have been a model for those master sculptors who conferred immortality upon the gods of classic Greece, he was just slipping into the water when Uncle Nick came up the bar.

"You'll find the lead line fast on somethin'—a snag more'n likely," he directed. "Jist h'ist it off. 'Tain't no trick—but we've lost our fish."

Warhope glanced back over his shoulder and nodded. The next moment he was plowing through the stream with strokes so powerful it seemed his great shoulders fairly scorned the water and spurned it out of the way. But the task ahead proved harder than the light remark of his old friend had indicated. It was only after he had three times dived to the bottom of Alpine hole that he was able to locate the snag and release the seine.

When the swam ashore, following the hauled it in, the preacher, who had come up the bar, was seated on the forward gunwale of the boat, feeling over his clothes stacked in the bow, as if eager to assure himself that they had not come to harm.

The woodsman was putting his wading clothes on again when a slight thud, as of some heavy object striking the bottom of the boat, caught his quick ear. Without turning his head—he happened to be just then squeezing the water out of his hair before putting his shirt on—he was able to catch a glimpse of the ivory butt of a six-gun protruding from a pocket of the black frock coat as it was being tucked back in the pile with the tall hat and shiny boots.

Nor was that all—with a deftness that would hardly have been expected in one of his profession, the slim fingers were feeling over the other two stacks of clothes as if making sure that the six-gun he had just tucked away was the only one in the crowd.

Still, probably such an intention was farthest from his thought. Six-gun and all, it was likely merely another of the many eccentricities of a man who had the double drawback of being a professor as well as a tenderfoot—in the eyes of the woodsman, a combination about as bad as could be made. Warhope finished putting on his clothes, and, followed by the preacher, went down the bar to where the others were busy with the seine.

Snugged away under the tangle, in a manner that must have made it practically invisible, except from that one point, lay a small houseboat.

CHAPTER VIII
Hermit Houseboat

Uncle Nick and Counterman had just finished hauling in the seine when Jack Warhope, followed by the preacher, came down the bar and rejoined them. But the old man's prediction about losing the fish proved correct. The haul produced not a thing except a very surprised, highly indignant snapping turtle. Counterman kicked the turtle back into the water, and stared ruefully at the empty seine.

"Them fish has t' be made up"—he glanced up the river—"an' that's just one shore place t' do it——"

"Mud Haul," Uncle Nick finished.

"Egzac'ly. Hit's sich a nasty place t' fish that it ain't hardly ever fished, but they're thar."

He stooped again over the seine and began laying it out smooth and even on the dry sand, while the woodsman, always sparing of words and apparently in perfect agreement with the two older fishermen, went to the farther end of the great net to roll it up in readiness to be placed on the stern locker of the skiff.

The preacher had turned a quick look up the river; an expression of polite displeasure clouded his face.

"Mud Haul——" he muttered; "is it far?"

"Mile 'r so," grunted Uncle Nick, as he stooped over the seine, helping spread the meshes straight.

"I really should not remain away from the study so long," the preacher pursued. "I must have time to collect my thoughts somewhat, as I understand I shall be expected to make a few remarks at the—festival tonight."

Uncle Nick leered around at him.

"An' them remarks will be few, Parson. I 'low y'n nee'n t' worry y'ur head about them remarks none. Ther'll be another scent in the air t'night."

The old man winked at Counterman, trudged off down the sandbar to the live box, dragged it up along the edge of the stream and hitched it to the stern of the skiff. He had hardly finished when Jack and Counterman came to the seine, coiled ready to be unwound, stacked it on the stern locker and took their places at the oars.

The preacher came last, his eyes still drawn irresistibly up the river.

"Is there not some—other place?" he asked, reluctantly taking his seat in the bow, "some—nearer place?"

Uncle Nick studied him out of his deep-set eyes. He was a guest, in a sense, and he was—the preacher. The old man's face became thoughtful; he glanced at Counterman.

"Thar's Grassy Bar," he muttered. "Hit's better f'r spearin'. An' Yaller Branch"—he glanced up at the sun; swept sky and river with his puckered one eye—"t'day's too glary. Hit ain't deep enough. No, I'm f'r Mud Haul. They'll be scrooched in thar thick as bees around a haw tree."

The preacher glanced again up the river, and pulled the faded straw hat farther down over his head as if afraid of sunburn.

"Is it dreadfully—muddy?" he mumbled.

Guest and preacher though he was, he was still a tenderfoot. Counterman's raucous laugh exposed the huge wad of tobacco between his jaws; the woodsman grinned and dropped the blade of his outboard oar into the water., Uncle Nick took the unlighted pipe from between his lips, and his roar wheeled a wisp of sand snipe that happened at the moment to be glancing up the bar.

"Not as muddy as it—sounds," he chuckled, grabbed a match out of his trousers pocket.

Mud Haul is merely an arm of the river that reaches up behind a bramble-infested point of mud and sand jutting out and down into the stream. Ages ago it was probably the main channel. But in the long process of earth sculpture the river shifted and the old channel degenerated into a bayou. As time went on deposits of successive floods filled up the bayou, till at last only the lower point of it remained, fed and kept open by the tiny stream that oozed out from under the hills and crawled down through its bogs and swamps.

The fishermen landed at the sandy lower point of the prong of land behind which the mud draggled remnant of the bayou lay. The live box was hitched to a stake as before, the half reluctant preacher left to hold the brail stick, while the others rowed out and around the 50 yards or more of murky water that lay between the point and the shore.

The final haul proved to be much the best of the day. The good fish were dropped into the live box, the others tossed back into the river, and the fishermen sat about preparing to return to the village. The brail sticks were united, the seine rolled up, and the woodsman walked up the bar for the boat.

He stooped over the craft, possibly recalling the circumstance of the six-gun concealed in the frock coat; laid his hand to the bow to push it off; straightened after a moment, walked some distance farther up the bar and stood gazing intently toward the narrow upper end of the arm of water where it disappeared under the overlapping branches of trees and tangled vines. Snugged away under the tangle, in a manner that must have made it practically invisible, except from that one point, lay a small houseboat.

A trifling circumstance enough—houseboats were common on the Wabash—but why there? The place was dark and dank, the bank boggy, and there was no spring short of Alpine island. The woodsman turned and motioned to his companions.

They had been watching him and at his sign came trooping up the bar—the preacher fagged and lagging behind—and gathered around him. Following the direction of his finger, they peered in under the overlapping trees.

Counterman grinned around at the others after a moment and jerked his thumb back toward the skiff.

"S'posin' we row up an' pay 'im a visit? I'd like t' see a man with sich an eye f'r a campin' place."

Uncle Nick tossed up his chin, grunted, and led the way down the bar to where he had beached the boat.

The preacher appeared to be considerably vexed at the further prolongation of a trip that was growing more and more irksome to him. It might almost have been imagined that a frown ruffled the studious primness of his brow. But as the skiff glided up the narrowing arm of dead water, he appeared to get himself in hand again. The frown disappeared and his air became that of a man only mildly interested in what went on about him.

As they rowed in under the dense tangle of vines and branches they saw that the house-boat was small—small even for that class of craft.

There is little formality among men of the river and the woods—a fine enough delicacy, though, when big moments come. They brought the bow of the skiff up under the stern of the secluded little craft and climbed aboard. It was so light that it rocked with their weight.

There was both a fore and an aft door to the tiny cabin that occupied the whole mid-section of the deck, but no windows on either side. Both doors were heavily padlocked—a further proof of the owner's exclusiveness. A narrow gangway ran along the sides of the cabin and connected the diminutive fore and after decks. On the dusty boards there were a number of foot-prints, some of them—curiously enough—made by a boot that must have been stylish, even dainty.

Uncle Nick leaned upon the railing of the forward deck and prodded his pipe, while the one-eyed fisherman gnawed himself a fresh chew from a sweaty plug that he clawed up out of his overalls pocket, the two of them generalizing on the circumstance of stylish boot tracks no windows and padlocked doors.

The preacher had joined in the discussion and was just telling them, in his half bored drawl, that it might be some naturalist taking unusual pains to preserve his specimens, when Jack Warhope, still standing in the skiff and holding it to the stern of the house-boat, picked up one of the shiny boots from the preacher's stack of clothes in the bow, and, hidden from the others by the cabin, pressed the heel of it down hard beside one of the heel-prints on the dusty after deck.

The two prints coincided perfectly.

CHAPTER IX
Mettle of the Minister

THE Buckeye schoolhouse stood on the extreme west side of the village. Though it has since been replaced by a modern structure of brick and stone, 70 years ago it was a plain one-room building of the general type of the period—paint gone; weather-beaten; no belfry; no ornamentation; three windows on each side; a chimney at the back; a battered door in front.

The "festival" in celebration of the close of school was a distinct event at Buckeye.

The pupils' desks had been removed and placed around the walls. A long table extended across the rear. The rest of the room was clear, except for the great box stove that stood in the center of the

(Continued on page seventeen.)

FAMILY CIRCLE

ALICE W. BARLAND
EDITORIAL CONTRIBUTOR

SOMETIME.

Some time when all life's lessons have been learned,
And sun and stars forevermore have set,
The things which our weak judgments here have spurned—
The things o'er which we grieved with lashes wet—
Will flash before us out of life's dark night
As stars shine brightest in deep tints of blue.
And we shall see how all God's plans were right,
And how what seemed reproof was love most true.

And if some times commingled with life's wine,
We find the wormwood and rebel and shrink,
Be sure a wiser hand than yours or mine
Pours out this portion for our lips to drink;
And if some friend we love is lying low
Where human kisses can not reach his face,
Oh, do not blame the loving Father so,
But wear your sorrows with obedient grace.

God's plans, like lilies pure and white unfold.
We must not tear the close-shut leaves apart,
Time will reveal the calyxes of gold,
And if through patient toil we reach the land
Where tired feet, with sandals loosed, may rest,
When we shall clearly know and understand,
I think that we shall say, "God knew the best."
—Mary Rily Smith.

Experience Letters

Dear Mrs. Barland: You ask us to tell what we are doing. Women on the farms work very hard early and late; they raise almost everything in the garden that is used for canning and do can from 400 to 1000 quarts in a season.

I will mention four things that I raise for table use and for sale for pin money and perhaps it will help some one who wants to make money. I had a strawberry patch 15 feet by 20 feet which served the table for two meals a day for three or more people during the season and I canned 30 quarts and made 15 quarts of jam and sold five crates.

I own and attend several colonies of pure Italian bees, which supply my table and I have honey and bees to sell.

Women can attend to bees as well as men and bees are very interesting. The honey saves on sugar and jams and the bees pollenize the crops. All farmers should keep two or more colonies of bees for this purpose and to collect honey from their crops.

I have an asparagus bed of about 70 hills, two years old this spring, which provides an early vegetable very delicious, until peas mature. I expect quite a crop next year when the bed will be three years old.

I raise a white onion which multiplies from 7 to 21. My bed was a beautiful sight. This kind is a fine one for farmers to raise as there is little work to grow them and they ripen early. If set out in the early spring, they will soon be ready for use and when they ripen I reset them to use as green onions for fall and winter use. This way they provide us with onions the year around.

I will give several little discoveries that may be useful. To relieve the itching from nettles, rub on vaseline. It gives instant relief.

When canning place a cloth between the jars when boiling and they will not break.

To test a cake in baking, when it seems done press your finger in the center. If it presses in it isn't done; if it keeps its shape it is. MRS. ANNA HYATT.
Battle Ground, Wash.

Family Circle Girls

Dear Mrs. Barland: I received your letter and will write you about the Rogue river and surrounding country.

Our ranch is eight miles from Agnes and 24 miles from Gold Beach and Wedderburn, Ore.

We are living on the Wedderburn side of the Fogue river, which is just at the mouth and Gold Beach is on the other side, and is the county seat of Curry county.

Many people come here every summer to hunt and fish and camp. There is only a trail up the Rogue river now, but there is going to be an auto road through here in a few years on the Wedderburn side. Boats go up the Rogue as far as Illake and the mail boat goes up three times a week. From Agnes up mail has to be carried on pack horses.

There are many wild animals around here such as bears, cougars or mountain lions, skunks, bob cats, raccoons, squirrels, gophers, coyotes and deer.

There are seven in our family and I am the eldest and am nearly 13. I am in the seventh grade. I am 5 feet 4 1-2 inches tall and weigh 91 pounds.

We have two ranches, 1000 acres in all.
ELLEN.
Oregon.

Dear Mrs. Barland: I enjoy the circle very much and I wish we had more space. I am 23 years old and live on a farm of 272 acres and 200 acres are under cultivation. We have about 25 acres in clover and expect to harvest it for seed. We milk 10 cows and send the cream to Portland, Ore. The car line isn't very far away and the road is very good.

I help in doors and out doors, too. When haying time comes I help my father and brother in the field and I enjoy being out of doors very much.

I would like to hear some ideas from the circle as to how a boy or girl is to get an education when there is a large family. I think this would be interesting. Education is a very important matter for anyone to consider. T. C.
Oregon.

Dear Mrs. Barland: I am a girl of 20 years and live in the central part of Idaho. I think this is a beautiful country and I love it all—the mountains, rivers, plains and canyons.

We have discussed the question quite a good deal in school lately as to whether a married woman can take care of a home and also have a successful career. It is my opinion that all the career any married woman needs is her home. If she makes it a real home and not a boarding house for her family, she will have no time for any other career. No one can take the place of a mother to children no matter how good a nurse, school matron or maid she may be.

Don't misunderstand me and think I do not approve of women in business for I most assuredly do believe in single women having any sort of career they choose, but I believe if they want to follow one they should remain single. I shall be glad to hear the opinions of others on this subject. E. W.
Idaho.

Dear Mrs. Barland: Thanks for your card. What you said was true. I care more for my books, music and chickens and kittens than to be going somewhere all the time.

I walk five miles to take my music lesson but of course I get a ride sometimes. I will make a fine old maid for I like cats and I like my chickens, too, as they paid all my high school expenses last year, except for a few clothes.

You may picture me as very dignified and quiet, but I am not and if I am not laughing all the time I am called grouchy, so I try to have a smile always. I have enough freckles for a dozen girls.
E. B.
Oregon.

Family Circle Boys

Dear Mrs. Barland: I have been a silent reader of the circle for some time and at last have my courage up to write.

I am a boy of 19 and live on a 2000-acre farm. I believe a farm is the very best place for young folks. Many of the girls and boys are going to the cities to get positions in offices or stores. They are likely to be disappointed as there are many more looking for such work than can ever find places.

What the country needs now is more boys and girls to stay on the farms and help care for the crops. This will cut down the expense of hired help.

So many of the young people say that life on the farm is all work and no pleasure, but they are greatly mistaken because no one has better times than the outdoor girls and boys.

I think the family circle is a great benefit to all the girls and boys and I hope they will heed the good advice given by those older and more experienced.

I would like to hear from some of the boys and girls who are interested in outdoor life and I shall be glad to answer them.

A FARM BOY FROM OREGON.

Dear Farm Boy: Write again and tell us all about that 2000-acre farm. Tell what you raise, how much stock you keep, what you do with your beef or any produce and the whole story, and I am sure all will be glad to hear about it.
A. W. B.

"Mother Sacrifice"

By Edith D. Abbott.

"The day of 'mother sacrifice' is past—all the praise the farm mother or any mother of today should receive should be when she makes Johnny pick things up for himself instead of picking them up for him," said Mrs. Harriet D. Stow, home demonstration agent for Snohomish county, in an informal talk before the project leaders of that county.

"Not very many years ago it was generally conceded that when a girl married and lived on the farm, it needn't matter after that whether she had bright and pretty things to wear—she would never have a chance to wear them. But it does matter a great deal to farm women of today. The life of no mother or wife on the farm need be or should be one of constant sacrifice.

"You get sick of work, sick of yourself and sick of the family—and the family may get sick of you for all you know. What you need is contact with other women. One big thing in this community project work is that it gets the women away from home occasionally, and gives them an outside interest which is also an interest in the betterment of their homes."

Home project leaders from organized communities of Snohomish county have been meeting this week with Mrs. Stow for the purpose of outlining and scheduling their work for the coming year in the various projects and sub-projects.

Monday Mrs. Staw met with the project leaders in the home management work. Tuesday with the clothing leaders and Wednesday with the food and nutrition leaders.

The home management leaders will take up with the women in their community problems in room arrangement, choosing and placing of equipment, interior decoration, sewage disposal and such other matters as stain removal and the like. These leaders have scheduled their meetings for February. The leaders who attended the meeting Monday, December 3, were: Mrs. N. B. Newman, route 4, Snohomish; Mrs. Burt Mortland, route 1, Everett; Mrs. E. A. Henly, Florence; Mrs. C. E. Kuhlmann, Red Crossing; Mrs. E. M. Pearson, East Everett; Mrs. J. H. Vail, Red Crossing; Mrs. T. Sheil, Hartford; Mrs. John Maxwell, Oso; Mrs. Rees T. Jones, Marshland; Mrs. George Aken, Lakewood; Mrs. Lewis I. Jones, Marshland.

Twenty-seven communities have signed up for the class in millinery, which includes expert instruction in remodeling, designing and making hats. The actual classwork itself is more of a demonstration and exchange of ideas and suggestions relative to the use and fitness of various shapes and materials. This enables the women to get suggestions and training in the handling of materials so that when they work on their own hats they have very effective success. Last year the women taking this work in Snohomish county made more than 400 hats. The course also enables them when buying a hat to choose more wisely and economically.

Meetings for the women of the various communities were scheduled in millinery for March and April of the coming year, in pattern alteration for May and in garment finishing for July. Intensive courses will be held for the leaders themselves for two days the latter part of February and also in August.

The women at this meeting were:

Mrs. Frank Obenhofer, Stanwood; Mrs. F. H. McColl, Snohomish; Mrs. F. L. Couston, Sunnyside; Mrs. F. Frank, Snohomish; Mrs. A. Lindquist, Fobes; Mrs. E. Beckman, Riverview; Mrs. J. S. Carter, Riverview; Mrs. J. M. Modar, East Stanwood; Mrs. Alf Daniels, East Stanwood; Mrs. E. W. Shroeder, Snohomish; Mrs. W. G. Parker, Alderwood Manor; Mrs. Ray J. Porter, East Everett; Mrs. Rees T. Jones, Marshland; Mrs. W. F. Barnes, Machias; Mrs. W. L. Moore, Machias; Mrs. E. L. Bryant, Machias; Mrs. Chris Nelson, Hartford; Mrs. Mamie Carter, Hartford; Mrs. Eggert, Getchell; Mrs. O. D. Morgan, Granite Falls; Mrs. Lewis J. Jones, Marshland.

Meal planning and the school lunch are the two big projects under the food and nutrition group, leaders of which met Wednesday to schedule their meetings. Special stress is being put upon establishing the habit of milk-drinking for children. The women who represented their communities at the meeting Wednesday were Mrs. A. J. Love, Cedar Hill; Mrs. N. B. Newman, Cedar Hill; Mrs. G. G. Paine, Red Crossing; Mrs. E. T. Sutherland, Granite Falls.

Your Health

By Royal S. Copeland, M. D., F. A. C. S.

Has it ever occurred to you that too many of us are satisfied with past achievements? Because we have done fairly well in this and that field of endeavor, we rest on our laurels. Sometimes we are prone to think we have done our share.

Dr. Copeland.

I think I could forgive that particular mental attitude, although it strikes me as showing an unworthy complacence of mind. But there is another condition, all too common, which seriously impairs the progress of the race and which is fatal to the victim himself.

Some men who have really done well in the past settle down, gradually developing into human drones.

If they are office holders the community suffers because no new things are done and the old ones are neglected. If they are preachers the sermons grow dull and the sacred activities of the church are undertaken in a routine way. As a natural result the congregation drops off and the churchly spirit dies. If the doctor fails to refresh and replenish his medical knowledge by frequent pilgrimages to the sources of wisdom the new doctor gets the patients. Unless the merchant dresses his windows and showcases with new goods his more progressive rival gets the business.

Self-satisfied contentment and indifference to the progressing demands of life mean rust, rot and disaster.

It is expected of every man that he shall never stop in his course. Every day must be a new day and not merely another yesterday. You can't eat the food you ate yesterday. Neither should you govern your activities by what you did yesterday. The solid ground you stood on yesterday is soft today and it will be quicksand tomorrow. Unless you move you will be swallowed up and destroyed.

It is exactly the same in the matter of health. You may watch yourself for 30 years, you may take setting up exercises till you are 30 or 40, you may observe the rules of hygiene through this period, but unless you persevere everything you did in early life will become as nothing. "He that endureth to the end shall be saved."

It is a shame to see a man with a noble frame and upright carriage abuse his body and shorten his life by wrong habits. Strong drink, drugs, excessive use of tobacco, late hours, overeating, loafing, lack of ventilation, wet feet, careless exposure to the elements—what a lot of ways there are to undermine the health!

Fortunately, most boys and girls who are taught how to live are very likely to grow up into men and women who will continue to do those things which make for good health. Keeping the teeth clean, having them repaired when they need it, guarding the eyesight and getting glasses if necessary, making no improper demand upon the stomach and intestines, cleansing the skin, and by systematic, daily exercises keeping the heart and muscles in condition—these are essential things.

Unless these simple rules of health are observed every day and all the year, the beginning of the end is at hand. When you become a drone in the game of living you are warning the casketmaker that his services will be needed pretty soon.

Retirement from business will not prolong your life—it will shorten it. God intended that every man should labor and you are leading a normal life only while you strive as you always have striven.

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High Points in News of the Week

Congress is now adjourned for a holiday recess until January 3. At the time of adjournment the house of representatives was fully organized and was ready for business, but the senate was still deadlocked over the choice of committee chairmen. The small number of senators designating themselves as "progressives" held the balance of power between the regular democrats and the regular republicans in the election of a chairman of the senate interstate commerce committee. The fight was waged largely against Senator Cummins for this position, the progressive republicans voting for others to compel the acceptance of a compromise chairman.

In the lower house the big issue is the so-called Mellon tax program as prepared by Secretary Mellon of the treasury department and approved by President Coolidge. This matter is expected to be the dominating question until it is disposed of by acceptance as it now stands or in modified form. Friends of the soldiers' bonus insist that the bonus should be taken care of before the tax legislation so that the latter could be made to include provisions for meeting the bonus should it be granted. It is generally predicted, however, that the bonus will be given second place in consideration.

Important in the Mellon tax problem are the provisions governing taxes on incomes. Here are a few of the points favored by the secretary in this regard, as announced in a prepared digest of the bill:

Earned income, defined as wages, salaries and professional fees, is given a credit of 25 per cent of the amount of the tax attributable to the earned income.

The normal tax on the first $4000 of net income is fixed at 3 per cent, and upon the remainder of the net income at 6 per cent.

The surtax rates begin at 1 per cent on net incomes from $10,000 to $12,000; an additional 1 per cent for each $2000 of net income up to $36,000; then 1 per cent additional for the next $4000 of net income up to $40,000, and then 1 per cent additional for each $6000 of net income up to a total of 25 per cent at $100,000 and over.

Income taxes to be paid during the coming year will be on the present basis, covering incomes for 1923. It is understood that the forms to be made out by the taxpayer will be much more simple than in previous years, eliminating much of the red tape that has made the filling out of the blank a nightmare for the average person.

A bill was introduced in congress last week providing for the creation of a fund of $50,000,000 to be loaned to farmers of the north and west.

* * *

Mexican women are not unlike women elsewhere. They do not like war. They are holding a convention in Mexico City now with a view to outlaw war and bring about peace between the various warring factions of their country. At this time the rebellion against the administration of President Obregon continues, with uncertainty as to its outcome. The uprising is one of the periodic disturbances of that hot-blooded country.

* * *

Flour is lower now than it has been for seven years. In Spokane last week northwest patents reached as low as $6.20 a barrel, with hard wheat patents $6.60, or $1.55 and $1.65 a 49-pound sack respectively. The high price of recent years was reached in January, 1920, when northwest patents reached $13.20 and hard patents $13.80.

* * *

Twenty-seven federal prisoners, who were sent to prison for violation of wartime laws, were released under order of President Coolidge last week. Three were held for deportation to their foreign homelands. This will clear the prisons of all so-called war prisoners.

* * *

Henry Ford last week announced that he would not be a candidate for president on any party ticket against President Coolidge. He declared that President Coolidge was the logical candidate of the republican party and that he should be elected in order not to disturb the country's business. Mr. Ford did not say that he would not be a candidate if Coolidge were not nominated, nor did he intimate that he would be. Difference of opinion exists as to the effect of the Ford statement. Some believe that it eliminates him from becoming the candidate of a third party even should Coolidge not be the republican nominee. Some who charge President Coolidge with "big business" ideas believe that it brands Ford as not a progressivve but a bona fide representative of "big business." Some say that it clears the atmosphere and insures the nomination and reelection of Coolidge, while others declare it will do Coolidge injury and prevent his election.

* * *

Premier Poincare last week publicly admitted that Germany was unable to make cash reparations payments, but declared that this only rendered more imperativve the ruling of the economic situation in the Ruhr district by the French. He declared that during 1923 France had secured from Germany 5,000,000 tons of coal, and that had she not occupied the Ruhr she would have received none. He predicted more than 20,000,000 tons in 1924, since passive resistance by the Germans has ceased. He said France was willing to negotiate with Germany at any time, but that France would not allow such negotiations to replace any of the authority of the regularly established reparations commission.

* * *

King George of Greece was last week dethroned, pending the decision of the Greek general assembly as to the form of government best serving the people of that country. It is considered doubtful that the king will be permitted to return. He has gone to Rumania. His removal is the outgrowth of a popular civil revolution in that country.

Potatoes

Rank High in World Agriculture

The importance of potatoes in world agriculture is emphasized in a special report published by the United States department of agriculture. The world crop was estimated at more than 5,000,000,000 bushels last year, exclusive of Russia. In countries reporting to date, the 1923 crop is 79 per cent of that in 1922.

The region of greatest potato production is in northwestern Europe.

Germany is the world's largest producer of potatoes, the report states. Production this year is estimated at 1,200,000,000 bushels, as compared with 1,494,181,000 bushels in 1922. Poland ranks second as a spuds producer with an estimated production in 1923 of 896,022,000 bushels, as compared with 1,220,576,000 bushels last year. Production of 15 countries in the northern hemisphere this year is estimated at 3,089,036,000 bushels, as compared with 3,900,730,000 bushels in 1922.

More than 60 per cent of American exports go to Cuba.

The Netherlands leads as an exporter of potatoes, and supplies at least 25 per cent of the world's total exports, the department says. Last year Italy exported approximately 5,000,000 bushels, Canada 4,000,000 bushels and Denmark 2,000,000 bushels.

Farm Business and Markets Outlook

(Continued from page five.)

63,023,000 bushels, compared with 103,362 bushels in 1922.

The flax crop estimate was reduced in the December estimate to 17,429,000 bushels. Last year's total also was revised downward to 10,375,000. The average farm price on December 1 was reported at $2.11 this year in spite of the increase in the crop. Last year's figure was $2.12

The range of cash grain prices on December 19 was: Chicago—Wheat—No. 2 hard, $1.07 1-2@1.10; No. 3 red, $1.09. Oats—No. 2 white, 41 1-4@46c; No. 3, 43 1-2@44 1-4c; No. 4, 44@43c. Barley—58@75c. Rye—71 1-4@71 1-2c.

Seed and Feed.

The cloverseed market is dull and little activity is expected until after the holidays. Prices are lower than a week ago, as retailers are slow to provide for their spring requirements.

Deliveries of wheat feeds by flour mills are rather heavy, although the rate of production is not high for this season of the year. Fresh offerings are liberal from both domestic and Canadian mills. Demand is only fair, although a little improvement has been noted in the southwest.

Hay Market Firm.

The hay market is a stereotyped affair, firmness ruling at most points as a result of light receipts. Demand is limited in most cases, although alfalfa suitable for dairymen finds a rather broad market.

Break in Fresh Egg Prices.

Prices on fresh eggs declined still further last week. Receipts were heavy and advices from the country report increasingly heavy production in many sections. Cold weather may strengthen the market and check the decline at any time. Prices of storage eggs declined to the low point of the season, as the movement out of storage was slow and receipts of fresh eggs were plentiful.

Butter and Cheese.

Butter prices were unchanged last week, although the undertone gradually weakened. Stocks moved slowly as consumptive demand slowed down.

Arrivals of foreign butter last week included 1252 casks of Danish, 3248 boxes Argentine, 500 boxes Irish and 118,140 pounds Canadian butter. Much of this was offered at attractive prices compared with domestic, and with the exception of the best Danish, competed mainly with the medium grades of domestic which were in liberal supply and hard to move.

Declines in prices of cheese in producing centers were reflected in reductions on nearly all styles at distributing points of 1-4 to 1 cent last week.

Fruits and Vegetables.

Potato markets were steady to firm last week. Shipments from producing sections showed a further falling off and have been light long enough to affect receipts at the leading cities. Northern round whites are quoted at $1 to $1.15 per 100 pounds for United States No. 1 sacked and $1.30 to $1.40 in bulk at Chicago. Idaho sacked Russets are bringing $1.65 to $1.75. Maine, Idaho, Colorado, Minnesota, Wisconsin and Michigan are the leading shippers at the present time in the approximate order given.

Carlot shipments of apples declined slightly last week, but are considerably above normal for this season of the year. Prices were steady and the prevailing level probably has fully discounted the large crop. Shipments of barrel apples have declined more sharply from the high point in October than have boxed apples. New York Baldwins are quoted at $4 a barrel in eastern cities and midwestern Jonathans at $5 to $5.50 in Chicago. Washington medium to large extra fancy Delicious are bringing $3.25 to $3.50 per box, fancy $2.85 to $3.15 and Jonathans medium extra fancy at $2.25 to $2.50.

LATEST QUOTATIONS.

The Live Stock Market.

PORTLAND, Ore., Dec. 22.—Cattle—Beef steers, good grade, $7@8; medium grade, $5.50@7; common, $4.25@5.50; beef cows and heifers, good grade, $5@6; medium, $3.50@5; common, $3@3.50; canners and cutters, $1.50@3; bologna and butcher bulls, $2.75@4.25; feeder steers, $5@5.50.

Calves—Medium to choice, 190 pounds and down, $9@10; 198 to 260 pounds, $6.50@9; 260 pounds up, $4.50@6.50; cull and common, $3.50@4.50.

Hogs—160 to 200 pounds, medium, good and choice, $7@7.60; 200 to 250 pounds, $6.50@7; 260 pounds up, $6@6.50; packing hogs, smooth, $5@6.50; packing hogs, rough, $4@5; slaughter pigs, $6.50@7; feeder pigs, $6@6.90.

Sheep and lambs—Lambs, 84 pounds down, medium, good and choice, $10@11; cull and common, $7.50@10; yearling wethers, medium to choice, all weights, $6@9; wethers, $5.50@8; ewes, medium to choice, $3.50@6.50.

SPOKANE, Wash., Dec. 22.—Cattle—Prime steers, $7@7.50; good to choice steers, $6.50@7; medium to good steers, $5.75@6.50; fair to medium steers, $5@5.50; common to fair steers, $4.25@5; choice cows and heifers, $5@5.50; good to choice cows and heifers, $4.25@5; medium to good cows and heifers, $3.75@4.25; fair to medium cows and heifers, $3@3.75; canners, $1.50@2.25; bulls, $3.25@4; light veal calves, $8@9; heavy veal calves, $6.50@8; stockers and feeders, $4.50@5.50.

Hogs—Prime mixed, $7@7.25; medium, $6.75@7; heavies, $4@6.25; fat pigs, $6.25@6.50; stockers and feeders, $6@6.25.

Sheep—Prime lambs, $9.25@10.50; fair to medium, $8.50@9.25; yearlings, $6.50@7.50; wethers, $5.50@6.50; mutton ewes, $3@5.

SEATTLE, Dec. 22.—Cattle—Bid prices; Prime steers, $7.25@8; medium to good, $6.75@7.25; fair to medium, $5.50@6.75; choice cows and heifers, $4.50@5.50; feeders, $4.50@5.50; medium to good cows, $4@4.50; fair to medium, $3.50@4; calves, $4@10; canners, $1.50@3.25.

Sheep—Bid prices: Choice lambs, $9.50@11.50; common to choice, $7.50@9.50; ewes, $4.50@6.75; yearlings, $7.50@9.25; wethers, $6@7.25.

Hogs—Bid prices: Prime light, $7.50@7.75; smooth heavies, $5.75@6.75; rough heavies, $4.75@5.75; pigs, $6.75@7.25.

The Grain Market.

PORTLAND, Ore., Dec. 22.—Wheat—Hard white, Bluestem, Bart, 98c; soft white,, western white, 97c; hard winter, western red, 94c.

Today's car receipts: Wheat, 102; barley, 1; flour, 6; corn, 3; hay, 9.

Grain futures: Wheat—Bluestem,, Bart, December, January, February, 98c; western white, December, January, February, 97c; hard winter, northern spring, western red, December, January February, 94c.

Hay—Unchanged.

SEATTLE, Wash., Dec. 22.—Wheat—Bids: Hard, soft, western white, Big Bend Bluestem, 97c; hard and soft red winter, northern spring, western red, 94c.

Yesterday's car receipts: Wheat, 21; hay, 4; flour, 10; barley, 1.

SPOKANE, Wash., Dec. 22.—Wheat—Feed wheat, $36 ton. Oats—$38 ton; rolled, $40. Corn—$43 ton; cracked corn, $45. Barley—$38 ton;; rolled, $40. Bran $27 ton. Bran and shorts—$28 ton. Shorts—$32 ton.

WALLA WALLA, Wash., Dec. 22.—Bluestem, 86c; Club, 85c; Turkey red, 81c.

DAVENPORT, Wash., Dec. 22.—Bluestem, 78c; Gold Coin, 78c; Club, 78c; Turkey red, 75c; northern spring, 75c.

PULLMAN, Wash., Dec. 22.—Red, 77c; white, 80c.

LEWISTON, Idaho, Dec. 22.—Red, 79c; white No. 1, 81c.

COLFAX, Wash., Dec. 22.—Red, 77c; white, 80c; oats, $28 ton; barley,, $25.

General Produce.

PORTLAND, Dec. 22.—Butter—Cubes, extras, 45c lb; prints, parchment wrapped, box lots, 49c; cartons, 50c. Butterfat,, 50c, delivered Portland.

Eggs—Buying prices white hennery standards 40c; mixed color standards, 36@37c. Selling prices, Front street: Selects, 45c; candled ranch, 40@42c; pullets, 38c; storage white, 35c; storage colored, 30c; association selling price, cash at store, extras, 45c; pullets, 40c.

Cheese—Price to jobbers, f. o. b. Tillamook: Triplets, 30c; longhorns, 31c; loaf, 30c per lb.

Dressed meats—Veal, fancy, 12½c; pork, fancy, 10@10½c per lb.

Poultry—Hens, 15@21c; springs, 20c; ducks, 15@18c; geese, young, 15c; turkeys, live, fancy, 20@22c; dressed, fancy, 27@28c.

SEATTLE Dec. 22.—Butter—Unchanged.

Eggs—French ranch, 45c; mixed colors, 42c; pullets, 35c.

SPOKANE, Wash., Dec. 22.—Poultry, live weight—Hens, 4 lbs and over, 18c; light hens, under 4 lbs, 12c; springs, 16@20c; old roosters, 8c; young geese, 15c lb; spring ducks, 16c lb.

Fresh ranch eggs—$9.50@11.50; fancy poultry farm, $11.50@12.50; pullet eggs, $9@9.50.

Hides, Pelts, Wool, Etc.

Hides—Salted hides, all weights, 4c; green hides, all weights, 3½c; salted bulls, 4c; green bulls, 3c; salted or green calf, 10c; salted or green kip, 7c; hair-slipped hides and skins, half price; flint dry hides, 9c; dry salted hides, 5c; culls and damaged, half price. Horse hides, green or salted, each $1; colt hides, each 25c; dry horse with tail and mane on, 50c.

Pelts—Flint dry sheep pelts, long, 20c; flint dry sheep pelts, short, 10c; flint dry sheep pelts, pieces, 10c; flint dry shearings, each 5 and 10c; dry salted pelts, 15c; salted pelts, longs, each, $1@1.50; salted pelts, short, each 50c@$1; salted goats, long, $1@1.50; salted goats, short, each 50@75c; dry goats, long, per lb, 12c; dry goats short each 10@20c; goat shearings each 5@10c.

Mohair—Long staple 30c per lb; short staple, 20c lb; burry, 15c lb.

Cascara bark—Peel 1922 or older, 12c; new peel, 1923, 11c per lb.

Tallow—No. 1, 4½c; No. 2, 3½c lb; grease, 2½c lb.

Oregon grape root—Per lb, 4c; delivered Portland.

Hops—1923 crop, 18@23c lb.

Wool—Valley wool, fine, 28@30c; medium, 28@30c; coarse, 25@27c; Cotswold and braid, 20c; matted, 15c; eastern Oregon, 28@33c.

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The goose we have rarely with us today, but surely the same could not be said before the year 1803, that in which the steel pen was introduced.

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LET US FIX YOUR WORN FURS

freshen, repair and reshape them if needed. Furs are very light weight, therefore it would cost but little to send them in to us by Parcel Post and get our estimate of cost; then we will hold them aside awaiting your decision. If you say "go ahead," very well; we will do so and hold them free of storage until you want them. If you say "no," we will return them post-paid.

Our illustrated catalog and style book combined gives a lot of useful information. It tells how to take off and care for hides. About our safe dyeing process on cow and horse hides, calf and fur skins. About dressing fine fur skins and making them into neckpieces, muffs and garments. About taxidermy and Head Mounting.

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Read the "Want Ad" page this week for good offers of all kinds.

Bits of Fun for Everyone

Right.

"If you cut the lungs of a dog open, what would you find?"

"The seat of his pants."—Selected.

Or Any Other Maiden's.

"So that's Mrs. Jones, is it? By the way, what was her maiden name?"

"Her maiden aim was to be married, of course."—Gargoyle.

English as She's Spoke.

A woman from Neosho Falls dropped into John McCallon's emporium yesterday and inquired:

"Is this a second-hand store?"

"Yessum," said John.

"Well," said the lady, "I want one for my watch."—Burlington Republican.

She Knew It.

William—Are you sure your wife knows I'm going home to dinner with you?"

Johnson—Knows! I should say so! Why, dear man, I argued with her about it this morning for half an hour!"—Los Angeles Express.

Unclassified.

A violinist entered a little music shop in London. "I want an E string, please," he remarked to the man behind the counter.

Producing a box the latter said: "Would you mind picking one out for yourself, sir? I 'ardly know the 'es from the shes."—Mink.

Up-to-Date Music.

Elder Watkins of Muddy Hollow, just back from the city, was telling his wife of the church he had attended.

"Did you know any of their songs?" ashed she.

"No," replied the elder, "they didn't sing anything but anthems."

"Anthems!" exclaimed his wife. "What on earth is an anthem?"

"Well," answered the elder. "I can't tell you just exactly, but if I'd say to you, 'Betsy, the cows are in the corn,' that wouldn't be an anthem. But if I'd say 'Betsy—Betsy—Betsy, the cows—the cows—the Holstein cow, the muley cow, the Jersey cow, the spotted cow—all the cows are in—are in—the corn—the corn—corn—corn—corn. Ahmen!' why that'd be an anthem."—The Open Road.

Latest High Class Patterns for the Home

Please order the patterns you desire at least two or three weeks before you wish to use them. Desiring to obtain the latest high-class patterns for its readers, THE FARMER has made arrangements to have them sent direct from the east, and under present mailing conditions it takes about that time for them to reach you

4592. Misses' dress. Cut in three sizes: 16, 18 and 20 years. A 16-year size requires two and five-eighths yards of 54-inch material. The width at the foot of the skirt is two and five-eighths yards. Price 10 cents.

4600. Boys' suit. Cut in four sizes: 8, 10, 12 and 14 years. A 10-year size requires four and one-fourth yards of 36-inch material. Price 10 cents.

4598. Girls' dress. Cut in four sizes: 8, 10, 12 and 14 years. A 12-year size requires four yards of one material 40 inches wide. Price 10 cents.

4071-4542. Ladies' costume. Blouse 4071, cut in seven sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. Skirt 4542, cut in seven sizes: 25, 27, 29, 31, 33, 35 and 37 inches waist measure. To make the costume for a medium size requires eight and one-half yards of 36-inch material. The width of the skirt at the foot is three and one-half yards, with plaits extended. Two separate patterns, 10 cents for each pattern.

4585. Ladies' house dress. Cut in seven sizes: 36, 38, 40, 42, 44, 46 and 48 inches bust measure. A 38-inch size requires four and five-eighths yards of 36-inch material. The width at the foot is two yards. Price 10 cents.

3854. Girls' dress. Cut in five sizes: 6, 8, 10, 12 and 14 years. A 10-year size requires two and one-half yards of 44-inch material. Price 10 cents.

4603. Child's dress. Cut in four sizes: 4, 6, 8 and 10 years. An 8-year size requires two and one-half yards of 36-inch material. Price 10 cents.

4588. A good work apron. Cut in four sizes: Small, 34-36; medium, 38-40; large, 42-44; extra large, 46-48 inches bust measure. A medium size requires four yards of 27-inch material. Price 10 cents.

4201. Child's rompers. Cut in four sizes: 2, 3, 4 and 5 years. A 3-year size requires two and one-half yards of 27-inch material. Price 10 cents.

4005. Ladies' slip. Cut in four sizes; Small, 34-36; medium, 38-40; large, 42-44; extra large, 46-48 inches bust measure. A medium size requires five and one-half yards of 27-inch material. For flouncing as illustrated two and three-eighths yards 15 inches wide will be required. Price 10 cents.

4582. Ladies' blouse. Cut in six sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. A 38-inch size requires two and one-half yards of 40-inch material. Price 10 cents.

4595. Ladies' skirt. Cut in seven sizes: 25, 27, 29, 31, 33, 35 and 37 inches waist measure. A 29-inch size requires three and one-half yards of 40-inch material. The width at the foot is about one and seven-eighths yards. Price 10 cents.

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Be sure to give the pattern number and the correct size.

The Red Lock

(Continued from page fourteen.)

floor, rusty red, and huge enough and deep enough to swallow a stick of cord wood whole.

Everything was free, each family that sent children to school bringing a well-filled basket. And such a feast as the housewives of the neighborhood furnished forth could have been found nowhere else in the land except there in the great Flatwoods that lay, warped and wild, along the north bank of the upper Wabash.

Uncle Nick was there—which meant that things were not likely to drag, for he was the wisest, wittiest, and, as he himself said, "the no-accountest" man in the Flatwoods

Aunt Liza, the "other half" of Uncle Nick, was there too. But if he had an oversupply of jollity in his disposition, she had a far greater oversupply of grimness. Aunt Liza was the one person in the world on whom Uncle Nick's wit fell flat.

Reverend Caleb Hopkins arrived, as he had promised—he and Texie and Mrs. Mason. He had been anxiously awaited, since it had long been the custom to have the minister sit at the first table and launch the "festival" with a blessing.

Zeke Polick—likewise by ancient custom, a sort of self-appointed master of ceremonies—his sharp hatchet face scrubbed shiny with home-made soap perfumed with sassafras, the two tufts of whiskers bristling with importance at either corner of his bony chin, pounced on the preacher and hurried him to the head of the table.

Twenty years before, Zeke's coat, by the exercise of nimble imagination, might have been said to fit. But Zeke had shriveled and the coat hadn't. As he stood introducing the tall young preacher, swinging his thin arms in gestures vigorous if not eloquent, the coat cut more of a figure than Zeke. The crowd laughed—at the coat and not at the speaker. But the voluble postmaster applied the applause where it would do the most good and seized the chance to make a full grown speech—such a speech as only a Zeke Polick could make with impunity in his home town.

The preacher's remarks were far shorter And no speaker ever better improved his opportunity. The speech ended while the audience was still hungry to hear more—a trick that many a less brilliant speaker might well copy. He turned back to the table and raised his hand. The two long rows of youngsters stood in awkwardly decorous expectancy. The low tones of the solemn grace fell softly impressive; the minister resumed his seat; a deep breath swept down the two rows of hungry urchins; and—the "festival" was on.

A good length of the candles in the windows had burned away when Jack, sauntering aimlessly in the crowd, found himself, for the first time that evening, face to face with Texie, where she leaned over Mrs. Mason's chair.

The girl looked up and smiled. He was raking over his scant stock of words for one that would fit the occasion—words being about the hardest things he had to reckon with—when the young preacher, suave and affable, by odds the most popular man in the house, joined the group.

Through the mind of Jack Warhope flashed a comparison between the preacher and himself. The comparison showed dead against him. For the first time in his life he was half ashamed of his ungainly clothes, of the great limbs, the massive chest and shoulders—the "six-foot-three" of bone and brawn upon which the Flatwoods had exhausted its utmost imagination, its ultimate romance, when it bestowed the title: Big Jack.

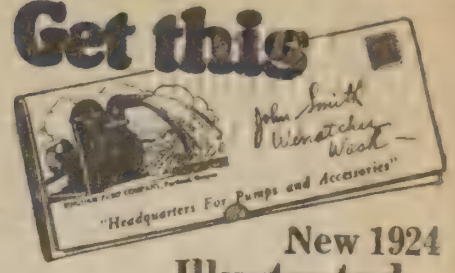
Of a truth, the comparison between the two men could not well have been more striking. The young preacher was a very handsome man. The beard and spectacles, the mass of hair falling about his ears, seemed to invest him with an air of exquisite mystery—an air that has such power to compel the attention of women. He might have been a great tragic actor, had he turned his talents to the stage instead of to the pulpit.

The young woodsman, on the other hand, with his uncouth and ill-fitting clothes, though far from plain, owed whatever attractions he possessed to his magnificent physique, a bold regularity of features, and an honest, open frankness—a man's man.

With a jerky, elaborate bow to Jack and a light remark or two about the seining party—which he might just as well have left unsaid—the young preacher turned to Texie.

"I was just hunting for you, Miss Texie. They want you at the punch bowl."

(To Be Continued.)



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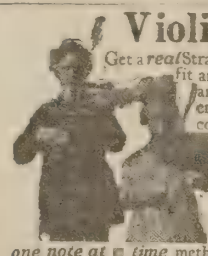

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may be offered in this week's want ads at a bargain. It's a good idea to look them over every week

Julia Leslie is 9 years old. She lives in central Washington, in Chelan county. Julia will have a birthday on the 24th of May. She likes her teacher very much.

Dear Aunt Nellie: May I join the Corner? I live on a farm and we have horses, cows, one cat and some chickens. I go to school and have five subjects. I like geography and reading the best.—Ernest Clark, in county, Wash. (Welcome to the r, Ernest.—Aunt Nellie.)

Aunt Nellie was pleased to receive a nice letter from Esther Boos. Esther has had her hair bobbed now and her sister has, too. They both have bangs and like them very much. Write again, Esther. This cousin is 10 years old and lives in Adams county, Wash.

"I am going to school and am in the fourth grade," writes a cousin from Chelan county, Wash., whose name is Ellis Sawyer. Ellis says he has a real nice teacher, and there are eight pupils in the school. He was at his friend's party and they had a fine time. Aunt Nellie was pleased to receive Ellis' letter and will look for another soon.

Loyd Fox celebrated his 7th birthday on December 8 by writing to Aunt Nellie, and we welcome Loyd to the Corner. He goes to school in the bus every morning. We were sorry to learn Loyd had the measles, but glad he is better now. Write again. Asotin county, Wash., is where this new cousin lives.

Aunt Nellie was pleased to hear from Jessie and Isabel Pettichord, two cousins from Whitman county, Wash. Isabel says she finds the letters, stories, jokes and riddles so interesting. Jessie has been unable to find a twin yet. She was 13 years old on August 4. Jessie has her hair bobbed and likes it. Write again.

for some
hear from
Wash., is
where she lives. She was 11 years old on December 13. Write again, Anna.

Birthday Greetings

THURSDAY, December 27—Doris Jones, 11 years old; Marie Wichert, 11.

FRIDAY, December 28—Opal Bridges, 10 years old; Bertha Osborn, 10.

SATURDAY, December 29—Lola Adam, 9 years old; Eunice James, 8.

SUNDAY, December 30—Lucille Jackson, 11 years old; Freida Klippert, 11; Doris Munson, 10; Sigrun Agnes Runolfson, 11.

MONDAY, December 31—Evelyn Lorraine Cronawert, 11 years old; Lester A. Piper, 7; Nelle May Shephard, 9; Caroline Wesch, 9.

TUESDAY, January 1—Elsie Crabb, 11 years old; Muriel Daugherty, 7; Irene Haverman, 8; Martha Keiski, 8; Ernest Michlund, 11; James Miller, 8; Maude Warfield, 10; Ernest Verner Wicklund, 11.

WEDNESDAY, January 2—Matilda Anderson, 9 years old; Vallborg Carlson, 9; Bert Florce, 10; Roy Linden, 8; Gertrude Stark, 7.

LETTERS WELCOMED BY AUNT NELLIE.

Among recent letters received by Aunt Nellie are those from cousins whose names follow. And these will be published each week in regular edition of THE FARMER and will appear from time to time in The Farmer:

Helen Simmons, Mabel Hamilton, Mina Hampton, Esther R. Neff, Anna Ajax, Hugo Hakala, Annie Coons, Ellis Sawyer, Loyd Fox, Jessie Pettichord, Isabel Pettichord, Julia Leslie, Ernest Clark, Esther Boos, Hazel Schafer, Ora [illegible] Nelda Jackson, Helen Johnson, Carl Wildermuth, Otto Roth, Emory Shiplet, Nellie [illegible]

BEDTIME STORIES

By THORNTON W. BURGESS.

THE MOST WONDERFUL JUMPER.

It didn't seem possible to the little meadow and forest people watching the jumping match by the tall pine on the edge of the green forest that there could possibly be any better jumpers than Jumper the hare and Lightfoot the deer. There wasn't one but right down in his heart envied Jumper and Lightfoot. So when Jimmy Skunk announced that he would introduce the greatest jumper of all there was a great deal of wondering, and not a few shook their heads in doubt. Jimmy made a little speech in which he told them the last one who would jump was bashful and timid, and therefore he hoped they would one and all keep very still.

"Now everybody watch the top of that tall pine," he commanded.

Of course, everybody looked up at the top of the tall pine. They couldn't see any one there, and they didn't know why they should look up in a tree when the other jumpers had been on the ground, but they looked as they were told to do.

"Jump!" called Jimmy Skunk.

Then out from the top of the tall pine tree sailed something or somebody so small that in the dusk they could hardly see what or who it was. Away through the air it sailed, over the mark Jumper the hare had made, over the mark Lightfoot the deer had made, and on and on, coming nearer and nearer to the ground until, with a scratching of tiny claws, it landed on the foot of another tall tree.

"Timmy the flying squirrel!" cried Bobby Coon. "Hurrah for little Timmy! Why didn't we think of him before?"

"But he didn't jump, he flew!" protested Peter Rabbit.

"No such thing! He jumped!" declared Jimmy Skunk. "Use your eyes, Peter. Now watch if you see any wings."

Timmy had climbed clear to the top of the tree he had landed on, and as Jimmy spoke he sailed out from the top and back toward the tall pine. Down, down, he

"Now everybody watch the top of that tall tree."

came in a long slant right over Peter's head. Peter stared with all his might. Timmy's legs were stretched out just as far as he could stretch them, and while there seemed to be something between them which made him very broad and flat, he certainly didn't have wings. Down he sailed and landed on the foot of the tall pine and at once scrambled to the top. He had gone almost 10 times as far as Lightfoot had jumped.

Right away all the little people began to talk at once. Some said that it wasn't a jump at all, but that Timmy flew. Others said that it was a perfect jump, and that Timmy was the greatest jumper in the world. While they were talking about it Timmy jumped again. All the tongues stopped wagging so that their little owners might watch him. The minute he landed the tongues began to go again.

"Well, Peter, did he or didn't he jump? You know you are the judge," said Jimmy Skunk.

Peter scratched his head in a troubled way. "I suppose if he hasn't got wings he must have jumped. "It is just as if he slid down on the air, but how can anybody slide on air?"

"Easy enough," replied Jimmy. "Doesn't Ol' Mistah Buzzard slide down out of the blue, blue sky? And doesn't Redtail the hawk do the same thing?"

"But they have wings and you said that Timmy hasn't wings. That's different," replied Peter.

"Perhaps if you ask him Timmy will tell you how he does it," retorted Jimmy. He certainly hasn't got wings, and you must admit, Peter, that there are two better jumpers than your cousin, Jumper the hare, about whom you have boasted so much."

"I'll never boast again," declared Peter.

Just then Timmy jumped again, and this time Hooty the owl sailed after him. But Timmy reached a tree in safety and disappeared in the green forest, and thus ended the great jumping match.

(Copyright.)

Make It Attractive

By Demarest Glentworth Shumaker.

A young lady once remarked that the first thing she noticed about any house was the curtains at the windows, and that she judged the housekeeper somewhat by such draperies. If this item might be the gauge of the housekeeper, what about the impression the farmkeeper produces by the condition of the entrance to his buildings?

One day during my childhood I was riding with some older people who were critically observant of the driveways and barnyards of the farms we were passing, the most required to meet their approval being that both be well sodded and free from litter. With others it is nicely balanced flowers and trees or shrubbery.

One will always turn to take a second look at an entrance to a drive that is a little out of the ordinary. The lattice fence, just now so popular, adds much to the appearance of the drive and lawn. Fence rows kept free of grass and weeds is a wonderful improvement. The fences about the buildings, if kept well painted, are attractive, too. People who buy property and improve it so it will sell at an advance, know the value of paint.

Trees along the drive and about the buildings are worthwhile. It is not always possible to have many flowers, yet one can always have a few, and if these are well chosen they add to the beauty of the premises.

It is not necessarily the expense, but the results achieved by our efforts that increase our pride in our homes as well as improve the looks of one's community. May I be permitted to tell what we are doing in the way of fixing up our own drive? Out of cobblestones we are making entrance posts that are substantial, but not too ornate. The fence along the drive is of lattice construction, and over the two gates that open into the drive are pergolas, as we like them better than the older-fashioned arches, and they also go better with the lattice fence. With fence and pergolas painted the same as the trim of the house, they are distinctive, yet in keeping with the rest of the premises.

Two Country Boys

The late President Harding started as a boy doing chores on the farm.

His family then moved to town and he did chores there.

From 14 to 17 years of age he was in high school.

From 17 to 19 he was a typesetter, country school teacher, law student and insurance agent.

At 19 he was reporter and afterward owner and editor of the Marion Star.

At 35 he was state senator.

At 39 lieutenant governor of Ohio.

At 50 United States senator.

At 56 he was president of the United States—the highest office to which any man can attain.

* * *

President Calvin Coolidge's first job was doing chores on the farm. He attended the country school and afterward a preparatory school away from home.

Between the ages of 20 and 23 he attended college, working his way part of the time. Every vacation was devoted to earning his living.

Between 23 and 25 he was an apprentice in a law office.

At 25 he was a lawyer.

At 27 he was city councilman.

At 28 city solicitor.

At 32 county clerk.

At 35 state representative.

At 38 mayor.

At 40 state senator.

At 44 lieutenant governor.

At 47 governor.

At 49 vice president.

At 51 president of the United States.

Diet Is Important

"Our diet plays an important part in our health, and we are now finding that proper eating prevents diseases and even early aging. Many children eat too much sugar with their meals, either on cereals, which in some cases is eaten without milk, or by the use of too much sirup on hotcakes. Excessive use of sugar is apt to result in diabetes later on," according to Mary Sutherland, nutrition specialist of the state college extension service.

"Children especially should have a greater variety of foods, since they need more bone and muscle-building materials than do older persons. Some people get the impression that when a child is underweight and under-nourished that it is because not enough food is being eaten. They should bear in mind that a greater variety of foods will do much in supplying the necessary nutrients.

"Since the normal child grows very rapidly he needs large amounts of bone-building material to produce a strong frame. Too much emphasis can not be laid on the use of milk for this purpose, since one quart of milk contains as much calcium as 28 pounds of meat, 23 pounds of potatoes, or nine pounds of white bread. There are also life-giving vitamines in milk which assist in many ways in nourishing the body.

"Each child should have at least one quart of milk a day in some form or other. As far as lime is concerned, one pint of milk, buttermilk or skim milk will guarantee the right amount for the building of the bones and teeth, but one pint will not provide the greater needs for growing children. If the children do not care to drink as much milk as they should have, it should be given them in some other form, such as cup custards, chocolates, junkets and puddings in which milk is used.

"The use of vegetable is also important, and should not be overlooked. They can often be made more palatable by the use of white sauce, which, by the way, is another way which milk can be used.

"Such vegetables as cabbage, carrots, parsnips and the like can be served with white sauce, and it takes but a few minutes to prepare them in this manner. Cabbage is more digestible when sliced and cooked only for a few minutes than where boiled for a longer time. If served with white sauce it makes a very palatable dish.

"While bread and milk served in a bowl is an old-fashioned dish, it is something that could be used more in our diets today. In fact, if we ate more bread and milk we would have less digestive ailments."

STRAWBERRY PLANTS.

When planting strawberries only new plants, that is, those less than one year old, should be used, and these should be from the first sets rooted from runners.

Tractors Cultivate Huge Orchard

This picture does not show a battery of miniature tanks ready to go over the barbed wire entanglements of No Man's land. On the other hand, it is a picture of a battle scene of peace times. These little "track-layers" are used to pull cultivators in the 4000-acre orchard of the Bert Johnson Orchards, Inc., in the state of Arkansas. This orchard is famed for the peaches which it produces. Of the 4000 acres, 2500 are in bearing trees and the remaining 1500 in young trees that will soon be pro[illegible].

VETERINARY

By DR. S. B. NELSON.

Poor Appetite—I have a young cow fresh five weeks ago that suddenly lost her appetite. I have been feeding carrots, mill run and good, clear clover. She has salt and clean, running water. W. J. A.

Give the cow one and one-fourth pounds of epsom salts in four quarts of water. Then in addition to that I think it would be well if she could have a little tonic for a few days. Possibly as good a tonic would be one ounce of tincture of gentian in one pint of water daily.

Goiter—I have a hound pup 7 months old that has a goiter. Is there anything that I can do for him? J. D. H.
Renton, Wash.

Apply iodine ointment U. S. P. to the goiter morning and evening. Give the pup one-fourth of one grain of iodine in a little piece of meat night and morning.

Itch—I have a cow that began losing flesh about a year ago. She scratches and licks herself very much. I washed her with stock dip in May and she lost her calf a month later. She has lots of milk, but I dried her up and gave her special care. She is better, but still itches. She is with calf. F. J.
Chewelah, Wash.

Give your cow two tablespoonfuls of artificial Carlsbad salts once daily. I would not use any external treatment for the itch until after she calves. If the itch does not disappear after she calves I shall be glad to advise you.

Cough—I have a horse that coughs, mostly in the morning after having eaten hay during the night. I feed her oats in the morning, turn her on pasture during the day and feed a little hay in the evening, sprinkled with water.
Custer, Wash. M. C. H.

Give the horse one ounce of Fowler's solution of arsenic, morning and evening for 10 days to two weeks. Let her run two weeks and repeat.

Growth on Hock—I have a cow that has a growth from her hock resembling a parchment tobacco pouch. It is soft to the touch and appears to be full of fluid and the size of my fist. She is not lame nor seems to be bothered in any way. What can I do to get rid of this blemish?

Another cow 9 years old, milking, has trouble with her left hind leg. At times she has trouble raising her foot to step. She has to move her leg in a half circle to set her foot down and a distinct snap is heard. She is also troubled with numerous warts on her teats. What can I do to relieve her?
Kent, Wash. G. L. G.

Do I understand your question correctly, that the growth is a thin parchment pouch-like affair that hangs down from her hock? If it does I suggest that you tie it off short to the hock, tying it very tightly with a strong linen thread or string so as to cut off the circulation feeding it and allow it to slough off. I can not say that you can operate it because I don't know where it leads to, and when it drops off it is possible that the lips of the wound will have grown together so as not to cause you any difficulty.

As to the second cow, I think she is injured at the hip. You do not say how long it has affected her. It limits my opportunity to advise treatment. The fact that she swings the leg in a circle practically locates it in the hip, and since she swings it out it would indicate the trouble to be in the lower part of the joint. If she swung it inward it would indicate it as being in the upper part of the joint and vice versa, so as far as the leg bone fitting into the joint socket is concerned, I do not know of anything but a good plaster put on the hip and causing a cooling irritant effect that would be of value.

Regarding the warts on the cow's teats, I would suggest that you snip them off with a dull pair of scissors and then apply a little tannic acid to the stump, morning and evening. If, however, the warts are flat ones, I would suggest that you apply a little of the following prescription four or five times a day to the warts, applying the medicine rather liberally: Chloral hydrate, one and one-half drams; acetic acid absolute, one and one-half drams; salicylic acid, one dram; spirits of ether, one dram; collodion, four drams.

Wire Cut—I have a horse that was cut in the wire on the hind leg about seven days ago. Can you tell me what to do for it? T. J. M.
Colton, Wash.

Use the following treatment if it is in the muscles of the hind leg: Lead acetate, one ounce; zinc sulphate, one ounce; water, one pint. Apply morning, noon and night.

Wire Cut—I would like to know the best treatment for wire cut. I have a horse which was badly cut about a month ago and it does not seem to heal. He was fat at the time, but is getting poor. He was cut to the bone just inside the hock a little below the joint. It has run a good deal for about a week. Is the horse liable to be left with a stiff leg? E. B.
Nespelem, Wash.

It appears to me that your horse is in a very serious condition, because of the seriousness of the cut and the location of the injury. If he was cut to the bone and the bone is injured, the chances are that if it heals on the outside it may break and run again, because of the diseased bone inside. If the joint is not open and the infection does not get into the joint, the chances are good for your horse's recovery, but it will take a long, long time. I would think that his chances are three to one that he will have a stiff leg if the injury is pretty close to or at the joint. It is quite possible that it would be best for you not to try to inject any material into the wound, because if the joint is not open you might accidentally injure the joint and thus make the case a much more serious one than it is at the present time.

I would suggest that you simply keep the outside of the leg clean and paint the wound and around the wound with tincture of iodine morning and night, unless it begins to blister too severely, then stop for a few days and give it rest. Give your horse rather nourishing food, because these bone injuries draw on their vitality very heavily.

News for Breeders

CLACKAMAS GUERNSEY BREEDERS.

Guernsey breeders of Clackamas county, Ore., held their sixth annual meeting at Oregon City, December 12. There was a good attendance and two interesting addresses were listened to. E. J. Mahy, who recently came to the county from England with a fine Guernsey herd, mostly bred on the island of Guernsey, told in an interesting manner of the work done there and customs on the island. State Senator F. J. Tooze spoke on dairy legislation, giving particular reference to the anti-margarine bill passed by the last legislature and referred to the people. He strongly urged farmers to use every possible influence for the bill.

Officers elected are John Gaffney, president, Oregon City; R. I. Seely, Sherwood; J. T. Beckley, Boring; A. E. Shibley, Springwater, and A. I. Hughes, Oregon City, vice presidents; C. B. Sprague, secretary-treasurer, Estacada.

YOUNGQUIST'S NEW HERD BULL.

A new herd bull has been purchased by the Youngquist Brothers of Mt. Vernon, from Alec Todd & Sons of Yakima. The animal is only 10 months old, and the name Cascade Jessie Piebe has been applied for. He is a son of Cascade Nabob, who is out of Cascade Jessie, the latter being a dam of the young bull's sire. This close in-breeding runs back three times to Johanna Ruth Fayne.

The new bull will be used as junior herd sire, and will be bred onto the daughters of Lacona Pontiac Segis, the present herd sire at the Youngquist farm. There are at present 50 head of both old and young registered Holsteins on the farm, and from 20 to 25 head are milking the entire year.

MUNNS ADD TO HERD.

Two registered Jersey females have been purchased by Munn & Son of Olympia for their herd near Olympia. Dahlia Forest Girl has won two gold medals in succession the last two years for production, with records of 773 and 736 pounds of butterfat per year, respectively. The other, Firwood Holly's Pet, is due to calve soon for the first time. She combines two of the two most popular strains in the country, St. Mawes and the Stoke Pogis families.

WILL USE BULL JOINTLY.

J. W. Berns and Edward Valentine, both of Wynooche, purchased a new Holstein herd sire from the Beal's herd at Tillamook, Ore. The bull is an exceptionally good individual and carries much the same blood as Tillamook Daisy, the grand champion cow at Portland. The bull will be owned in partnership by both men and used on both herds.

BUILDS SHORTHORN HERD.

A pure bred registered milking Shorthorn bull and a registered heifer were recently purchased by George Spaulding from his two sons, Spaulding Brothers of Elma. Mr. Spaulding expects to enlarge his herd of milking Shorthorns as the opportunity permits.

BUYS WINNING JERSEY.

O. I. Compton of Wishkah recently purchased a first prize junior heifer calf from Parker Askew of Elma. The animal, a Jersey, won at the Grays Harbor county fair in September.

BUYS HOLSTEIN CALF.

A registered Holstein bull calf was recently purchased by T. O. Fenstermaker of the Satsop valley from Ira Smith of Montesano.

THICK, SWOLLEN GLANDS

that make a horse Wheeze, Roar, have Thick Wind or Choke-down, can be reduced with

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Registered Guernsey Calves Both sexes [illegible] reduced prices. Show quality; heavy producers. Show bull, ready for service; dam imp. Photo on request. WILLOW WOOD GUERNSEY FARM, Filer, Idaho.

29-Lb. Holstein Bull A splendid Pontiac bred proven sire, 5 years old. A calf getter, thoroughly staff broke and guaranteed right, $150.
H. F. KOSTER, Genesee, Idaho.

Rambledale Rambouillets can spare a car of registered ewe lambs and car of ewes of highest quality to lamb in February and March. Bred for wool and mutton, the type that made the Rambouillet famous. Rambledale Ranch.
E. R. HOBBS, Castleford, Idaho.
TWIN FALLS COUNTY, (Via Buhl.)

Ioka Farm Durocs
Home of Jumbo Giant, grand champion Oregon state fair and Pacific International, 1923. Bred gilts and choice weanling pigs, on approval. Good ones.
A. N. DOERFLER, Silverton, Ore.

Duroc Bred Gilts Champion breeding, March farrow, fall weaned pigs and service boars. Tall, long, [illegible] oted and good color. Prices reasonable.
H. C. COMPTON, Boring, Ore.

Poland Chinas Bred gilts, one or carload. Best [illegible] either sex.
[illegible] Ore.

Poland Chinas That Win
[illegible] bred gilts, all [illegible] Satisfaction or money back.
H. J. STILLINGS, Herm[illegible]

Pioneer Hea[illegible] Berkshires
Bred sows and g[illegible] for sale.
A. M. PRUITT, [illegible], Idaho

Have you glanced over the farm [illegible] on the "Want Ad" page?

HOLLYWOOD HOLSTEINS
Registered Holstein bull calves out of yearly record dams. Excellent individuals, well marked, thrifty. By getting them young you can get them cheap and [illegible] as much money as when you buy yearlings. We have [illegible] bulls that have sired daughters with records up to 1508 pounds butter in a year. Each of our last two herd sires has sired one or more world record daughters. Sire from the famous Hollywood herd that was the highest record large herd in the highest record [illegible] in the United States last year. A few heifer calves suitable to mate [illegible] above bulls.
A CALF OR A CARLOAD.
HOLLYWOOD FARM (Near Seattle) Hollywood, Wash.

"The Best Berkshire Boar

I ever saw."—Judge Haynes.

Sows bred to this famous boar, or daughters bred to other popular, big type boars in our herd, at very reasonable prices.

"Ready-for-service" boars and weaned pigs are waiting your orders for prompt delivery

RIVER BANKS MASTADON NO. 310877.
Grand champion Oregon state fair, 1923.
Grand champion Pacific International, 1923.
Sire of grand champion pen of barrows over all breeds, Pacific International, 1923.
RIVER BANKS FARM, Grants Pass, Ore.

Registered Duroc-Jersey Bred Sow Sales
Starting the Southern Idaho Sale Circuit, January 9-10-11, 1924.

W. H. Rambo, Thomas Parks and J. P. Hunt will sell on the above dates the best lot of sows that have ever been offered to the public.

On January 9, 1924, Thomas Parks will sell at Buhl, Idaho, 27 head of sows and gilts bred to or sired by Orion Joe Jr., Buhl Pathfinder and Buhl Constructor.

On January 10, 1924, J. P. Hunt will sell at his farm two miles east of Buhl, Idaho, on the state highway, 27 head of sows and gilts bred to or sired by Gem Sensation Leader.

On January 11, 1924, W. H. Rambo will sell at Clover Leaf Ranch, three miles west of the southwest corner of Buhl, Idaho, 40 head of sows and gilts bred to or sired by Idaho Sensation, Big Commander, Orion Joe and Gold Finder.

These sows and gilts and the boars they are bred to are the direct descendants of the very best of the breed.

For catalogs write to
COLS. AMOS J. MILLER, Caldwell, Idaho,
and R. E. HOPKINS, Buhl, Idaho,
or W. H. RAMBO, THOMAS PARKS and J. P. HUNT, Buhl, Idaho.

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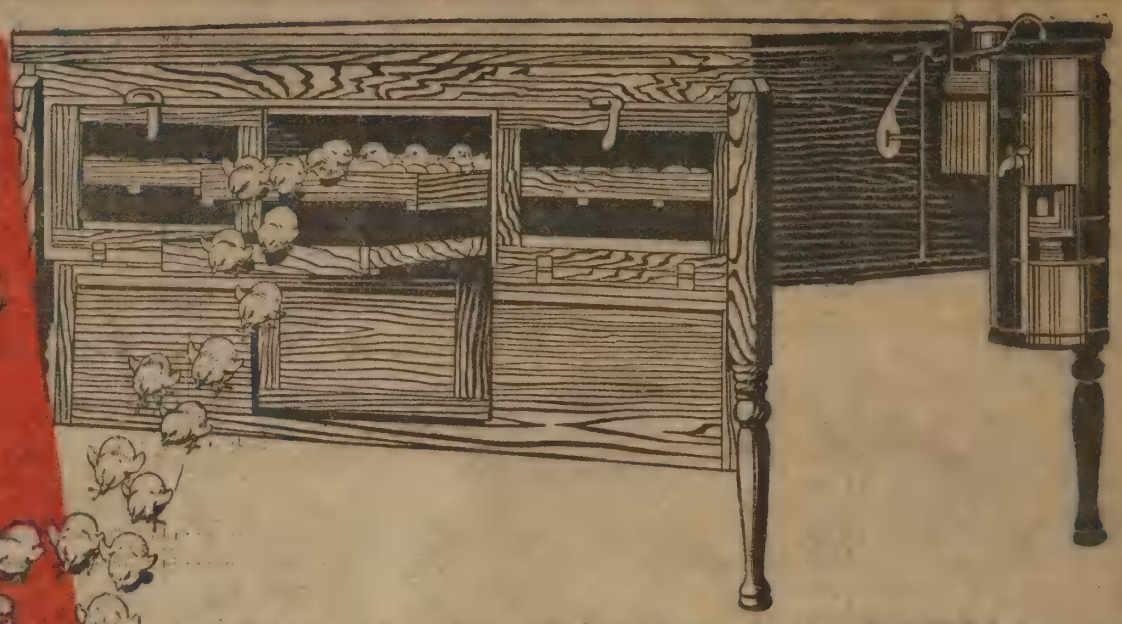
EXPERIMENT STATION
U. of A. ILL

Chicks that Live after they are hatched

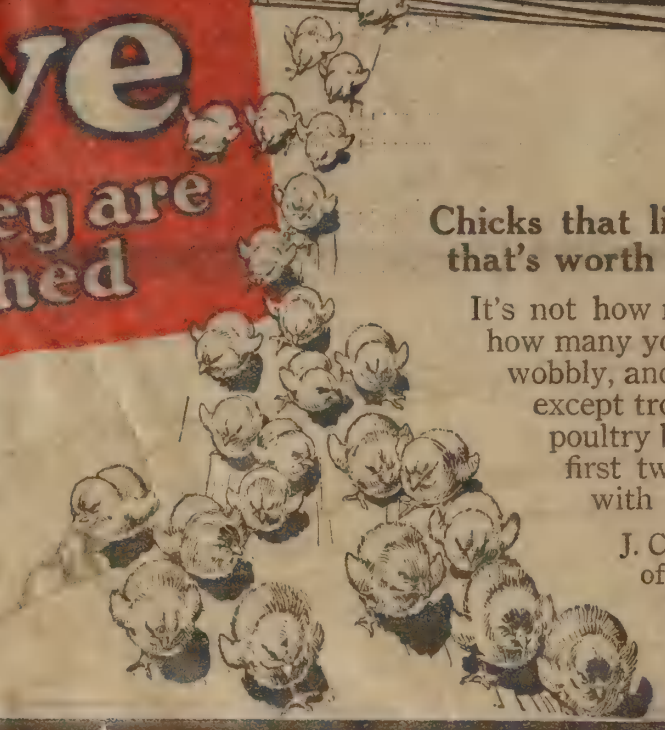


Chicks that live and grow—that's the only kind that's worth hatching.

It's not how many you hatch that counts after all; it's how many you raise. Chicks that hatch out weak and wobbly, and live but a few days, mean nothing to you except trouble and loss. They make one sick of the poultry business. Most of the chicks you lose in the first two weeks die because they did not hatch out with enough vitality or strength for a good start.

J. C. Coulter, Sardis, Ohio, summed up the experience of thousands of Queen users when he wrote us: "I have had my Queen 9 or 10 years and have made several 95% hatches. Made as high as 98%. It is easy to run—almost runs itself—**and chicks live after they are hatched.**"

Sizes:
70-Egg
and up



Queen Incubators

Are Famous for Big Hatches of

Strong, Healthy Chicks that Live and Grow

Three of the most important problems in constructing an incubator are Insulation, Moisture and Regulation. Queen designers long ago successfully solved all three problems, which is the reason why the Queen has such a wonderful reputation among poultrymen all over the country for hatching chicks with unusual strength and vitality.

Insulation Many incubators are not well insulated, as proper insulation adds considerable expense to the manufacturing cost and the manufacturers of cheap machines do without proper insulation or substitute an inferior material.

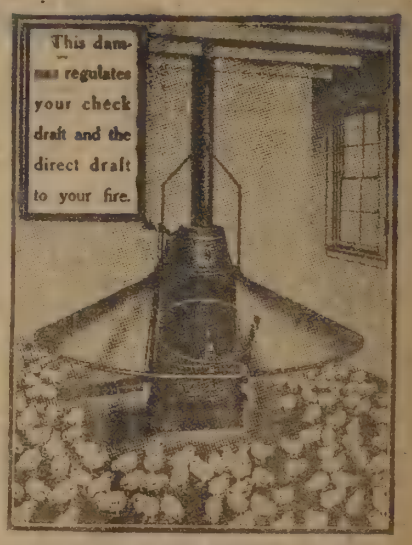
Good insulation means a proper maintenance of uniform heat throughout the hatching period, less fuel and stronger chicks. Poor insulation means a fluctuating temperature, more fuel and weak chicks.

The Queen is doubly insulated. First, we use double walls of California Redwood, forming a dead air space. Second, we use corrugated strawboard between the wooden walls.

Moisture With the Queen, there is no drying out during incubation, or no necessity to add moisture artificially. The circulation of water through the radiator, in the Queen hot water system, keeps the air at just the right degree of moisture for proper incubation.

Regulation It is not only necessary for an incubator to have the right kind and amount of heat, but it is highly important that the heat be uniform all the time. It must be accurately self-regulating.

We have designed and patented a regulator especially for the Queen with which we guarantee a regulation to within a small fraction of a degree.



Queen Self-Regulating Colony Brooder Stove
Even heat all the time

From all parts of the country we have reports that Queen hatches out chicks that are actually stronger and healthier, and that loss from weakness and disease is consequently much less with Queen machines. Read the following letters from people who know:

Galloway Poultry Farm, Pocatello, Idaho, writes: "Am using one of your large size incubators and it beats them all. Have four of another make but they do not bring off the hatches the Queen does. It is almost impossible to get a hatch of any kind in this dry climate but with a Queen we have splendid hatches."

Ellen Myers, Grace, Idaho, writes: "I have used the Queen Incubator for a number of years and like it fine."

Mrs. Dora E. Crawford, Ellensburg, Wash., writes: "I have always had good luck in my hatches with the Queen."

Elzo Gelms, Blaine, Wash., writes: We have Queen Incubators and like them fine."

Mrs. Earl Bowen, Strathmore, Calif., writes: "I have had a 75-egg Queen for three years and it has been so satisfactory I would like to have a larger one."

Thomas H. Martin, Loyalton, Calif., writes: "I have been very successful with my 180-egg size Queen. The first time my wife used the Queen she hatched 53 of the healthiest chicks I ever saw from 58 eggs."

A. Atkinson, San Francisco, Calif., writes: "Please send me your catalog and price list. I am familiar with the Queen Incubator, as I have used them in New Zealand for some years. We have lately come to this country."

H. R. Adams, Grace, Idaho, writes: "The White Leghorn chicks that I hatched in my Queen got most of the State prizes at our State Fair last fall."

Send your name for free catalog describing the full line of Queen Incubators, Brooders, Brooder Stoves, etc.

Sold by local dealers in almost every town, but if you cannot find them, JUST LET US KNOW.

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